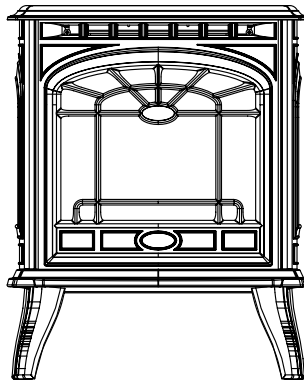


QUADRA-FIRE®

Garnet

DIRECT VENT ROOM HEATER



Tested and
Listed by  Beaverton
Oregon USA
OMNI-Test Laboratories, Inc.

**SAVE THESE
INSTRUCTIONS**

Installation, Venting, Operation and Maintenance Manual

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.

(In the Commonwealth of Massachusetts, installation must be performed by a licensed plumber or gas fitter.)

FOR YOUR SAFETY

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

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

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 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.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, *Title 24 CFR, Part 3280 or Standard for Installation in Mobile Homes, CAN/CSA Z240 MH.*

This appliance is only for use with the type(s) of gas indicated on the rating plate. A conversion kit is supplied with the appliance.

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

Congratulations



Hearth & Home Technologies welcomes you to our tradition of excellence! In choosing a **Quadra-Fire** appliance, you have our assurance of commitment to quality, durability, and performance.

This commitment begins with our research of the market, including 'Voice of the Customer' contacts, ensuring we make products that will satisfy your needs. Our Research and Development facility then employs the world's most advanced technology to achieve the optimum operation of our stoves, inserts and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. During manufacturing each unit is meticulously fabricated and gold surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection. Additionally, we feel it is important to offer you several finishing options and accessories to compliment your home's décor, individualize the use of your appliance, and provide financial options in acquiring a quality hearth appliance. Ask your **Quadra-Fire** Dealer for information on these options. From design, to fabrication, to shipping: Our guarantee of quality is more than a word, it's **Quadra-Fire** tradition, and we proudly back this tradition with a **Lifetime Warranty**.

Prior to installation, we ask you to take a few moments to read this manual. It has been our experience that your overall enjoyment of your new appliance will be greatly enhanced by becoming familiar with its' installation, operation and maintenance requirements. We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. **Thank you** for choosing **Quadra-Fire**.

With warm regards,

Alan Trusler
Senior Vice President
Dealer Channel

Dan Henry
Vice President
Research & Development

Mike Derosier
Vice President
Marketing & Product Planning

Jason Olmstead
Vice President &
General Manager

Dave Fiebelkorn
Materials Manager

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

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GARNET DIRECT VENT ROOM HEATER

Serial Number:

Date Purchased:

Dealership:

Dealer Phone:

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LISTINGS AND CODE APPROVALS

The Garnet 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 Laboratories, Inc., Beaverton, OR.

SPECIFICATIONS

	Natural Gas †0-2000'	Propane †0-2000'
Input Rate on "HI" (BTU/Hr)	17,500	16,000
Input Rate on "LO (Btu/Hr)	11,500	12,000
Max. Output (BTU/Hr)**	14,500	13,500
Main Burner Orifice	.078	.0469
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 36** 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, if any (and approved by the Commonwealth of Massachusetts); if none, follow the National Fuel Gas Code, ANSI Z223.1, or the Canadian Installation Code, CAN/CGA 149. **NOTE:** Have the gas supply line installed in accordance with local building codes by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts, installation must be performed by a licensed plumber or gas fitter.)

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/NCSBCS 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 Garnet is manufactured to operate on Natural Gas (NG), it is field convertible to Liquid Propane (LP) using the manufacturer's conversion kit.

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.

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 performed by a qualified, and/or where required by state and local codes, licensed installer/service technician. (In the Commonwealth of Massachusetts, installation must be performed by a licensed plumber or gas fitter.) 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 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 electronic 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.

WARNING!

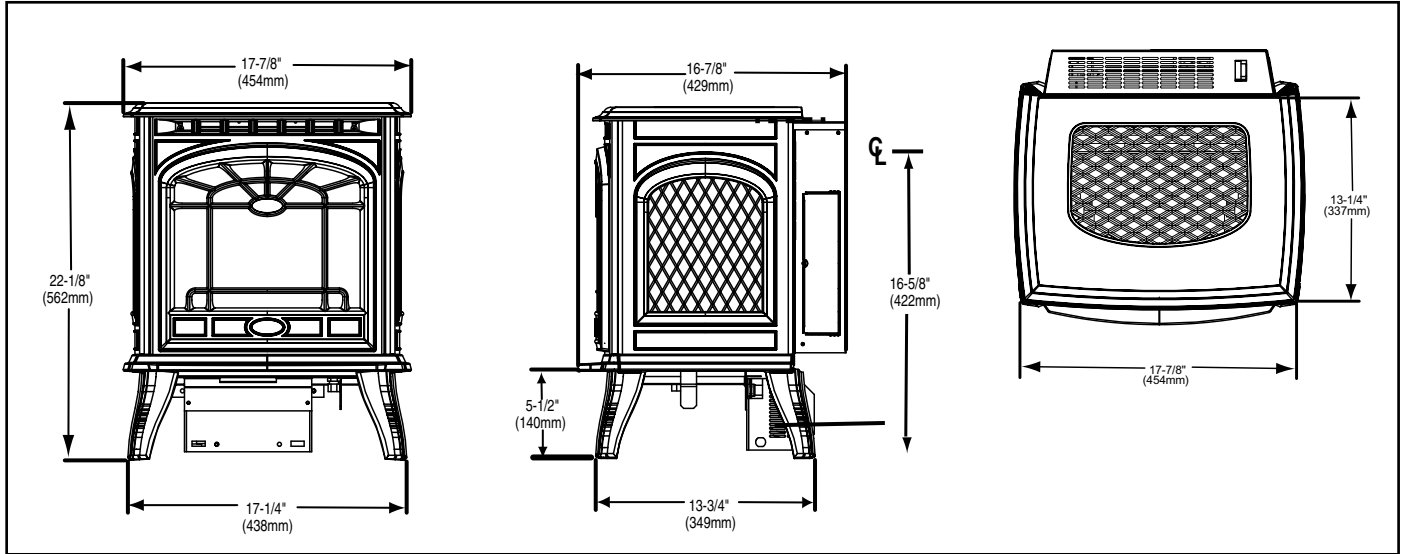
This appliance is equipped with a three pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle. Do not cut or remove the grounding prong from this plug.

OVERVIEW OF INSTALLATION TO OPERATION

- Familiarize yourself with this Owner's Manual and the Safety Notices located in this manual, and posted on the gas appliance.
- Remove and unpack the following components:
 - The Log Set is taped to the top of the stove.
 - Inside the firebox will be the Component Bag.
- Unbolt the appliance from the pallet.
- Remove the top and then the face of the stove. The face is removed by lifting straight up.
- Remove the glass door by opening the latches located on both the left and right sides at the top of the glass. Pull towards you and separate latch from notches. Lift the glass out of the two notches at its base and carefully set aside.
- Convert to LP if necessary. (Use Conversion Kit included with appliance).
- Install Blower if purchased. (Part #844-9370).
- Finalize your installation decisions and requirements:
 - Refer to Dimensions on **page 7**.
 - Refer to Clearances to Combustibles on **page 7**.
 - Refer to Horizontal and Vertical termination requirements on **pages 20-32**.
 - Install damper if necessary for your venting plans, **see page 24**. (In the Commonwealth of Massachusetts, the word damper shall be replaced with the words flue restrictor.)
 - Refer to Vent Kits pertinent to your installation on **page 14**.
- Contact your local building inspector for code requirements in your area.
- Run thermostat lines to TH & TPTH connectors on valve, if applicable, **see page 9**.
- Set unit in place and install venting per your installation requirements.
- Install Log Set and lava rock. See instructions on **page 10** of this manual.
- Connect the gas line. **See page 33**.
- Plug in blower, if purchased.
- Leak test gas line to manual shut-off valve. **See page 34**.
- Re-attach the glass door.
- Re-attach the face.
- Follow Lighting Instructions, **page 35**, to light the appliance. (A copy is attached to a beaded chain on the lower right hand side of the appliance).
- Adjust gas control knob to "ON" (Following Lighting Instructions **page 35**).
- Set Thermostat or turn control panel switch to the "ON" position.
- Check flames and adjust shutter position, if necessary. **See page 39**.
- Familiarize yourself with the maintenance requirements of the stove. **See pages 37 & 38**.
- Familiarize yourself with the Troubleshooting section of this manual, **page 41**.

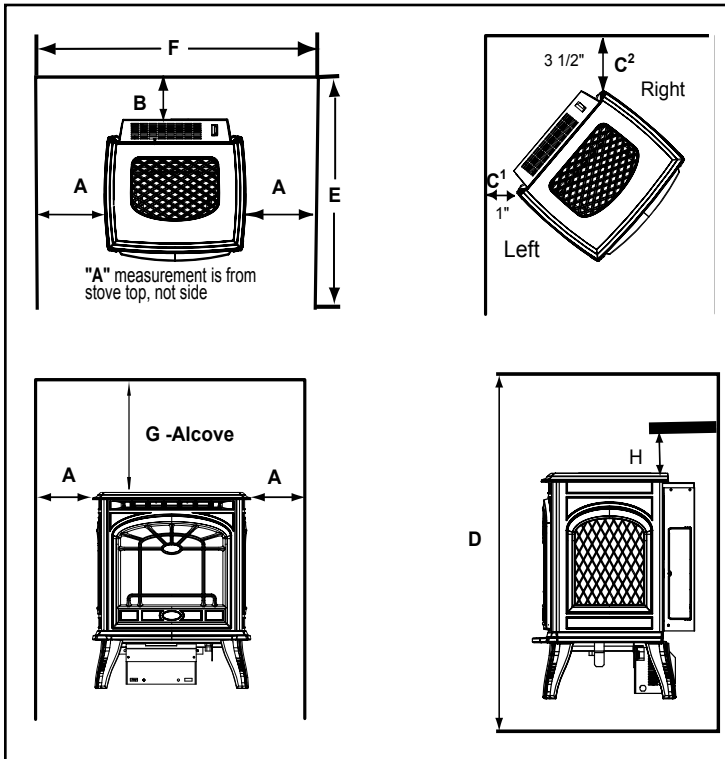
DIMENSIONS

NOTE: Diagrams show gas stove equipped with optional Blower, Part #844-9370.



CLEARANCES TO COMBUSTIBLES

Minimum clearances required from combustible construction for all appliance surfaces



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. Wood flooring, ceramic tile, brick hearths, or high pressure laminate flooring applied directly over the sub-flooring material meet this requirement. If the appliance is installed over carpet or combustible tile (vinyl tile), a metal or wood panel extending the full width and depth of the appliance must be installed.

A.	Side of stove top to side wall	6"	(152mm)
B.	Rear of stove to back wall	0"	(0cm)
C ¹ .	Corner of stove top to side wall-Left	1"	(25.4mm)
C ² .	Corner of stove top to side wall-Right	3-1/2"	(88.9mm)
	(for valve clearance)		
D.	Minimum alcove height	43"	(1092mm)
E.	Maximum alcove depth	36"	(914mm)
F.	Minimum alcove width	30"	(762mm)
G.	Top of Stove to alcove ceiling	20-7/8"	(530mm)
H.	Mantle Clearance	21-1/2"	(546mm)

NOTE: Flooring beneath appliance may reach 90 degrees plus room ambient temperature. Check with flooring manufacturer for maximum temperature allowed on flooring surfaces.

LP CONVERSION INSTRUCTIONS

NOTE: Have the gas supply line installed in accordance with local building codes by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)

KIT CONTENTS: Replacement orifice; replacement pilot injector; valve regulator; conversion label.

1. Remove front (if installed), glass, and logs (if installed).
 2. Remove log/burner pan: First remove screws then lift side of pan vertically and pull out of firebox. **(Fig. 1)**
 3. Remove burner: Loosen shutter set screw and slide shutter all the way to the right (closed). Lift left side of burner and slide to the left.
 4. Pull off pilot hood and set aside. **(Fig. 2)**
 5. Use a 5/32" Allen wrench to remove the pilot injector. **(Fig. 3)**
 6. Replace pilot injector with the appropriate size injector supplied with the stove (#35 for Propane, #62 for Natural Gas).
 7. Replace pilot hood, snapping into position.
 8. Remove main burner orifice using a 5/8" wrench. **(Fig. 4)**
 9. Replace orifice with the proper size as indicated below for your gas type and venting.
- | | |
|----------------|--------------------|
| PROPANE | NATURAL GAS |
| .0469 | .078 |
10. Reinstall burner. Slide burner neck into shutter and over orifice. Install log/burner pan using the three screws removed.

See page 9 for Valve Regulator Replacement.

TOOLS REQUIRED: Power drill (a 90° handle is helpful) or slotted screwdriver or Torx TH20; #2 Phillips bit; 5/32" Allen wrench; 5/8" open end wrench.

FIG. 1



FIG. 2

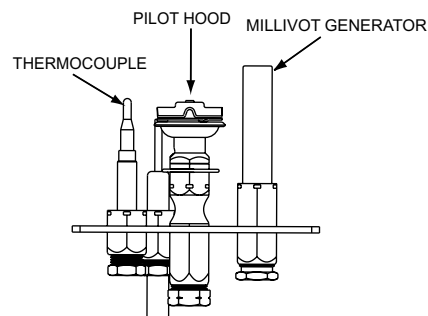


FIG. 3

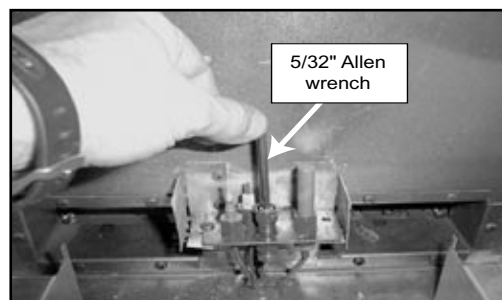
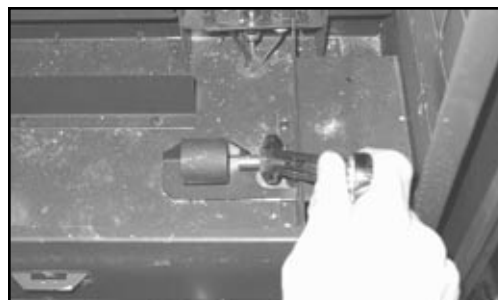


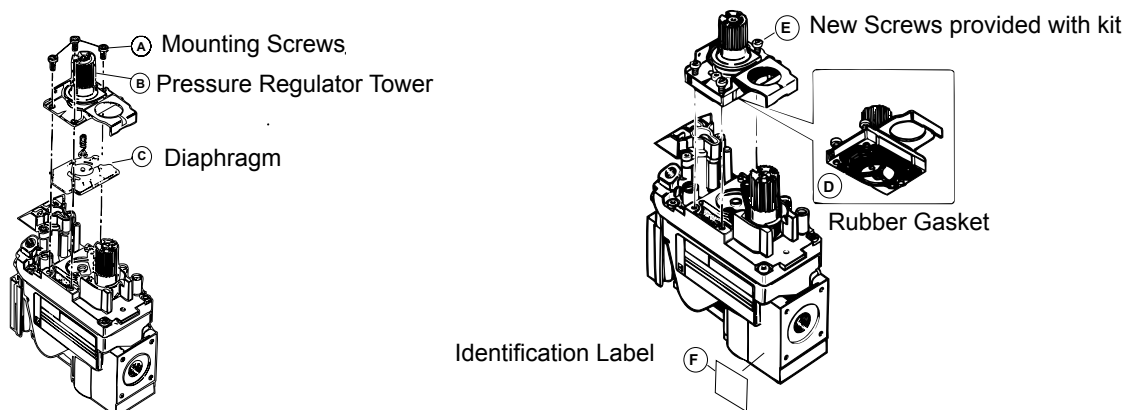
FIG. 4



LP CONVERSION *(cont'd.)*

Valve Regulator Replacement

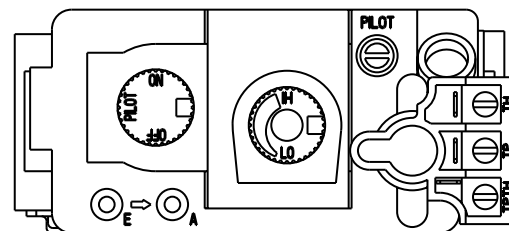
1. Turn control knob to the OFF position, ensure that gas supply to the valve has been turned off.
2. Using a Torx TH20, or slotted screwdriver, remove the (A) three pressure regulator mounting screws, (B) pressure regulator tower, and (C) diaphragm.
3. Ensure that the (D) rubber gasket is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the (E) new screws supplied with the kit. Tighten screws securely. (Reference torque = 25 in/lb)
4. Install the enclosed (F) identification label to the valve body where it can be seen.
5. Fill out the Conversion Label and attach to the valve cover.



THERMOSTAT INSTALLATION

A thermostat may be installed to regulate the Garnet. 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
Anticipator Setting 1.2

Part Number 812-3760

Programmable Thermostat

Part Number 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

LOG SET INSTALLATION

Complete Set Part 842-4980

The three piece log set is packed in the components box and consists of the following:

Qty	Name	Diagram
1	Rear Log	Fig. 1
1	Left Twig	Fig. 2
1	Right Twig	Fig. 3
1	Lava Rock	Fig. 4

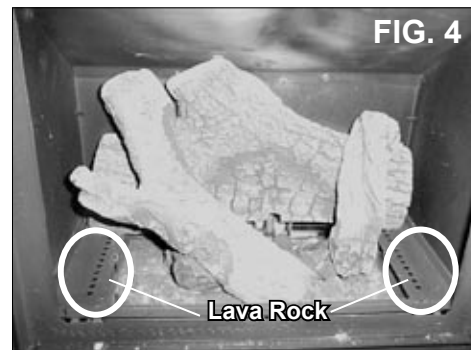
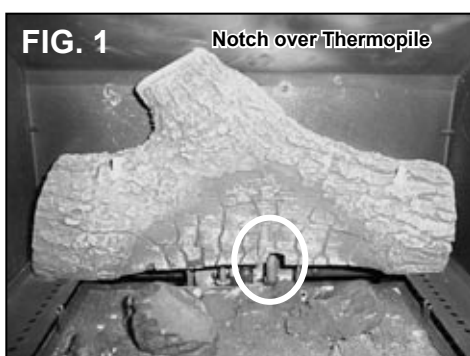
While breakable, the logs do not become fragile until after the stove is burned and they have cured. After curing, any handling must be done with care as breakage may occur easily.

PLEASE NOTE: Logs have been designed to work specifically with the burner of the Garnet. Exact placement will ensure proper operation of your gas appliance and reduce sooting.

Installation:

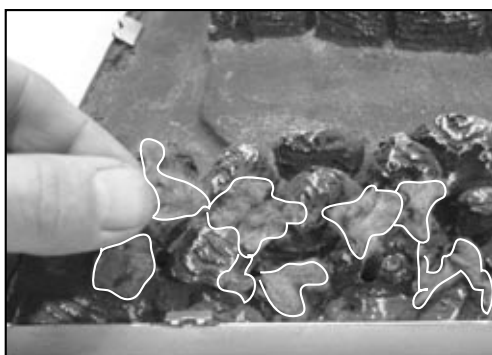
1. Place the notch in the Rear Log over the Thermopile. Push the log all the way to the rear of the firebox (Fig. 1).
2. Place the hole in the bottom of the Left Twig over the left pin in the Rear Log (Fig. 2).
3. Place the hole in the bottom of the Right Twig over the right pin in the Rear Log. Lay the end of the twig in ember bed (Fig. 3).
4. A complete assembled Log Set is shown in Fig. 4.
5. The lava rock supplied with the stove can be poured in the trays along the left and right sides of the burner pan.

NOTE: Do not pour any of the lava rock onto the burner (Fig. 4).



MINERAL WOOL INSTALLATION

Apply dime size pieces sparingly along front edge of burner. Do not completely block ports.



COMPLETE INSTALLATION



BLOWER INSTALLATION

PART #844-9370

KIT CONTENTS: Blower motor, housing and snap disc assembly; rheostat (speed control); rheostat nut; knob; screws; knob position label.

TOOLS REQUIRED: Short #2 Philips head screwdriver; 11/16" wrench.

The blower is held in place using 4-#6 screws. The screws are already installed in the bottom of the fire box.

1. Remove the (4) screws from the firebox and slide the blower into place from the left side of the stove. **(Fig. 1)** Notice the locations of the pilot assembly tubes and wires. The pilot tubes and wires may need to be moved to prevent scraping the blower housing. **(Fig. 2)**
2. Re-use the (4) screws removed from the bottom of the firebox, to install the blower. Install the 2 screws on the right first, then use the other 2 screws to hold the snap disc in place and support the left side of the blower. **(Fig. 2)**
3. Remove the valve access panel by removing the (3) screws that secure it to the right side of stove and sliding it out.
4. Attach the rheostat to valve access cover and tighten with 11/16 wrench. Attach label showing knob positions on valve cover. Install the knob on the rheostat. **(Fig. 3)**
5. Connect the black and white wires from the blower to the rheostat wires. **(Fig. 4)**
6. Re-install the valve access cover.
7. Route power cord away from unit. **DO NOT** route the power cord under or in front of the stove.

FIG. 1

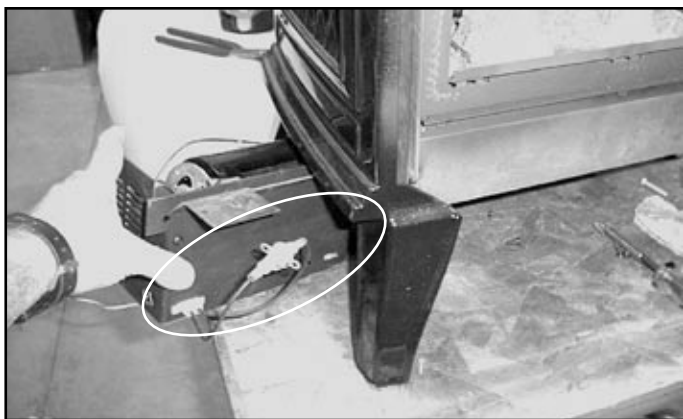


FIG. 3

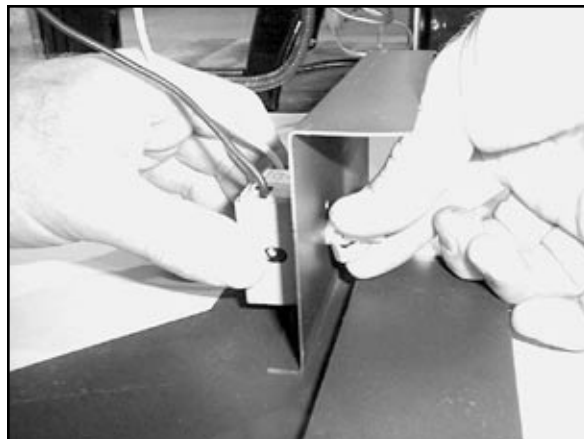


FIG. 2

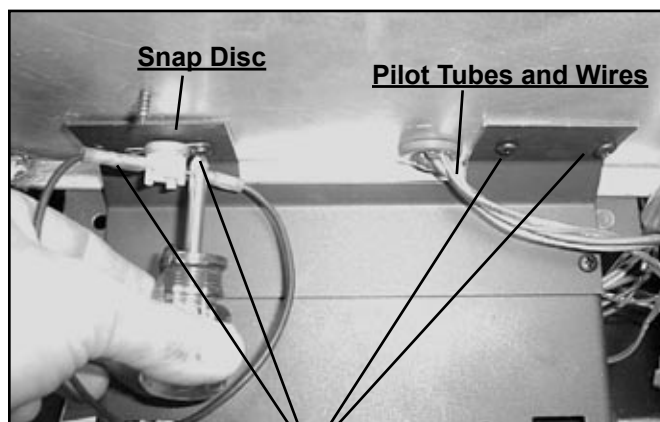
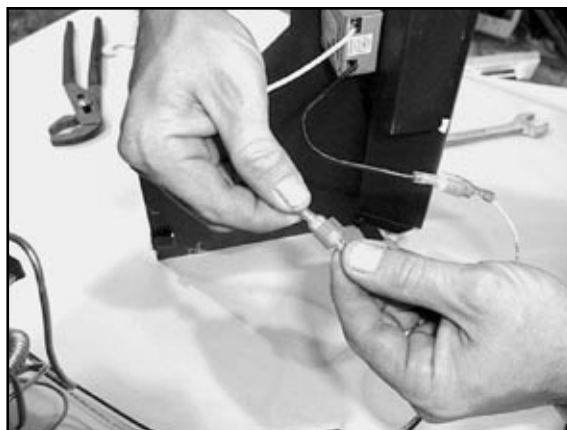


FIG. 4



GENERAL VENTING INSTRUCTIONS

PLEASE NOTE: In order to comply with applicable codes and product warranties, only Simpson Dura-Vent (SDV), Hearth & Home Technologies (HTI) venting components, or Security Chimney's Secure Vent Chimney System may be used. **DO NOT USE FIELD-FABRICATED VENTING COMPONENTS.** The Garnet 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 use Simpson Dura-Vent, or HTI components labeled and listed on **page 14**.

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 required 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 Quadra-Fire Garnet 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 Hearth & Home Technologies, 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" (2.5cm). 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 page 20 of these installation instructions, the vertical termination requirements on page 18, 19 and 27, 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 Garnet.

1. Horizontal Termination (**Fig. 1, page 15**)
2. Vertical Termination (**Fig. 2, page 18**)
3. Into a Class A Metal Chimney (**Fig. 3, page 18**)
USA installations only
4. Into a Masonry Chimney (**Fig. 4, page 19**) 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 23**. 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 27** 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 7**, 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.

SIMPSON DURA-VENT and HTI PARTS LIST**Termination Caps & Snorkels:**

991	High Wind Vertical Termination Cap
985	High Wind Horizontal Termination Cap
983	Vertical Termination
981	Snorkel Termination (36")
982	Snorkel Termination (14")
950	Vinyl Siding Standoff (VSS)

Flashing:

941	Cathedral Ceiling Support Box
943	Flashing, 0/12 to 6/12 Roof Pitch
943S	Flashing, 7/12 to 12/12 Roof Pitch
943F	Flashing, Flat Roof

Support Boxes/Thimbles:

940	Round Ceiling Support/Wall Thimble Cover
941	Cathedral Ceiling Support Box
942	Wall Thimble

Pipe:

908	6" Pipe Length, Galv.
908B	6" Pipe Length, Black
907	9" Pipe Length, Galv.
907B	9" Pipe Length, Black
906	12" Pipe Length, Galv.
906B	12" Pipe Length, Black
904	24" Pipe Length, Galv.
904B	24" Pipe Length, Black
903	36" Pipe Length, Galv.
903B	36" Pipe Length, Black
902	48" Pipe Length, Galv.
902B	48" Pipe Length, Black
911	11" -14 5/8" Pipe, Adj. Galv.
911B	11" -14 5/8" Pipe, Adj. Black.
912	12" - 17" Pipe, Adj. Galv.
912B	12" - 17" Pipe, Adj. Black.
917	17" -24" Pipe, Adj. Galv.
917B	17" -24" Pipe, Adj. Black.
945	45° Elbow, Galv.
945B	45° Elbow, Black
990	90° Elbow, Galv.
990B	90° Elbow, Black

Misc.

953	Storm Collar
963	Ceiling Firestop
988	Wall Strap
9546	Attic Insulation Shield
923GK	Chimney Liner Termination Kit
923GCL	Co-axial / Co-lineal Appliance Connector
909B	Retrofit Adj. Chimney Connector Retrofit Chimney Connector Plate

Decorative Trim Kits

3951	Round Ceiling Support; Wall Thimble Trim Kit, Polished Brass
3960	Cathedral Ceiling Support Trim Kit, Polished Brass

SDV KITS

970A Standard Termination Kit includes 1 each of: 990B, 940, & 985. See Note below.

971HW Standard Termination Kit includes 1 each of: 990B, 940, 985, 904B, 911B

973 Vertical Termination Kit includes 1 each of: 943, 953, 991 (support box NOT included)

NOTE: Straight pipe lengths are needed to complete installation; the black 45° elbow is NOT included in kit.

HTI'S VENT PARTS LIST

HHW2	841-0670	Horizontal High Wind Cap (recommended for optimal performance)
HHW2K	844-4490	Horizontal Kit (One 90° Black Elbow, 11"-14-5/8" Adjustable Vent, HHW2 Termination Cap)
RHVK	844-8920	Snorkel Kit #844-8920 (with Dura-Vent part #'s 911B and 940)

SECURITY CHIMNEY'S SECURE VENT CHIMNEY SYSTEM & AMERIVENT DIRECT VENTING COMPONENTS

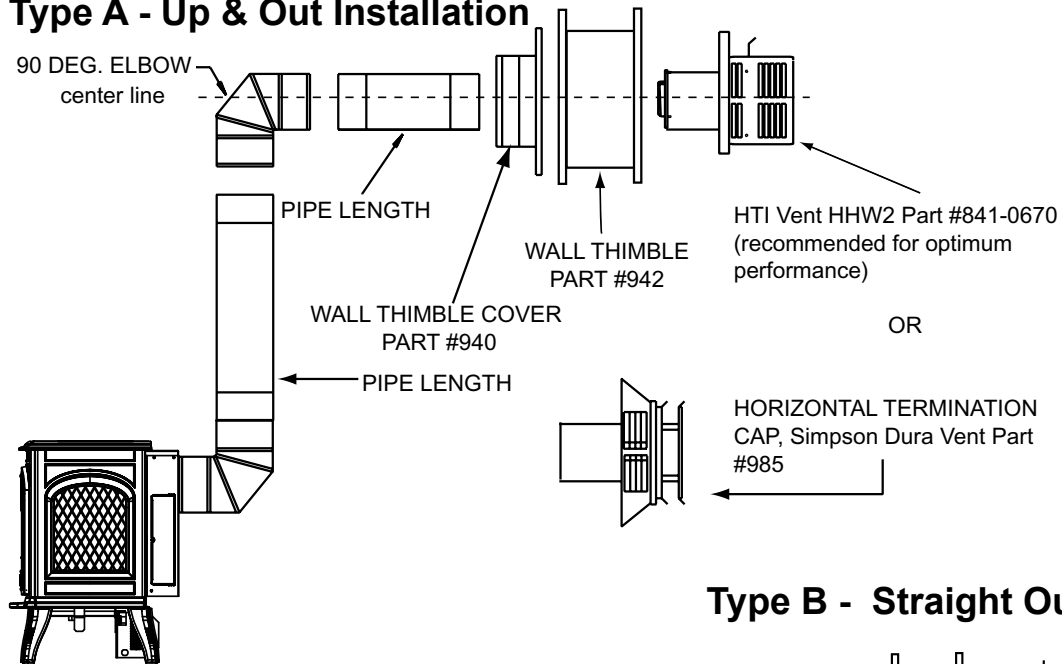
Your Quadra-Fire Garnet has been approved with Security Chimney's Secure Vent Chimney System and Amerivent Direct Venting Components. All the required certification tests have been successfully completed with OMNI-Test Laboratories, Inc. Please contact your local dealer and they will advise you of the required parts needed for your installation. It is required to use High Temperature RTV Sealant at the inner and outer joint connection of the first section to the supplied listed direct vent starter section.

INSTALLATION METHODS

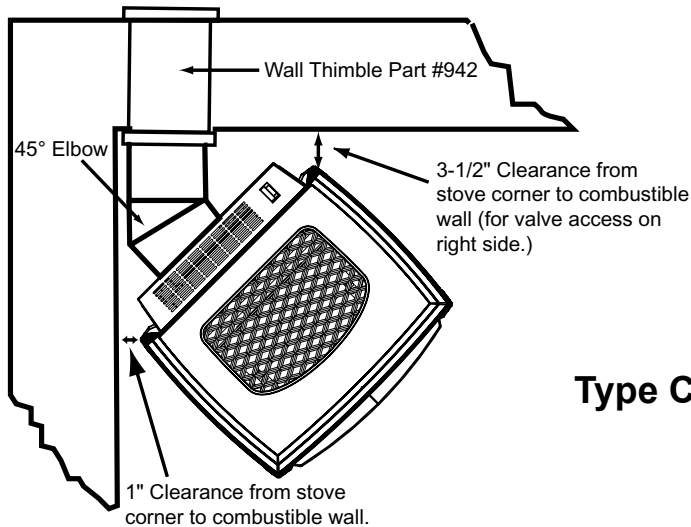
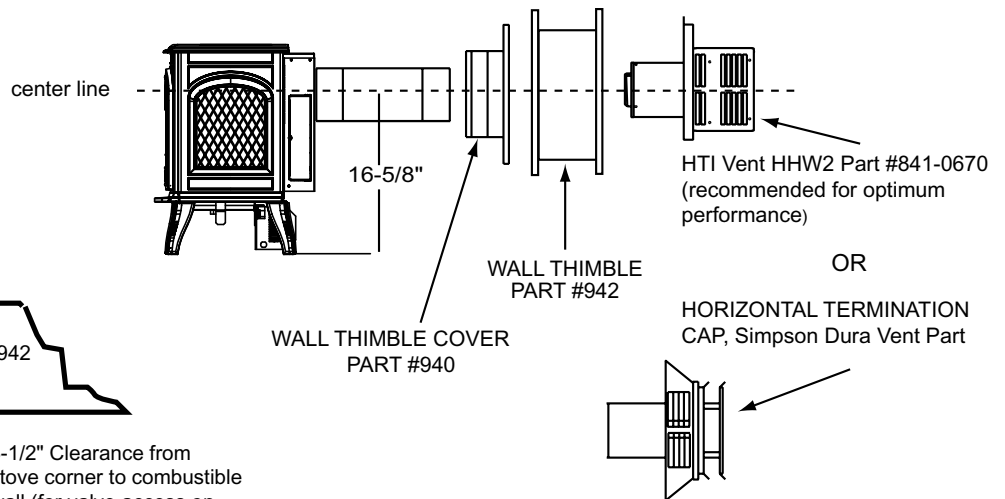
FIG. 1 - HORIZONTAL TERMINATION

Refer to pages 20-22 for installation instructions and requirements.

Type A - Up & Out Installation



Type B - Straight Out Installation



Type C - 45° Elbow in Corner Installation

SLIM LINE WALL THIMBLE

Part #844-9550

BEFORE YOU BEGIN:

Venting configuration will determine which Trim Ring you use in your installation. Review **Figures A, B and C** on **Page 17**. **Figures A and B** can use either Trim Ring, while **Figure C** REQUIRES the Ventilated Trim Ring.

ASSEMBLING SLIM LINE TRIM RING and HEAT SHIELD

1. Choose the appropriate Trim Ring for your installation. Lay on flat surface and bend up the 6 welded brackets into a 90 degree position. The brackets along the outer edge of the ring are for locating the ring in the center of the hole. **See Fig. 1.**

2. The Heat Shield is shipped flat and must be hand bent into a half circle before attaching to Trim Ring. Bend Heat Shield. **See Fig. 2.**

Note: Wear leather gloves when bending the Heat Shield to prevent injury.

3. Attach the Heat Shield to the Trim Ring with the four screws provided. Screws go through the Heat Shield and into the brackets on the Trim Ring. **See Fig. 3.**

INSTALLING SLIM LINE TRIM RING and HEAT SHIELD

1. Measure from floor to center line of the vent pipe. Cut out a 9-1/2" hole in the wall. Hold the Trim Ring/Heat Shield Assembly in place and place a mark on the shield with a black marker where it protrudes through the exterior wall. **See Fig. A on Page 17.**

2. Use that mark as a guide to trim off excess Heat Shield with a pair of sheet metal shears.

Note: When installing the Trim Ring/Heat Shield assembly make sure the Trim Ring is centered in the hole and that the shield is above the pipe. There must be a minimum of 3/4" minimum clearance maintained to combustibles from the top of the Heat Shield. **See Fig. 4.**

3. Ensure that framing on the inside of the wall is a minimum inner framing diameter of 10" x 10".

4. The four Trim Ring mounting screws provided should be replaced with appropriate fasteners for stucco, brick, concrete, or other types of sidings.

Fig. 1 Solid Trim Ring Shown

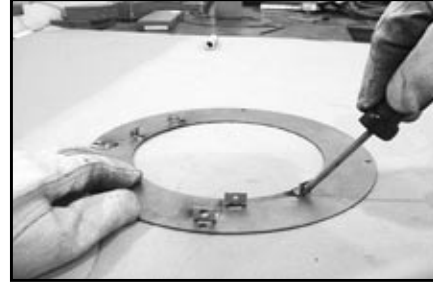


Fig. 2 Bending Heat Shield

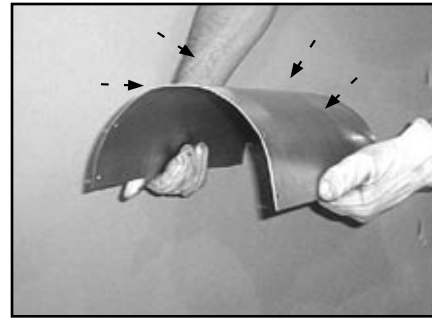
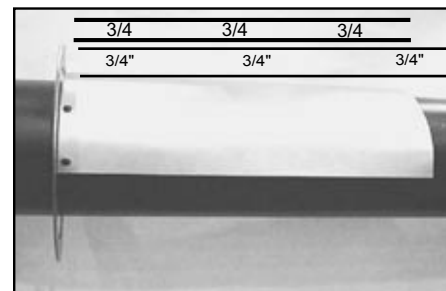


Fig. 3 Ventilated Trim Ring Shown



Fig. 4



Maintain minimum 3/4" clearance to combustibles from top of shield.

SLIM LINE WALL THIMBLE (cont'd.)

Note: When installing the Garnet to a rear wall in the Zero Clearance configuration remove the two heat shield knock-outs on the rear of the stove. See Fig. 5 Below.

FIG. 5



FIG. A 90 DEGREE ELBOW

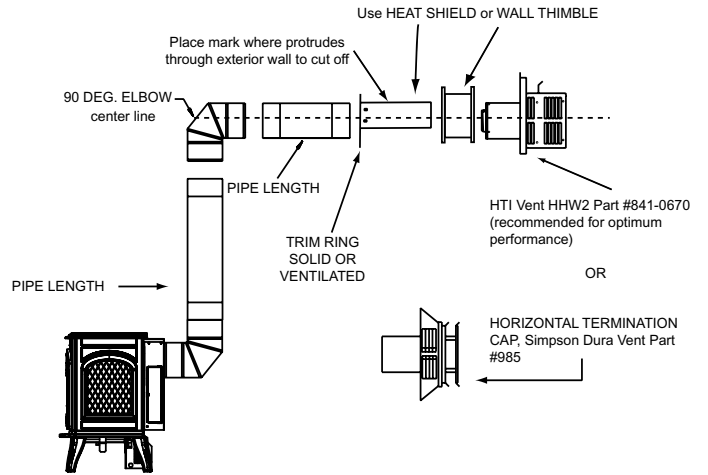


FIG. B 45 DEGREE ELBOW

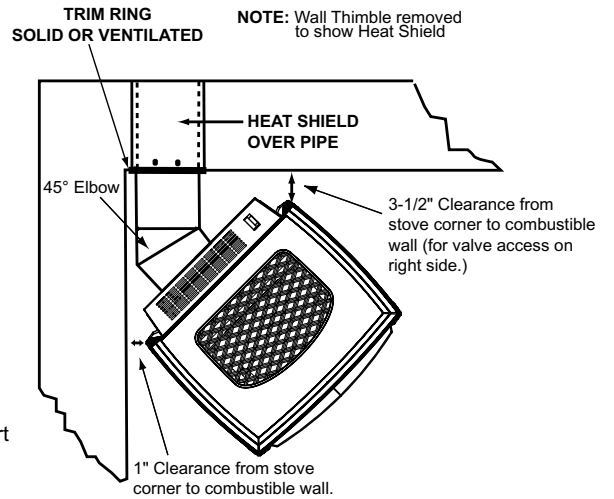
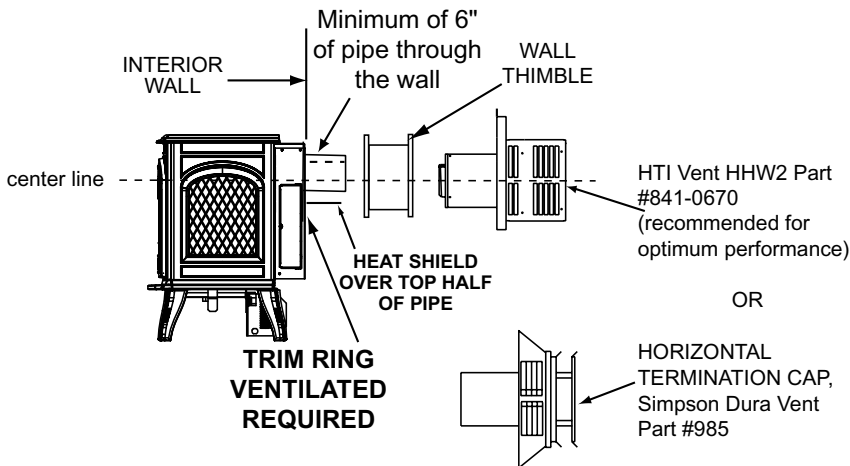


FIG. C ZERO CLEARANCE



INSTALLATION METHODS (cont'd.)

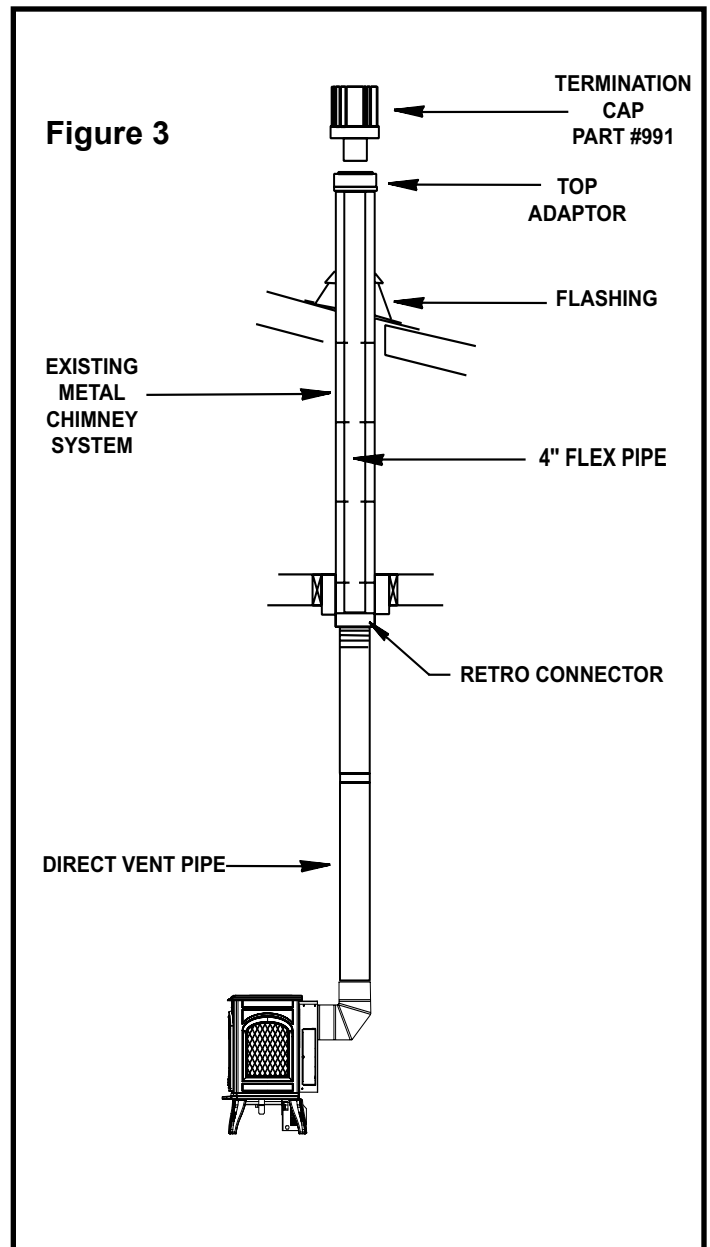
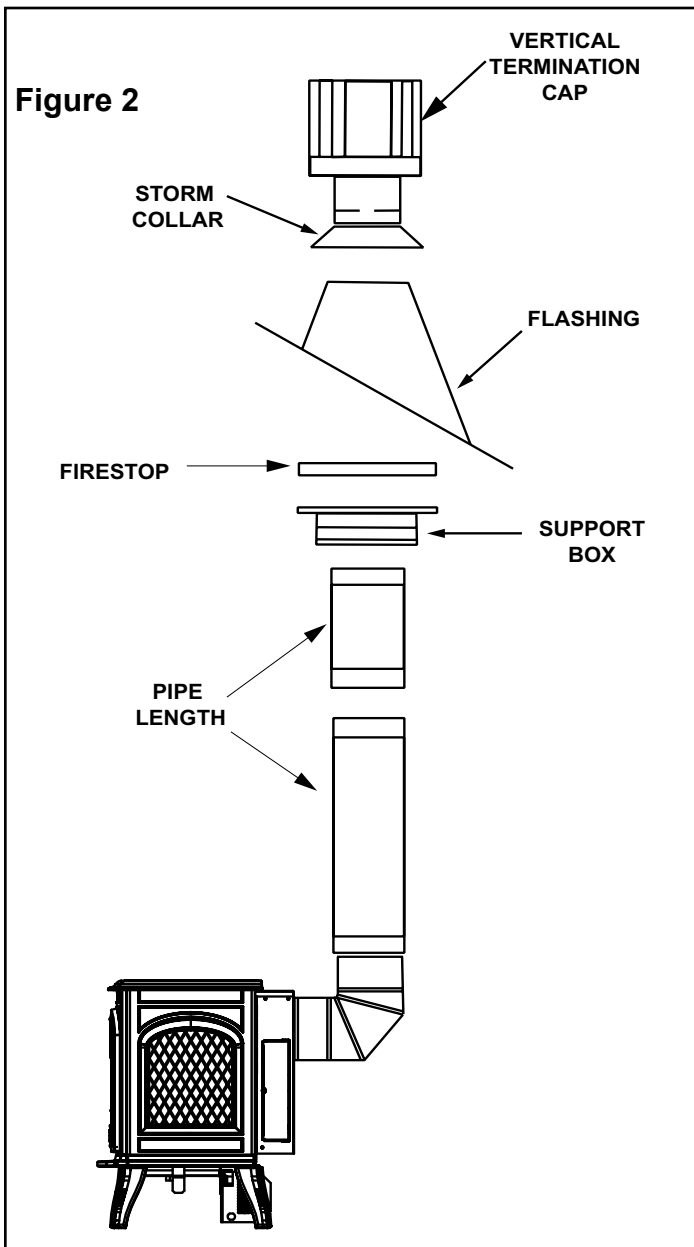
FIG. 2 - VERTICAL TERMINATION

Refer to **pages 25-27** for installation instructions and requirements.

On vertical terminations use only Dura-vent Part #991.

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

Refer to **page 29** for installation instructions and requirements.



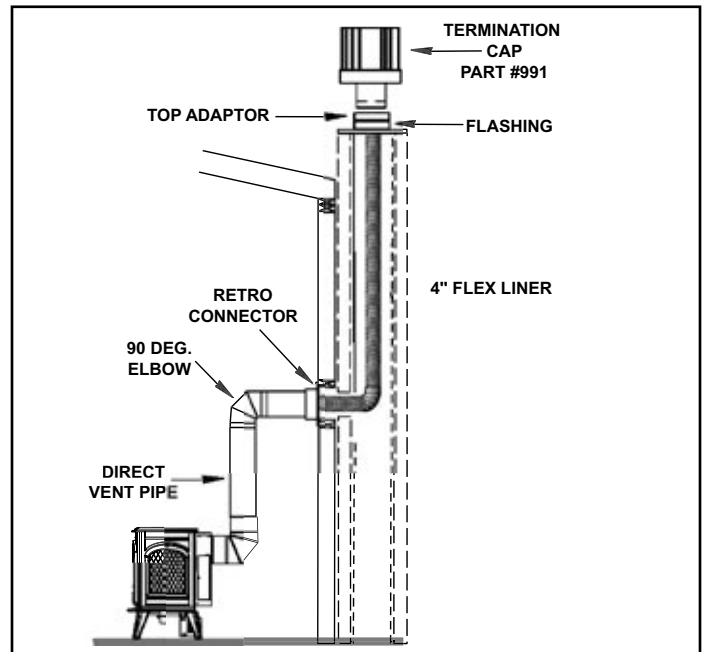
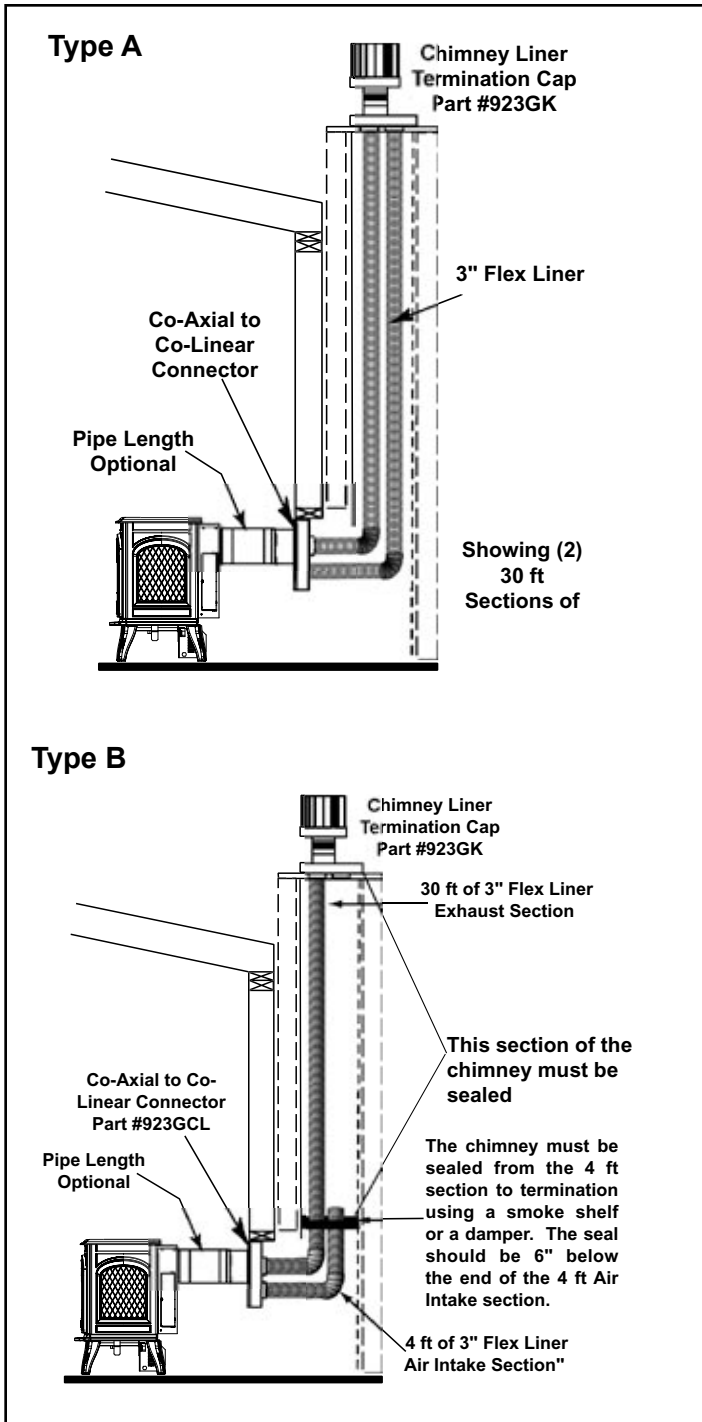
INSTALLATION METHODS (cont'd.)

FIG. 4 - A, B C & D INTO A MASONRY CHIMNEY (USA only)

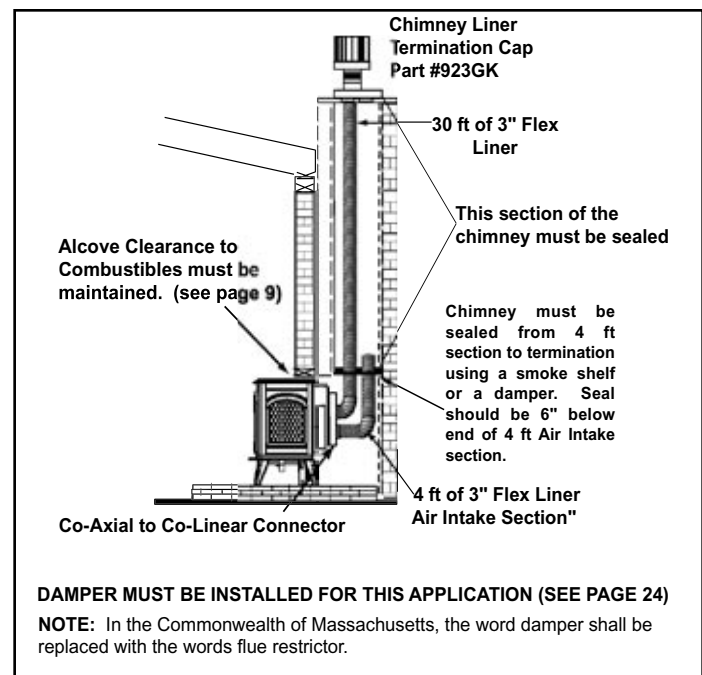
Refer to pages 30-32 for installation instructions and requirements.

Type A & B Co-Axial to Co-Linear Part 923GCL

Type C - Up & Out Installation



Type D - Hearth Mount



HORIZONTAL TERMINATION REQUIREMENTS

- A** = 12" clearances above grade, veranda, porch, deck or balcony
- B** = 12" clearances to window or door that may be opened
- C** = 12" USA/12" Canada: clearance to permanently closed window
- *D** = 18" vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the center-line of the terminal
- *E** = 12" clearance to unventilated soffit
- F** = 9" Clearance to outside corner. Clearance in accordance with local installation codes and the requirements of the gas supplier.#
- G** = 6" Clearance to inside corner. Clearance in accordance with local installation codes and the requirements of the gas supplier.#
- H** = 3 ft Canada: not to be installed above a gas meter/regulator assembly within 3 feet horizontally from the center-line of the regulator
- I** = 3 ft USA/6ft Canada: clearance to service regulator vent outlet
- J** = 9" USA/12" Canada: clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance
- K** = 3 ft USA/6ft Canada: clearance to a mechanical air supply inlet
- **L** = 7 ft clearance above paved sidewalk or a paved driveway located on public property
- ***M** = 12" clearance under veranda, porch, deck or balcony
- N** = Clearance to adjacent building or deck. Clearance in accordance with local installation codes and the requirements of the gas supplier.#
- O** = 6" min. clearance from sides of electrical service
- P** = 12" min. clearance above electrical service

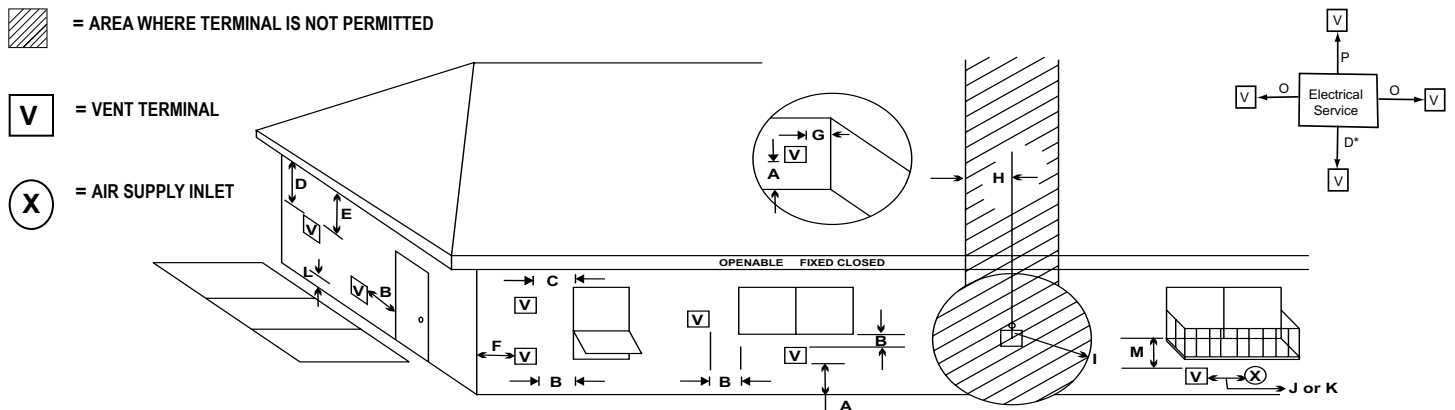
#In the Commonwealth of Massachusetts, installation must be performed by a licensed plumber or gas fitter.

- * 30" (762mm) minimum for vinyl clad soffits
- ** 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 2 sides beneath the floor.

NOTE: Local Codes or Regulations may require different clearances.
NOTE: Location of the vent termination must not interfere with access to the electrical service.

WARNING: In the U.S: Vent system termination is **NOT** permitted in screened porches. You must follow side wall, overhang and ground clearances as stated in the instructions. **In Canada:** Vent system termination is **NOT** permitted in screened porches. Vent system termination is permitted in porch areas with two or more sides open. You must follow all side walls, overhang and ground clearances as stated in the instructions.

CAUTION: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS RECOMMENDED TO USE TERMINATION CAP SLK-01TRD, AS THE EXTERIOR FIRESTOP IS BUILT IN. IF YOU ARE USING SIMPSON DURA-VENT PART #985 IT IS NECESSARY TO INSTALL THE VINYL PROTECTOR KIT (PART #950) TO THE TOP OF THE EXTERIOR FIRESTOP (FOR ALL ROUND TERMINATION CAPS).



HORIZONTAL INSTALLATION

Step 1.

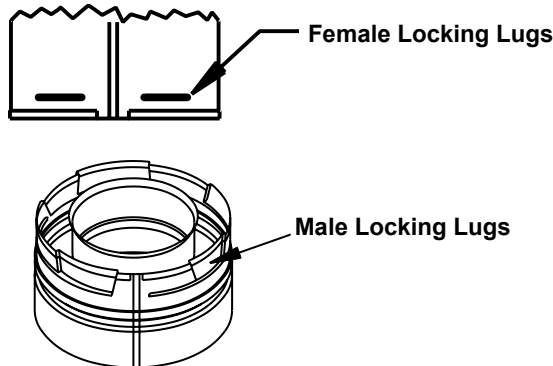
Determine the desired location of the stove. Check to ensure that wall studs or roof rafters are not in the way when the venting system is attached. If this is the case, you may want to adjust the location of the stove.

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



NOTE:

Horizontal runs of vent must be supported every 3' (91cm). Wall straps are available for this purpose.

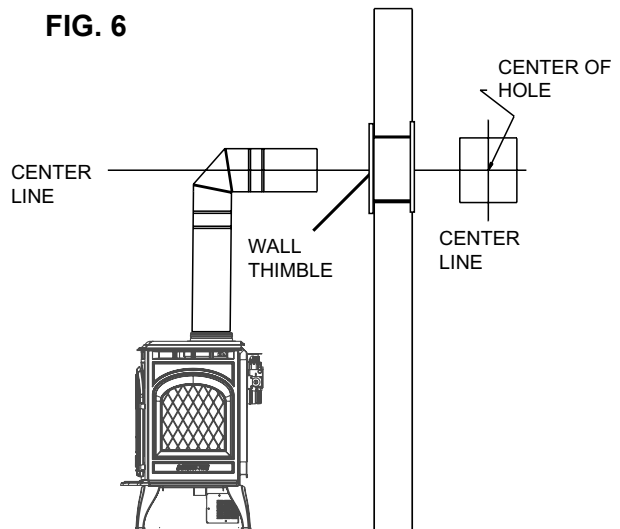
Horizontal sections require a 1/4" (6mm) rise for every 12" (30.5cm) of horizontal travel.

Exterior Vent Diameter = 6 5/8" (177mm); Inner Vent Diameter = 4" (10.2cm).

Step 3.

For installations using a Wall Thimble Dura-Vent Part #942, mark the wall for a 10" x 10" (25.4m x 25.4m) 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" (17.8cm) diameter hole is acceptable.

FIG. 6



NOTE:

- (1) Installation requires a minimum of 6" (15.2cm) horizontal run of vent with a 1/4" (6mm) rise run towards the termination. Each 1' (30.5cm) 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 20**.
- (3) For installations requiring a vertical rise on the exterior of the building, HTI RHVK Snorkel Kit #844-8920, 14" (35.5cm) or 36" (91cm) 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'd.)*

Step 4.

Position the horizontal vent termination in the center of the 10" x 10" (25.4cm x 25.4cm) square hole and 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 (**Fig. 7**)

FIG. 7

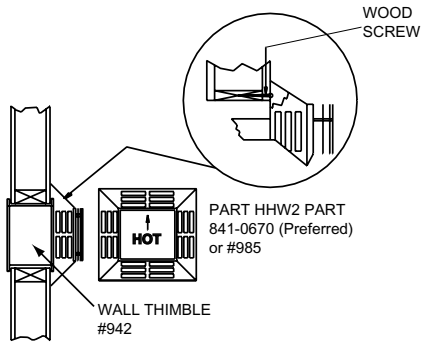


FIG. 8-A

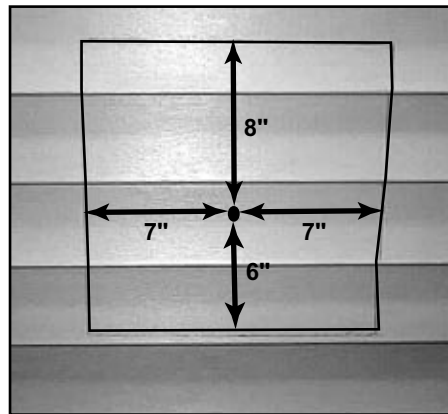
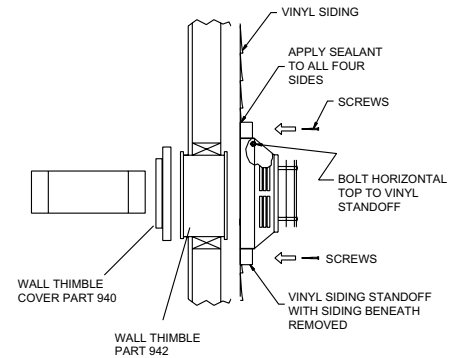


FIG. 8-B



NOTES:

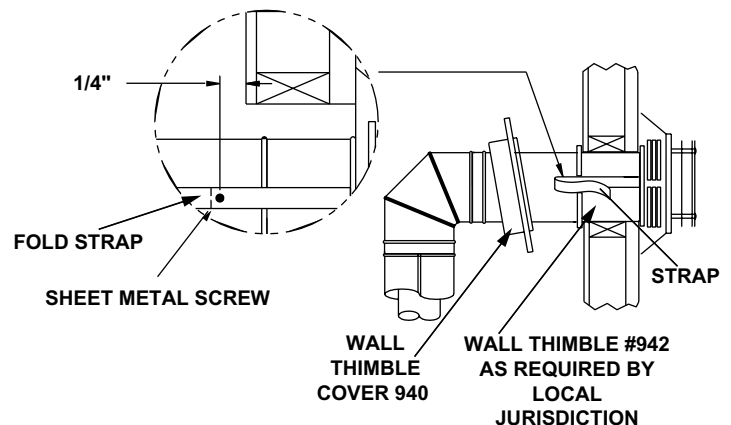
- (1) The four wood screws provided should be replaced with appropriate fasteners for stucco, brick, concrete, or other types of sidings.
- (2) Termination Cap HHW2 (HTI Part #841-0670) is highly recommended on a building with vinyl siding, as the vinyl siding standoff is built in. The pilot hole will be 2 inches closer to the bottom of the square than the top. Using a framing square, draw a 14" x 14" square around the pilot hole. **See Fig. 8-A.** (NOTE: If you are installing Termination Cap HHW2, the pipe will be off center on the flashing). Ensure that proper clearances to combustible materials are maintained. 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 (**Fig. 8-B**). 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 behind area of standoff.

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 1 1/4" (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 (**Fig. 9**).

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

FIG. 9



INSTALLATION VENT GRAPH

1. Measure the vertical distance from the center line of the flue pipe 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 center line of the flue vent to the center of the 90° elbow is 7' (2.13m), the horizontal run to the outer wall flange must not exceed 11'10" (360.8cm)

EXAMPLE 2: If the vertical dimension from the center line of the flue vent to the center of the 90° elbow is 21' (6.4m), the horizontal run to the outer wall flange must not exceed 7'10" (238.7cm).

4. Each 90° elbow is equivalent to 3' of vent pipe and each 45° elbow is equivalent to 1' of vent pipe, and must be subtracted from the vent pipe run. A single horizontal to vertical 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 6" (15.2cm).

Minimum wall thickness is 4" (10.2cm). Horizontal sections require a 1/4" (6mm) rise for every 12" (30.5cm) of horizontal travel.

Exterior Vent Diameter = 6-5/8" (177mm); Inner Vent Diameter = 4" (10.2cm)

Horizontal sections require noncombustible support every 3' (91cm), e.g. plumbing tape.

EXCEPTIONS

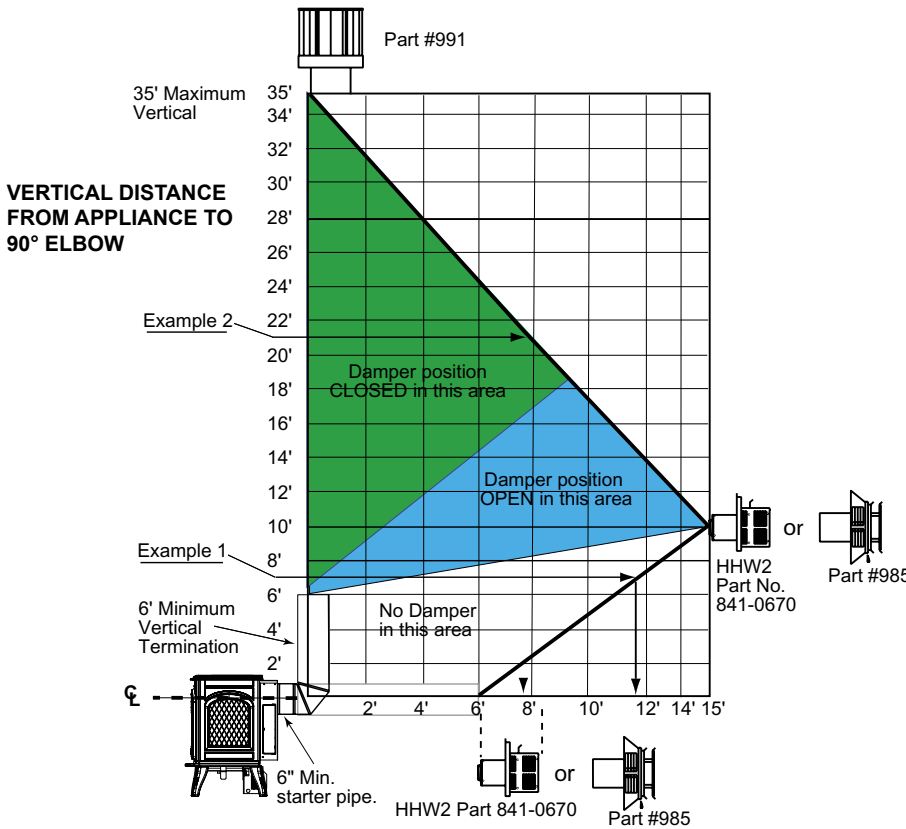
FOR HORIZONTAL INSTALLATIONS: The maximum horizontal vent run is 6' (182.8cm)

The maximum horizontal vent run with a 45° elbow is 5' (152.4cm)

No external minimum rise is required.

The minimum horizontal vent run is 6" (15.2 cm).

For any vertical termination a minimum of 6' (182.8cm) vertical must be used.



6' Maximum Horizontal run with no vertical pipe and with 1/4" rise per foot. Must use HHW2 or 985 Termination Cap.

NOTE: IF YOUR INSTALLATION FALLS WITHIN A SHADED AREA ON THE GRAPH, A DAMPER MUST BE INSTALLED. SEE INFORMATION ON DAMPER INSTALLATION AND ADJUSTMENT ON PAGE 24.

NOTE: In the Commonwealth of Massachusetts, the word damper shall be replaced with the words flue restrictor.

DAMPER INSTALLATION AND ADJUSTMENT

WHEN YOUR INSTALLATION FALLS WITHIN A SHADED AREA ON THE VENT GRAPH (PAGE 23). A DAMPER MUST BE INSTALLED FOR PROPER OPERATION. (In the Commonwealth of Massachusetts, the word damper shall be replaced with the words flue restrictor.)

Installation of the damper requires the removal of the baffle. Remove the baffle by removing the 4 screws holding the baffle in place. (Two screws in back and one on each side). Angle the baffle slightly and remove from firebox (**Fig. 1**).

The two screws holding the bottom of the baffle in place also hold the damper in place. After removing the baffle remove the two screws located at the back of the firebox. **See Fig. 2.** (These will also be used to secure the baffle in place.) Hold the damper in position and install the four screws to hold it in place. **See Fig. 3.** Leave the lower screws loose enough to slide baffle over them. Slide the baffle back into position. Tighten the screws and re-install the screws on the sides.



FIG. 1 Removing Baffle

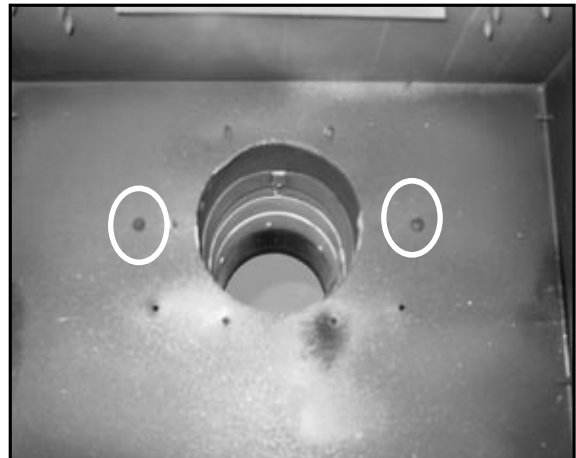


FIG. 2 Remove and re-use screws for installation

Figs. 3 and 4 show the damper installed in fully open and fully closed positions. Refer to the vent graph for the best damper position for your installation.

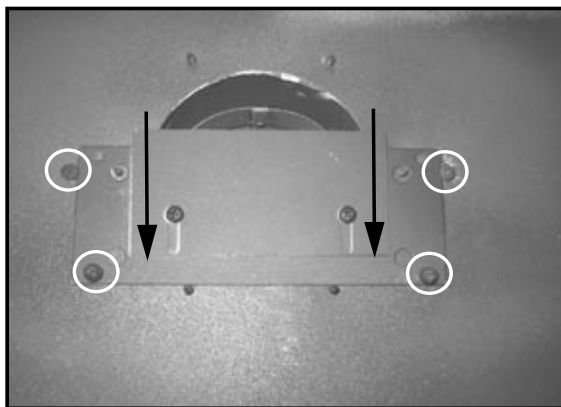


FIG. 3 Damper In Fully Open Position

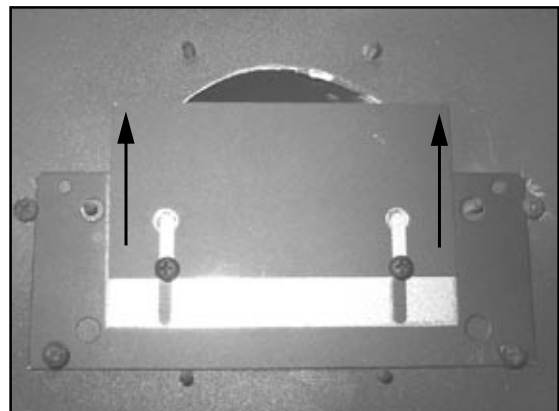


FIG. 4 Damper in Fully Closed Position

VERTICAL INSTALLATION INSTRUCTIONS USING GS SERIES PIPE

Step 1.

Check the installation instructions for required 1" (25mm) clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, or other nearby combustible surfaces. **See page 27, 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 23.**

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

NOTE: Maximum number of 45° elbows permitted for a vertical installation is eight, provided their installation does not decrease maximum allowable horizontal run (as specified by Vent Graph, on **page 23**).

FIG. 10

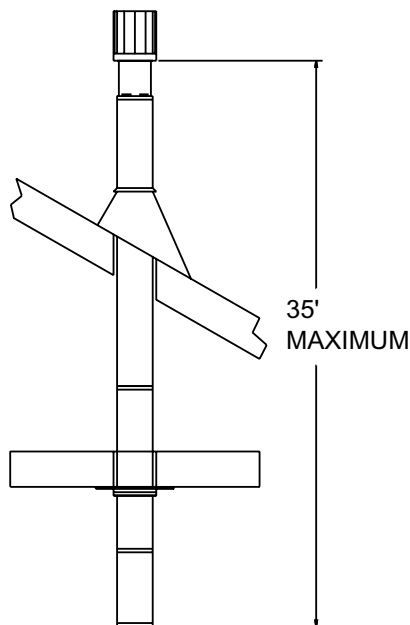
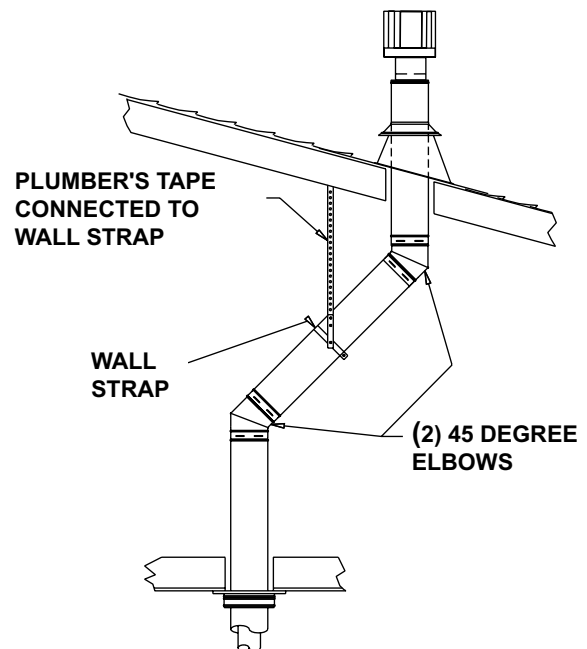


FIG. 11



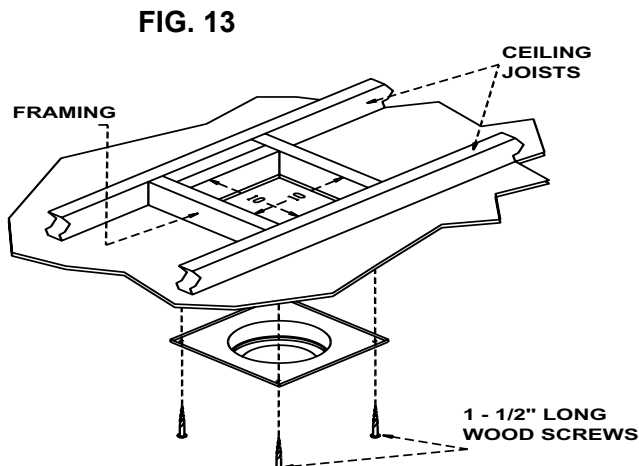
VERTICAL INSTALLATION USING GS SERIES PIPE *(cont'd.)*

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 **Fig. 11, page 25** to avoid cutting loadbearing members.

Step 3.

To install the round support box/wall thimble in a flat ceiling, cut a 10" (25.4cm) square hole in the ceiling, centered on the hole drilled in Step 2. Frame the hole as shown in **Fig. 13**.



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

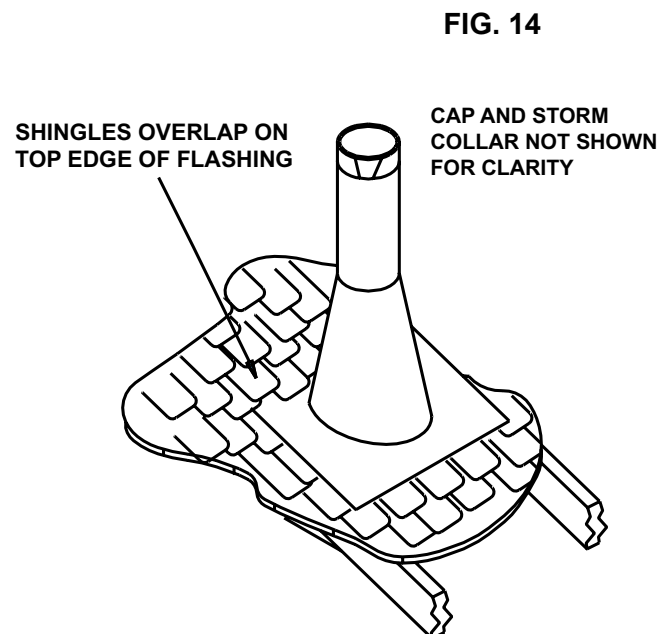
of pipe and elbows necessary to reach from the ceiling support box up through the roof line. Galvanized pipe and elbows may be utilized in the attic, as well as above the roofline. The galvanized finish is desirable above the roofline, due to its higher corrosion resistance.

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, **Fig. 11, page 25**.
- (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 **Fig. 14**. Verify that the chimney is the required height above the roof. See Roof Pitch Table on **page 27** of this manual



VERTICAL INSTALLATION USING GS SERIES PIPE (cont'd.)

Step 7.

Continue to assemble pipe sections until the height of the vent cap (H) (**Fig. 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.

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 (**Fig. 16**). The opening should be framed to 10" x 10" (25.4cm x 25.4cm) inside dimensions, in the same manner as shown in **Fig. 13, page 26**.
- (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.

FIG. 15

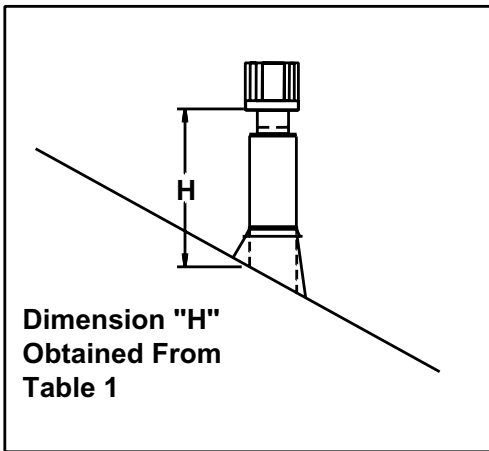
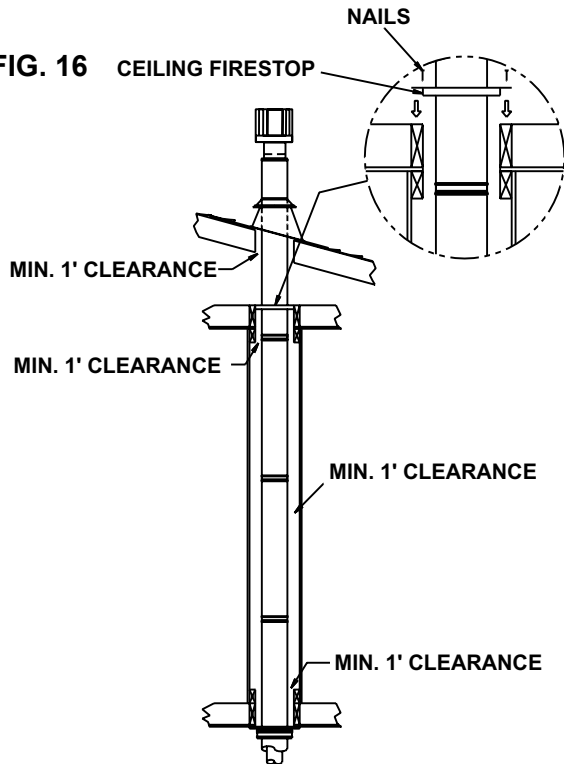


TABLE 1

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.

FIG. 16



VERTICAL INSTALLATION CATHEDRAL CEILING INSTALLATION

Step 1.

Follow installation Steps 1 and 2 under vertical termination section, **pages 25 and 26**.

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" (51cm) below the ceiling (**Fig. 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 (**Fig. 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, **pages 26 & 27**.

FIG. 17

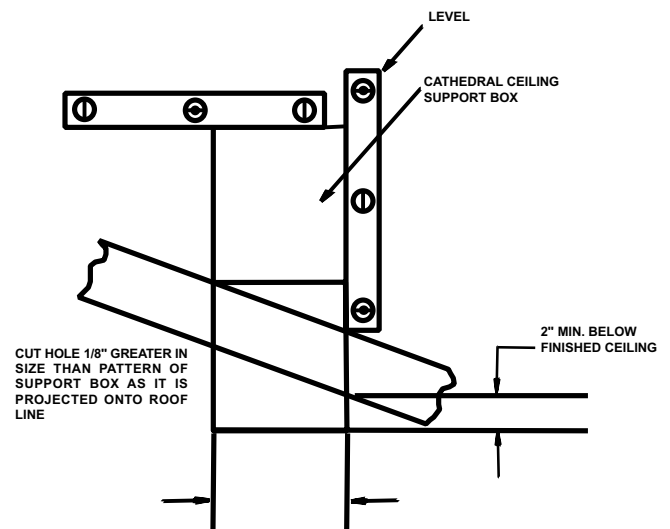
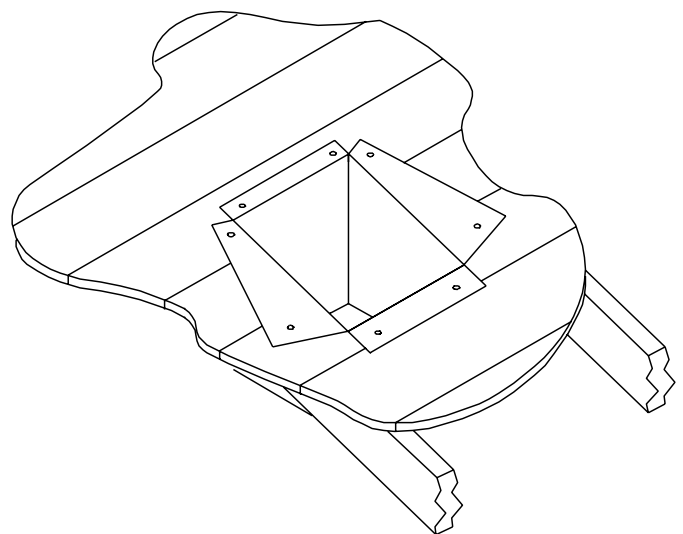


FIG. 18



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

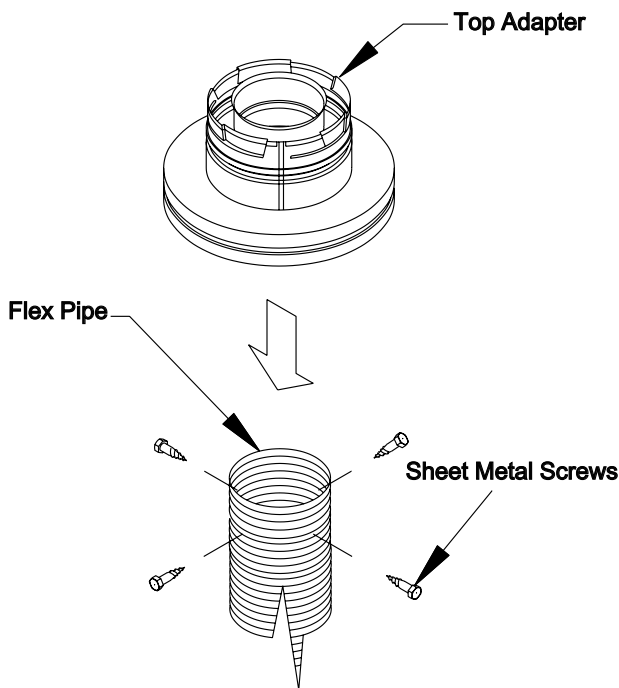
NOTE: Have the existing installation inspected by a qualified chimney sweep or professional installer prior to converting to direct vent. The existing chimney system must be in serviceable condition and functionally sound and clean.

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" (76mm) to this measurement, and cut a section of 4" (101mm) flex pipe to that length (the flex should be extended to its nominal length).

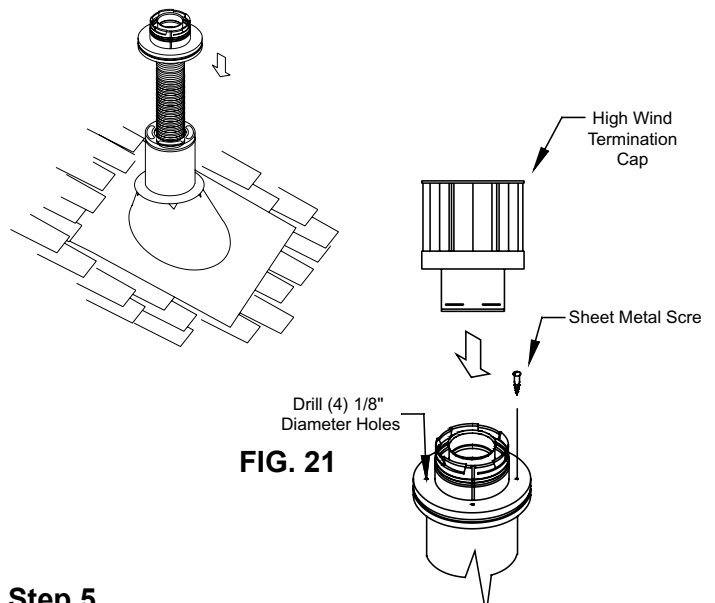
Step 3.
Connect the end of the flex pipe section to the underside of the top adapter (SDV #985K, 986K or 987K), using four sheet metal screws (Fig. 19).

FIG. 19



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" (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 (Figs. 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

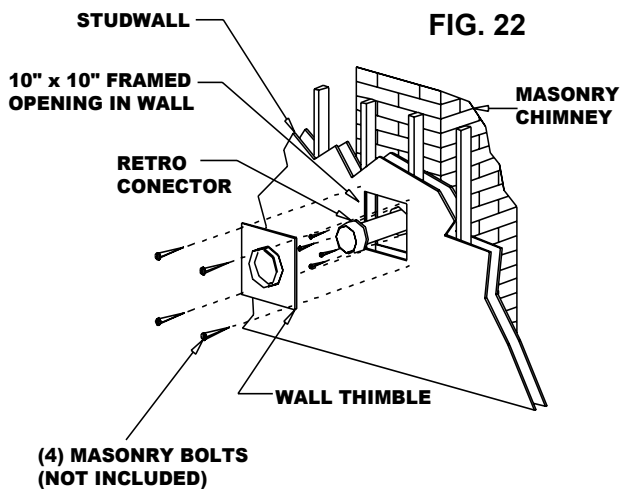
INSTALLATION INTO AN EXISTING MASONRY CHIMNEY (USA ONLY)

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. If the hole is framed a wall thimble is required. This allows the retro connector to mount directly on the masonry and provide the correct clearances to combustibles (Fig. 22).

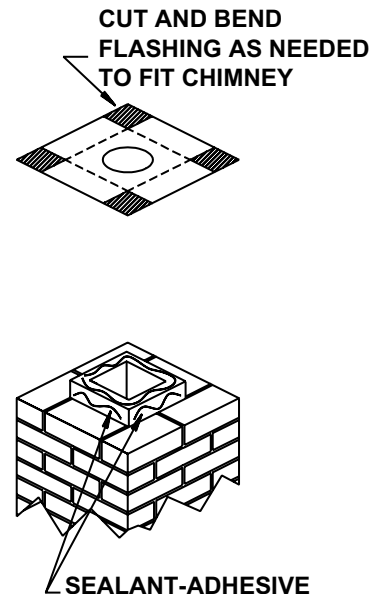


NOTE: FOR HEARTH APPLICATIONS REFER TO PAGE 19 FOR THE USE OF THE 923GCL CO-AXIAL TO CO-LINEAR APPLIANCE CONNECTOR.

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 (Fig. 23).

FIG. 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.

Step 5.

Connect the flex liner to the top adapter using three (3) sheet metal screws (Fig. 19, page 29).

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.

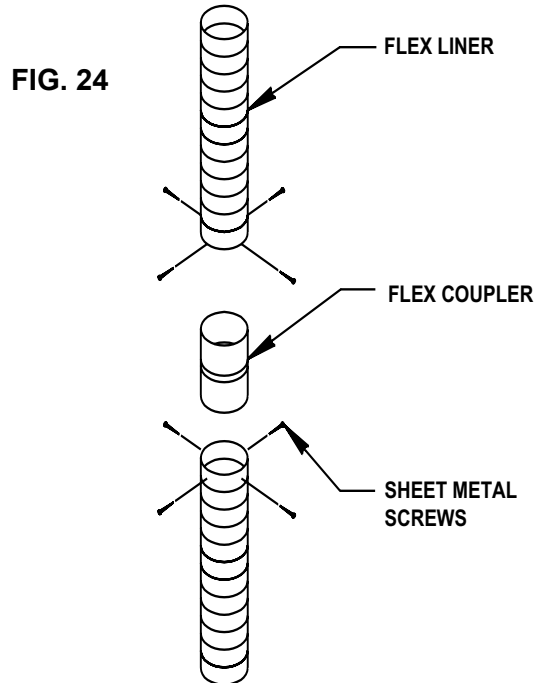
WARNING: Do not let the flex liner sag below the level at which it will connect to the appliance or connector. This could allow hot gas to become trapped and potentially become a fire hazard. The flex liner path should always be sloped up toward the termination cap.

VERTICAL INSTALLATION

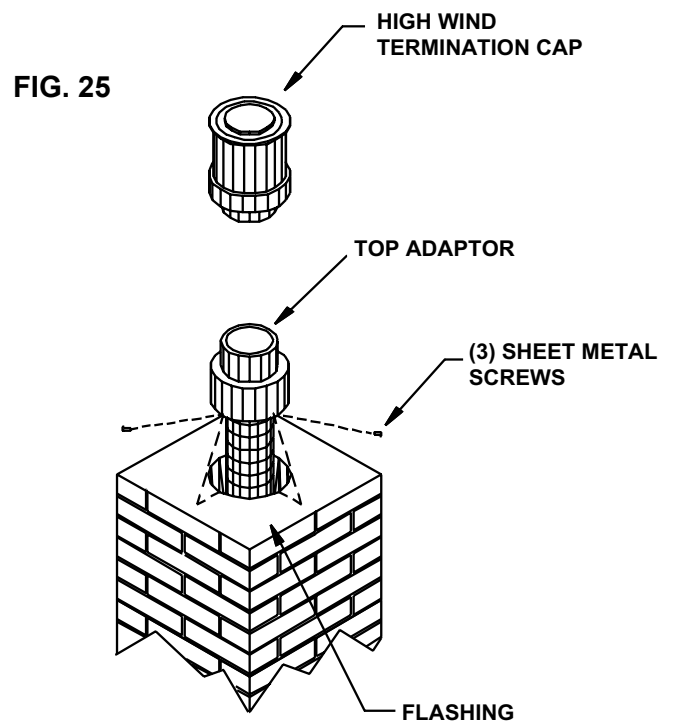
INSTALLATION INTO AN EXISTING MASONRY CHIMNEY (USA ONLY) *(cont'd.)*

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 sheet metal screws for each side (Fig. 24).

**Step 8.**

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



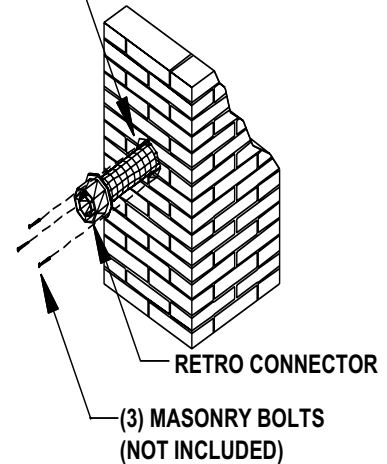
VERTICAL INSTALLATION

INSTALLATION INTO AN EXISTING MASONRY CHIMNEY (USA ONLY) *(cont'd.)*

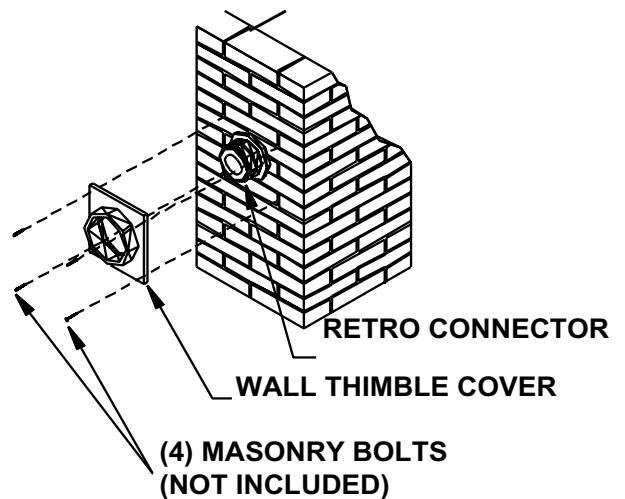
Step 9.

Attach the flex to the retro connector. Use three sheet metal screws to attach the flex liner to the connector (**Fig. 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.

6" DIAMETER OPENING
IN MASONRY WALL

FIG. 26**Step 10.**

Slide wall thimble cover (SDV #940) over retro connector and secure with masonry bolts (**Fig. 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" (25.4cm) square framed opening (**Fig. 22, Page 30**). 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 (and Commonwealth of Massachusetts approved); if not, follow NFGC ANSI 223.1 or CAN/CGA-B149 and the requirements listed below.

NOTE: Have the gas supply line installed in accordance with local building codes by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)

A listed (and Commonwealth of Massachusetts approved) 1/2 inch (13mm) tee-handle manual shut-off valve and a listed flexible gas connector are connected to the 1/2 inch (13mm) inlet of the control valve. **NOTE: If substituting for these components, please consult local codes for compliance. Leak test all gas line joints and the gas control valve prior to and after starting the stove.**

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 (3.5 kPa). For pressures under 1/2 psig (3.5kPa), isolate the gas supply piping by closing the manual shut-off valve. Be sure to bleed off test pressure before opening shut off.

Fuel

This unit is manufactured for use with natural gas. To convert to LP gas, use the LP Conversion Kit supplied with the stove.

Gas Line Connection

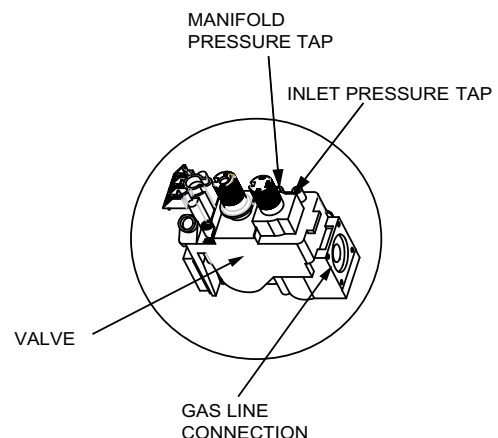
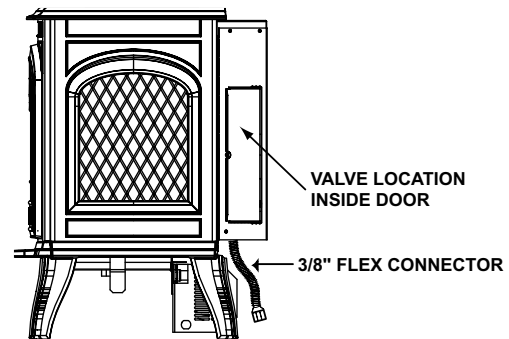
Before making the gas connection, ensure that the stove you are installing is designed for the type of gas being supplied. This information can be found on the Ratings Label attached to a beaded chain on the lower right hand side of the appliance. If the stove has been converted to propane (LP), the valve cover will have a label stating that the unit has been converted to propane. (See page 11, #5).

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

You must supply a manual shutoff valve in a visible location within 3' (91.4cm) 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.



CHECKING GAS INLET PRESSURE

Step 1. Turn "ON" all other gas appliances in the household, and;

Step 2. Turn the fireplace burner "ON".

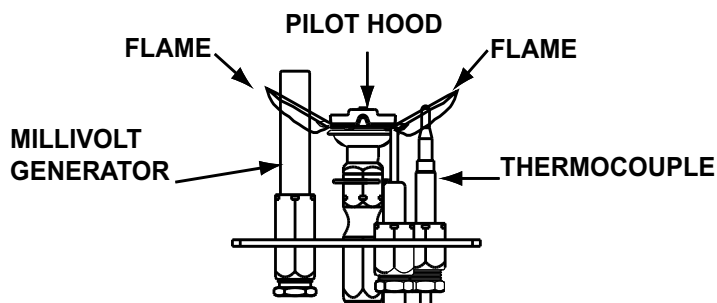
Step 3. Connect manometer to pressure tap on valve after opening it.

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

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 components, **see page 36**.
5. Follow Lighting Instructions on **page 38** 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.



PLEASE NOTE:

Fumes from curing paint and oil burning off the steel are a normal occurrence. Open windows 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 "OFF" 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

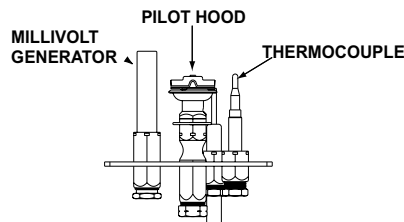
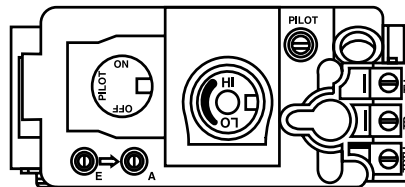
- A. This appliance has a pilot that must be lit manually. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING**, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

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 the power from the appliance.
4. Open the door of the appliance. May need to remove face/front first.
5. Push in gas control knob slightly and turn clockwise  to the "OFF" position. Do not force.
6. 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.
7. Push gas control knob in and turn counterclockwise  to the pilot position. NOTE: Knob cannot be turned unless knob is pushed in slightly. Do not force.
8. **PIEZO IGNITER:** Press down on the gas control knob in pilot position and simultaneously press the piezo igniter. (This may take many repetitions for lighting.)
ELECTRONIC IGNITER: If the unit is equipped with an electronic igniter it should begin sparking right away.
9. The pilot should be visible through the door opening.
10. Reinstall door and face. Wait five minutes to allow pilot flame to stabilize and establish proper draft.
11. After the pilot is lit, continue holding control knob down for approximately 30 seconds. Release the knob and it will pop back up. Pilot should remain lit.
 - * 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.
12. Push down and turn gas control knob counterclockwise  to "ON".
13. Push burner rocker 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.
14. Reconnect electrical power to appliance.



TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Push in gas control knob slightly and turn clockwise  to "OFF" position.

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 log set so it is necessary to first remove the logs. Refer to the following detailed instructions to achieve optimum performance of your stove.

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

1. Remove front (if installed), glass, and logs (if installed.)
2. Remove log/burner pan: First remove screws then lift the side of pan vertically and pull out of firebox.
3. Remove burner.
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. Reinstall burner: First slide burner tube into shutter and over holes. Secure plate with screws.
7. Reinstall log/burner pan in the back of firebox and then place horizontal over burner.
8. Install logs, refer to **page 10** for correct placement.
9. Replace glass door and front.

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)**

<u>ALTITUDE:</u>	0-2000	3000	4000	5000	6000	7000	8000	9000	10000
Natural Gas	.078	48(.076)		49(.073)		49(.073)		49(.073)	50(.070)50(.070)51(.067)51(.067)
Propane	.0469	57(.043)		57(.043)		57(.043)		57(.043)	58(.042)58(.040)59(.040)59(.041)

OPERATING PROCEDURES

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

CONTROLS

- 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 stove on and off.
- PILOT IGNITOR** The pilot ignitor is used only to start the pilot. When the valve control knob is turned to the pilot position and fully depressed, 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 indicator on the valve 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 to "ON" will keep the stove on continually.

NORMAL OPERATING SOUNDS

- Blower (Fan)** If the optional blower kit is installed, the 75 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 stove 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.

MAINTENANCE

Installation and repair should be done only by a qualified service agency. The appliance and venting systems should be inspected before use and at least annually by a qualified agency. 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 re-sealed and re-installed.

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.
- ___ Re-light pilot.
- ___ Re-attach door.
- ___ Check burner operation.

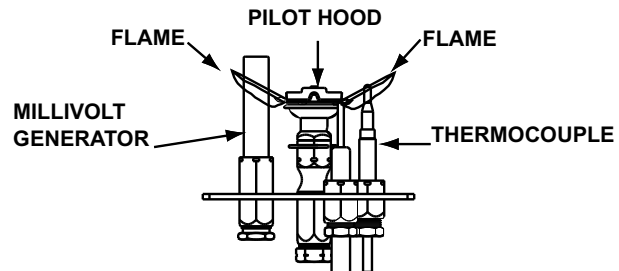
NOTE: If you observe a white film on the door glass, use a hard water deposit glass cleaner or contact your dealer. The use of a glass cleaner will reduce the mineral deposits.

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 agency once per year, preferably prior to the burning season.

1. Check or replace ignitor battery. Ignitor requires 1 "AA" 1.5V Battery. (Pg. 42).

2. Check the pilot flame. It should engulf approximately 3/8" of the top of the millivolt generator and engulf the top of the thermocouple and be 1" above the burner.



3. 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.
4. 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 stove will require adjustment. Contact your dealer.
5. Clean the burner with a soft brush vacuum attachment, (especially the burner holes) and inspect the following:
 - a. Check for burner holes that are cracked, plugged or deteriorated.
 - b. 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.
6. Re-install the log set. 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. Re-install door.
7. 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.
8. 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.
9. **CAUTION!** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.
10. 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.

Ignition Module Access and Battery Replacement

The Ignition Module (automatic-ignitor) is located on the left side of the stove. This module was incorporated into the design of the Garnet DV to facilitate "one hand" lighting of the stove. When the gas control knob is turned to the "Pilot" position, and depressed, the ignitor should begin sparking immediately. If the ignitor does not begin sparking immediately, then it is in need of service.

The ignitor is located on a plate attached to the right side of the stove and is attached to the plate using two #8 Phillips head screws. To access the ignitor, remove the two screws securing the plate to the side of the stove and slide the plate out, as shown in picture at right.

The single "AA" 1.5V battery that powers the ignitor is located in the module. To replace the battery, open the battery compartment and remove old battery. Replace the battery making sure the polarity is correct.



Accessing Ignition Module

Glass Replacement

1. Turn stove OFF and let it cool down before replacing the glass.
2. Lift off stove top and set on flat surface with the porcelain side up to prevent damage.
3. Remove stove front by sliding upwards in the grooves being careful not to chip the porcelain. Lay stove front face up on flat surface.
4. Unhook the two latches now exposed on top of the stove.
5. Lower the glass frame and glass towards you and lift out of the two notches at the bottom left and right of the frame.
6. Remove glass from the frame. Lay new glass in place. (Glass will come with gasket on it).
7. Reinstall glass frame on the stove and secure the two latches on top of the stove.
8. Reinstall stove front and stove top.

NOTE: The glass & gasketing must be replaced as a complete unit as supplied by the manufacturer.

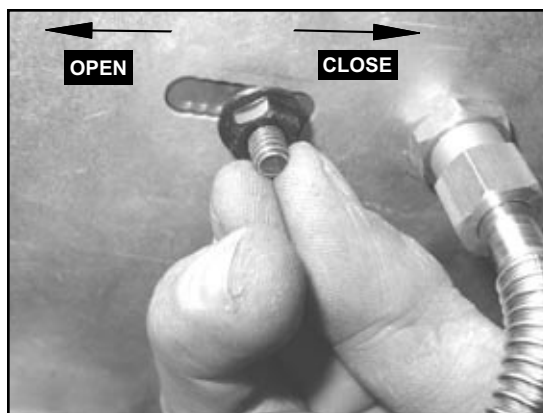
WARNING! Do not use substitute material.

Shutter Adjustment

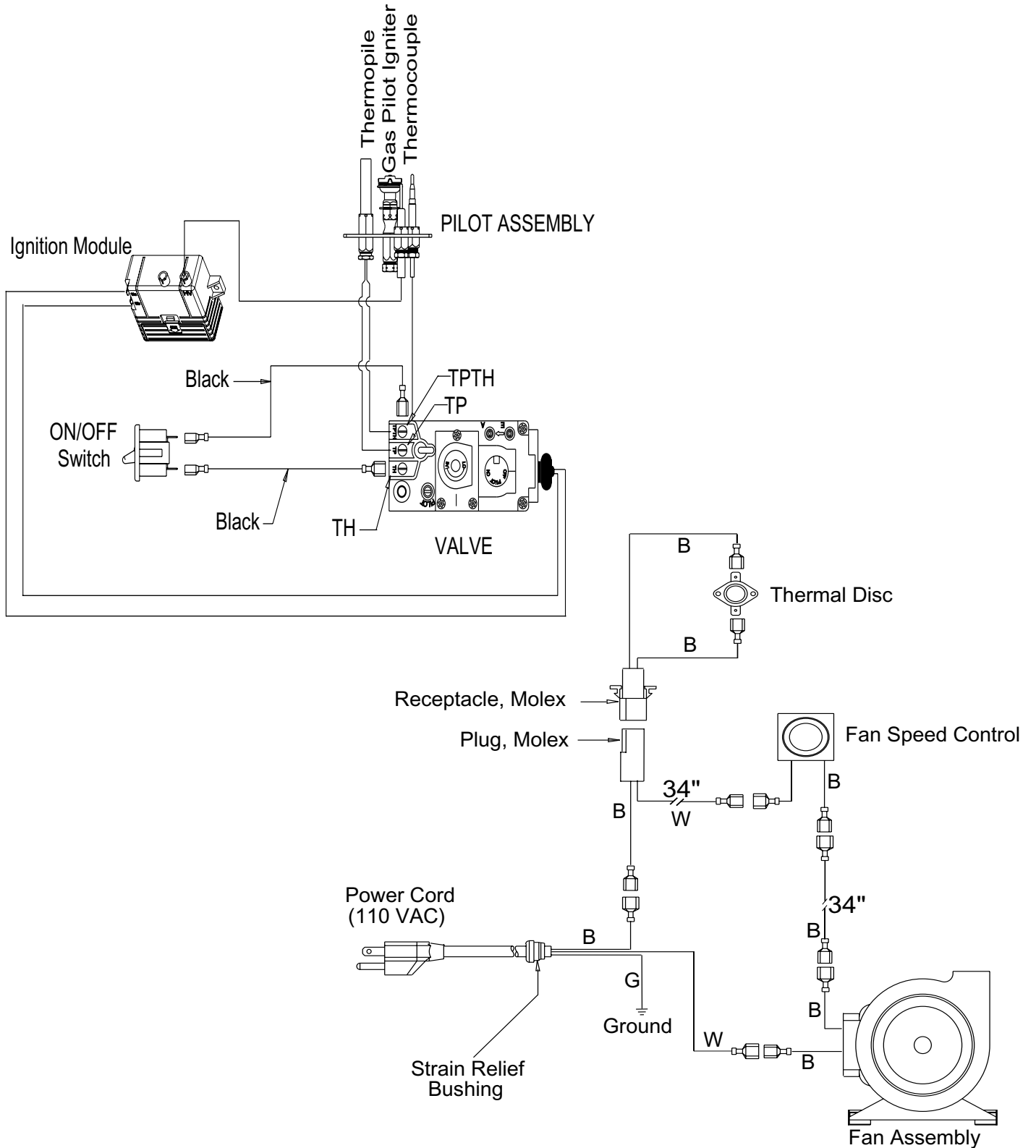
The shutter is located on the underside of the stove, on the right side. To adjust the shutter, loosen the 1/4" nut with a 7/16 wrench that is securing the shutter.

Moving the shutter bolt to the right closes the shutter. Moving the shutter bolt to the left, will open the shutter. Opening the shutter causes flames to become shorter and blue. Closing the shutter creates taller orange/yellow flames.

After adjustment, tighten nut to lock in place.



ELECTRICAL SCHEMATICS



TROUBLE SHOOTING

Pilot Will Not Light

1. Is gas shut-off valve turned on?
2. Is the valve control knob turned to "PILOT" (See Lighting Instructions, #6, Pg. 35).
3. Is the valve control knob pushed in? (See Lighting instructions, #6.)
4. Does the electronic ignitor have a good battery? (See battery replacement instructions. Pg. 39.)

Main Burners Will Not Start

1. Has the pilot light gone out? (See Lighting Instructions, Pg. 35.)
2. Is the gas control valve knob turned to "ON"? (See Lighting Instructions, Pg. 35).
3. Is the ON/OFF switch in the "OFF" position? (Turn to "ON".)
4. Is the remote control working correctly? (See instruction manual for the remote control.)
5. Is the thermostat disconnected or set too low? (See Thermostat Operation, Pg. 10.)
6. If LP, is the tank empty or supply valve off?

Remote Control Does Not Turn Unit On / Off

1. Has the pilot light gone out? (See Lighting Instructions, Pg. 35.)
2. Is the gas control valve turned to "ON"? (See Lighting Instructions, Pg. 35.)
3. Is the ON/OFF switch turned to "OFF"? (Turn the switch to "OFF".) If the switch is on, unit will remain on.
4. Is the remote too far away from the fireplace? (Use remote closer to fireplace.)
5. Is the remote control receiver turned "OFF"? (See instruction manual for the remote control.)
6. Are the remote control batteries dead? (See instruction manual for the remote control.)

Thermostat Does Not Work

1. Has the pilot light gone out? (See Lighting Instructions, Pg. 35.)
2. Is the gas control valve turned to "ON"? (See Lighting Instructions.)
3. Is the thermostat set too low? (See Thermostat Operation, Pg. 10.)
4. Is the ON/OFF switch turned to "OFF"? If switch is on, unit will remain on. (The switch overrides the thermostat.)
5. Has proper wire gauge been used for distance? (Pg. 10)

Stove Will Not Distribute Heat (Fan won't run)

1. Is the stove getting electricity? (Check the breaker switch.)
2. Is the stove up to temperature? (See Operating Procedures, Pg. 37. Blower will not turn on until stove is up to temperature.)

3. Is Blower operational? (Check Fan Speed control, Pg. 37.)

Pilot Goes Out Once a Month or More

1. Has the gas supply been shut off? (Keep gas supply turned on.)
2. Build-up on pilot assembly.
3. Correct pressure supply.
4. Wind gust may also blow out pilot.

Flames Are Too Blue

1. Has the stove just been started? Wait for 20 minutes.
2. Contact dealer to service shutter (Pg. 39) and damper adjustment (Pg. 24).

Flames Are Too Short (Under 6")

1. The flame height may be turned too low. (Turn the flame height to "HI"; see Comfort Control, Pg. 37.)
2. Shutter may require adjustment - Contact Dealer (Pg. 39).
3. Damper may require adjustment - Contact Dealer (Pg. 24).

Thin Layer of Soot Covers the Glass

1. Are the logs or embers placed incorrectly? (Pg. 10)
2. Shutter may require adjustment - Contact Dealer (Pg. 39)
3. Damper may require adjustment - Contact Dealer (Pg. 34)

NOTE: In the Commonwealth of Massachusetts, the word damper shall be replaced with the words flue restrictor.

Stove Design

Many of the components within this gas stove are designed specifically for safety purposes. It is therefore imperative that only certified gas service technicians should service this appliance.

Burner Operation

A millivolt system controls the operation of this stove. The thermopile and thermocouple generate electricity when heated by the pilot flame. This electricity is used to operate the gas valve. Without enough electricity, the gas valve will not turn on. That is why, when starting the pilot, the gas control knob has to be pressed in long enough for the thermocouple to heat up and generate enough electricity. The thermopile provides power for the ON/OFF switch, remote control, or thermostat. Because the thermopile generates the electricity needed to turn the fireplace on and off, this stove can be operated when the power is out (although the blower will not run).

Gas Build Up Prevention Feature

This appliance's utilization of a high-technology gas valve in conjunction with a pilot flame ensures that no gas builds up inside the firebox.

The thermocouple (next to the pilot) senses when the pilot flame is lit. If the pilot flames goes out, this thermocouple no longer generates electricity, causing the gas valve to automatically shut off all gas to the heater, preventing the pilot from spilling gas into the firebox.

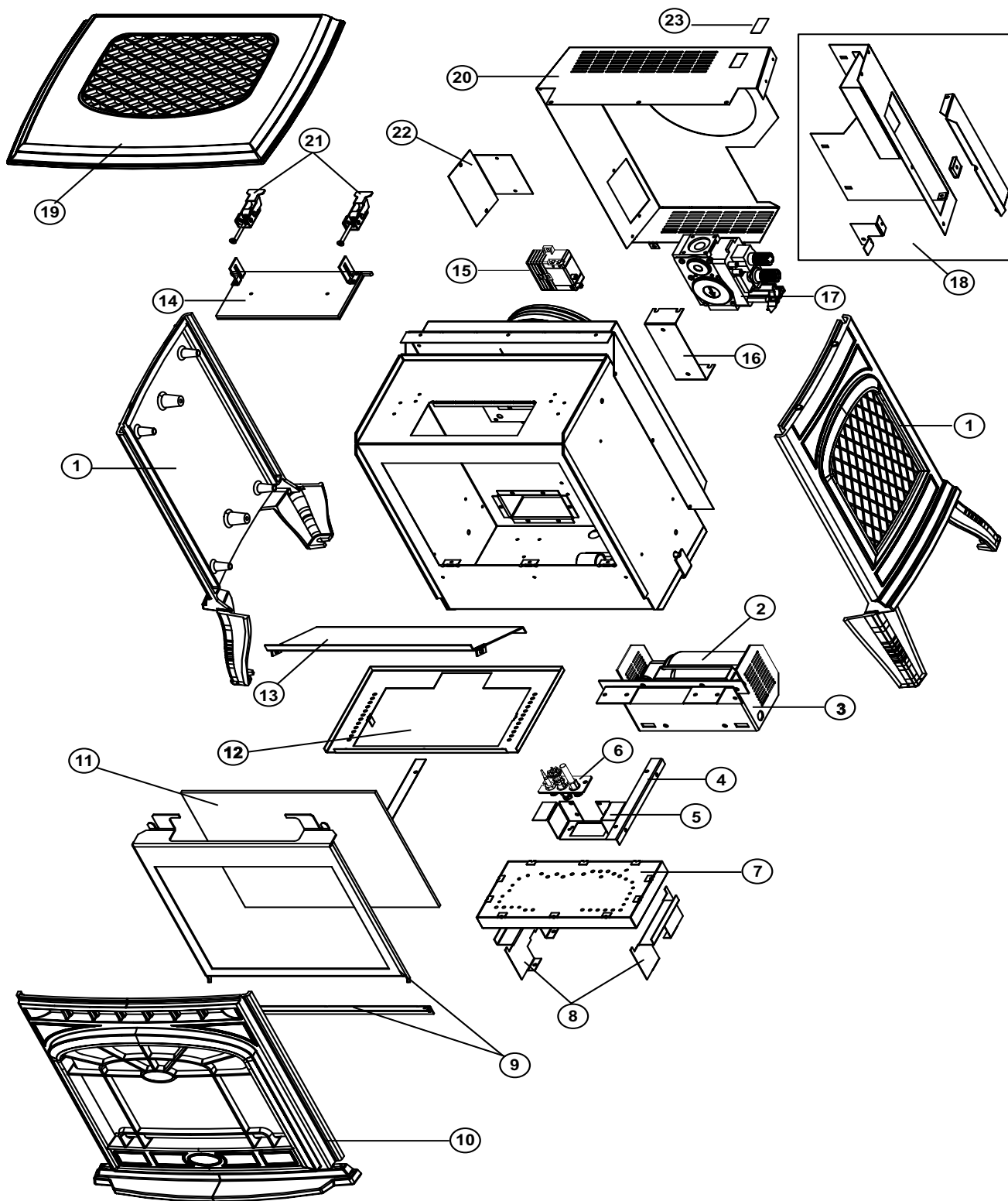
PARTS & ACCESSORIES*PLEASE CONTACT YOUR DEALER TO ORDER REPLACEMENT PARTS*

<u>Part Number</u>	<u>DESCRIPTION</u>
844-9370	Blower Assembly with Speed Control (Thermostat capability)
812-3760	Manual Thermostat
811-0520	Programmable Thermostat
841-0960	Remote Control, Smart Stat
841-0970	Remote Control, Smart Batt
842-4980	Log Set, 3 piece, complete
842-0370	Speed Control (Rheostat)
812-1560	Snap Disc for Blower
812-3821	Magnet Latch
220-0640	Door Latch
842-0320	On/Off (Rocker) Switch
844-9550	Slim-Line Wall Thimble
844-9580	Burner Kit
GLA-TP	Glass Assembly with Frame

EXPLODED VIEW SCHEMATIC

<u>Number</u>	<u>Description</u>	<u>Number</u>	<u>Description</u>
1	Cast Sides - Left or Right	13	Baffle
2	Blower (Fan) Motor	14	Pressure Relief Assembly
3	Blower Housing	15	Ignition Module
4	(2) Log Pan Supports	16	Valve Bracket
5	Pilot Bracket	17	Valve
6	Pilot Assembly	18	Valve Cover & Access Door
7	Burner	19	Cast Stove Top
8	(2) Burner Supports	20	Back Shield
9	Glass Frame	21	(2) Door Latches
10	Face	22	Ignition Module Bracket
11	Glass	23	On/Off Switch
12	Log Pan		

EXPLODED VIEW





Lifetime Warranty

LIMITED LIFETIME WARRANTY

The Hearth & Home Technologies limited Lifetime Warranty guarantees that the following components will work as designed for the lifetime of the stove or Hearth & Home Technologies 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, plating, doors, glass damaged by thermal breakage, steel baffle supports, steel and ceramic baffles and manifold tubes. Labor is for the first five years.

THREE YEAR WARRANTY

Our EZ Clean firepots are covered under Hearth & Home Technologies three-year warranty program. Labor is for 3 years.

TWO YEAR WARRANTY

All electrical components such as but not limited to blowers, wiring, vacuum switches, speed controls, control boxes, thermodisc switches, pilot assembly, gas valves, thermostats and remotes are covered under Hearth & Home Technologies two-year warranty program.

ONE YEAR WARRANTY

Porcelain finishes are warranted against manufacturer defects for one year. Labor to repair or replace these parts is covered for one year, reimbursed per our warranty service fee schedule.

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 Hearth & Home Technologies. 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 ten (10) years after Hearth & Home Technologies discontinues the model and two (2) years for optional accessories. 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, door gasketing, glass gasketing, firebrick, pellet logs, igniters, kaowool or other ceramic insulating materials. It does not cover installation or operational-related problems such as overfiring, 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 Hearth & Home Technologies assume responsibility for them. Further, Hearth & Home Technologies 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 Hearth & Home Technologies.

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. Hearth & Home Technologies 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 appliances sold after May 1, 2002 and supersedes any and all warranties currently in existence.

Policy 250-8620 Rev E