

21 TRV Fireplace

Tested and Listed by



OMNI-Test Laboratories, Inc. Portland, Oregon Report # 028-F-85-5 ANSI Z21.88a-2007 / CSA 2.33a-2007

- Built-In Direct Vent Fireplace
- Natural Gas or Propane
- Residential or Mobile Home

WARNING: If the information in these instructions 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 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.

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

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.

Installation Manual



Installer: After installation give this manual to the homeowner and explain operation of this heater.

TRAVIS INDUSTRIES HOUSE OF FIRE 4800 Harbour Pointe Blvd. SW Mukilteo, WA 98275

© Copyright 2008, T.I. \$10.00 100-01185_000 4080207

Introduction

Overview

This manual details the installation requirements for the 21 TRV fireplace. For operating and maintenance instructions, refer to the 21 TRV Owner's Manual (part # 100-01186).

Listing Details

This appliance was listed by OMNI Test Labs to ANSI Z21.88a-2007/CSA 2.33a-2007 - report # 028-F-85-5 – for US and Canadian installations. The listing label is attached to the appliance near the gas control valve. A copy is shown to the right.

ICBO Approval

This appliance was listed by OMNI Test Labs - ICBO # TL130.

Massachusetts Approval

This manual has been submitted to the Massachusetts Board of State Examiners of Plumbers and Gas Fitters

National Fireplace Institute



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

Table of Contents

Introduction

Overview	2
Listing Details	2

Safety Precautions

afety Precautions4
alety Flecautions

Features and Specifications

Features	6
Installation Options	6
Heating Specifications	6
Dimensions	6

Installation

Packing List	7
Additional Items Required	7
Recommended Installation Procedure	
Installation Overview	8
Massachusetts Requirements	
Converting the Fireplace to Rear Vent Configuration	
Fireplace Placement Requirements	
Clearances	
Raised Fireplaces	
Min. Framing Dims Rear Vent Configuration	
Min. Framing Dims Top Vent Configuration	
Nailing Brackets	
Corner Installations - Top Vent Configuration	
Corner Installations - Rear Vent Configuration	18
Gas Line Requirements	19
Fuel	19
Gas Line Connection	19
Gas Inlet Pressure	19
Gas Line Location	19
Electrical Connection (required)	21
Wall Switch or Thermostat Installation	22
Wiring Diagram (Millivolt System)	22
Installation	
Vent Requirements	23
Vent Clearances	
Altitude Considerations	
Approved Vent	
Vent Installation	
Approved Vent Configurations	
Restrictor and Diffuser Position	
Exhaust Restrictor Adjustment	
Diffuser Plate Adjustment	
Top Vent Config. W Horizontal Termination	
Top Vent Config. W Vertical Termination	
Rear Vent Configuration with Horizontal Termination	
Rear Vent Configuration with Vertical Termination	
Termination Requirements	31

Installation (continued)

Hearth Requirements	32
Facing Requirements	33
Face Dimensions	33
Facing Under 1" Thick	33
Facing Over 1" Thick	33
Facing – Fireplace Overview	34
Facing Detail – Drywall Facing	35
Facing Detail – Tile Facing	36
Facing Detail – Facing Over 1" Thick (Brick)	37
Mantel Requirements	38

Finalizing the Installation

Steps for Finalizing the Installation	39
Starting the Pilot Flame	
Pilot Flame Inspection	
Air Shutter Adjustment	
Glass Frame Removal and Installation	
Log Set Installation	43

Finalizing the Installation

LP Conversion Instructions	46
Aromatherapy Modification	49
Omega Remote Notes	50

<u>Index</u>

Index

Safety Warnings:

- Failure to follow all of the requirements may result in property damage, bodily injury, or even death.
- This unit must be installed by a qualified installer to prevent the possibility of an explosion.
- This appliance must be installed in accordance with all local codes, if any; if not, in U.S.A. follow ANSI Z223.1 and NFPA 54(88).
- A manufactured home (USA only) or mobile home OEM installation 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 Recational Vehicles and Mobile Housing, CSA Z240.4. This appliance may be installed in Manufactured Housing only after the home is site located.
- All exhaust gases must be vented outside the structure of the living-area. Combustion air is drawn from outside the living-area structure. The venting must not be connected to a chimney flue serving a separate solid-fuel burning appliance.
- Notify your insurance company before hooking up this fireplace.
- The room heater should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc.
- The instructions in this manual must be strictly adhered to. Do not use makeshift methods or compromise in the installation. Improper installation will void the warranty and safety listing.
- This heater is approved for use with natural gas (NG) or propane (LP). Burning the incorrect fuel will void the warranty and safety listing and may cause an extreme safety hazard. Direct questions about the type of fuel used to your dealer. Check the label and flame adjust knob on the gas control valve.
- Contact your local building officials to obtain a permit and information on any installation restrictions or inspection requirements in your area.
- If the flame becomes sooty, dark orange in color, or extremely tall, do not operate the heater. Call your dealer and arrange for proper servicing.
- It is imperative that control compartments, screens, or circulating air passageways of the heater be kept clean and free of obstructions. These areas provide the air necessary for safe operation.
- Do not operate the heater if it is not operating properly in any fashion or if you are uncertain. Call your dealer for a full explanation of your heater and what to expect.
- Do not store or use gasoline or other flammable liquids in the vicinity of this heater.
- Do not operate if any portion of the heater was submerged in water or if any corrosion occurs.
- Do not place clothing or other flammable items on or near the heater. Because this heater can be controlled by a thermostat there is a possibility of the heater turning on and igniting any items placed on or near it.
- Light the heater using the built-in piezo igniter. Do not use matches or any other external device to light your heater.
- Never remove, replace, modify or substitute any part of the heater unless instructions are given in this manual. All other work must be done by a trained technician. Don't modify or replace orifices.
- The viewing glass should be opened only for lighting the pilot or conducting service.
- Any safety screen or guard removed for servicing must be replaced prior to operating the heater.

Safety Warnings (continued):

- Allow the heater to cool before carrying out any maintenance or cleaning.
- Operate the heater according to the instructions included in this manual.
- If the main burners do not start correctly turn the gas off at the gas control valve and call your dealer for service.
- The pilot flame must contact the thermopile and thermocouple. If it does not, turn the gas control valve to "OFF" and call your dealer.
- This unit is not for use with solid fuel.
- Do not place anything inside the firebox (except the included fiber logs).
- If the fiber logs become damaged, replace with Travis Industries log set.
- Do not throw this manual away. This manual has important operating and maintenance instructions that you will need at a later time. Always follow the instructions in this manual.
- Do not touch the hot surfaces of the heater. Educate all children of the danger of a high-temperature heater. Young children should be supervised when they are in the same room as the heater.
- Due to the high temperature, the heater should be located out of traffic and away from furniture and draperies.
- Instruct everyone in the house how to shut gas off to the appliance and at the gas main shutoff valve. The gas main shutoff valve is usually next to the gas meter or propane tank and requires a wrench to shut off.
- Travis Industries, Inc. grants no warranty, implied or stated, for the installation or maintenance of your heater, and assumes no responsibility of any consequential damage(s).

Installation Options

- Residential or Mobile Home
- Straight or Corner Placement
- Flush or Recessed Face

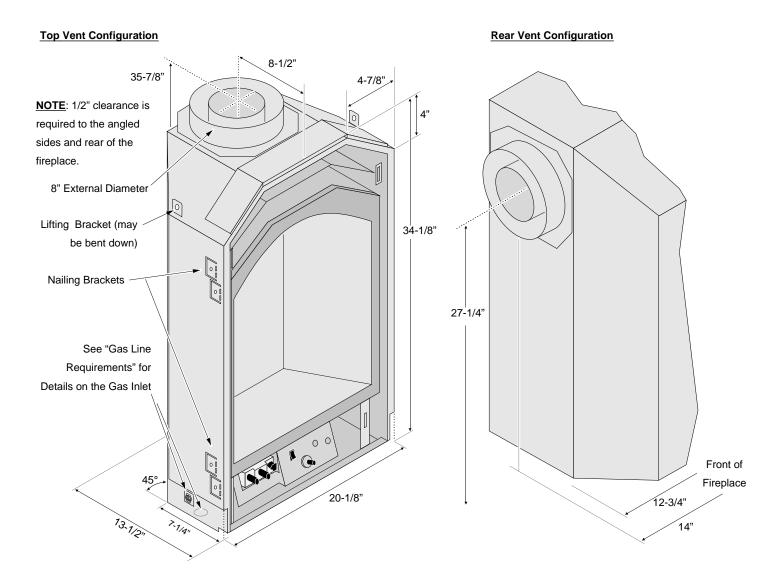
- Raised or Floor Placement
- Internal or External Chase
- Horizontal or Vertical Vent
- Bedroom Approved

Heating Specifications

		Natural Gas	Propane
	Approximate Heating Capacity (in square feet)*	Up to 650	Up to 650
	Maximum BTU Input Per Hour	16,500	16,500
*	Heating conspirity will your with floor plan, insulation, or	ad autoida tamparatura	

Heating capacity will vary with floor plan, insulation, and outside temperature.

Dimensions



Packing List

- Propane Conversion Kit
- Log Set
- Rear Vent Configuration Kit (insulation)
- Firestop

Additional Items Required

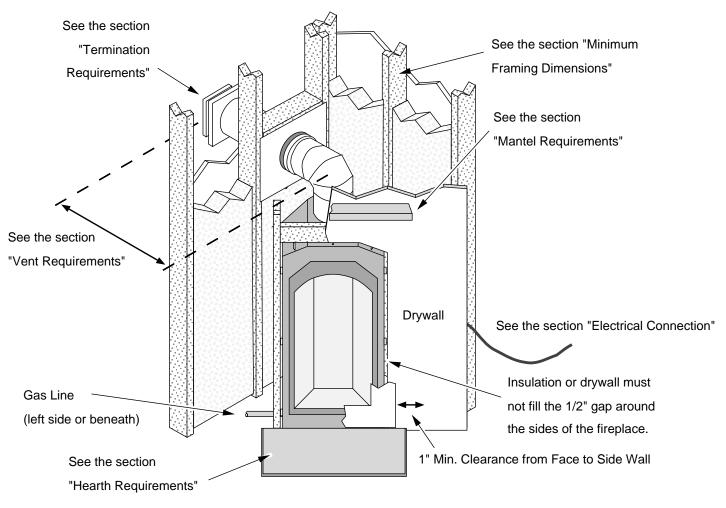
- Direct Vent
- Gas Line Equipment (shutoff valve, pipe, etc.)
- Electrical Equipment (min. 14 gauge, grounded line)
- Face

Recommended Installation Procedure

- 1 Install the optional equipment (do not install the logs) we recommend the following order:
 - a) LP Conversion (if applicable) NOTE: leave the burner removed until after the liner and accent light are installed (if applicable). If using the Omega remote, install the modulating regulator during LP conversion.
 - b) Liner (if applicable)
 - Accent Light (if applicable)
 NOTE: Do not install the accent light wiring harness or rheostat if using the omega remote.
 NOTE: Leave the control cover removed if using the blower
 - d) Blower NOTE: Do not install the rheostat if using the omega remote.
 - e) Remote
- 2 Frame the opening for the fireplace. Make sure to allow for vent installation.
- 3 This fireplace is designed to accommodate 1/2" drywall or 1/2" drywall with 3/8" tile (see "Nailing Brackets" on page 17 for details). Secure the fireplace to the framing. <u>NOTE</u>: If the facing is not 1/2" or 7/8" thick, follow the directions below: Place a strip of facing material to both sides of the fireplace opening (NOTE: the strips will be removed after the fireplace is secured). The facing thickness must represent the total thickness of the finished facing (e.g.: If tile is to be used, include the thickness of the backboard, tile, and tile adhesive). Insert the fireplace into the framing. Slide it back until the front edge of the fireplace is flush with the facing material. Secure the fireplace using the plates located along the base of the fireplace.
- 4 Complete the gas line installation. Complete the electrical hook-up.
- 5 Complete the vent installation.
- 6 Install the hearth (if applicable).
- 7 Install the drywall and facing (if applicable).
- 8 Install the mantel (if applicable).
- 9 Finalize the installation (see page 39) and install the grill or face.

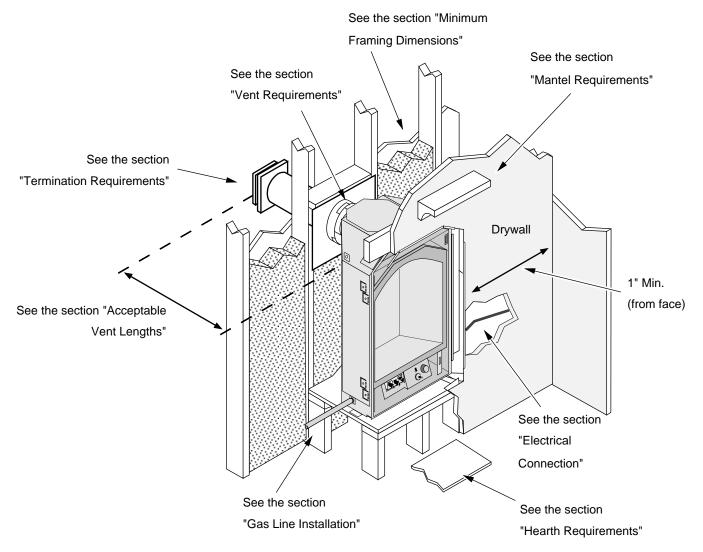
Installation Overview – Top Vent Configuration

• All requirements below must be met.



Installation Overview – Rear Vent Configuration

• All requirements below must be met.



Massachusetts Requirements

NOTE: The following requirements reference various Massachusetts and national codes not contained in this document.

Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

• The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

• Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

• The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

• The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

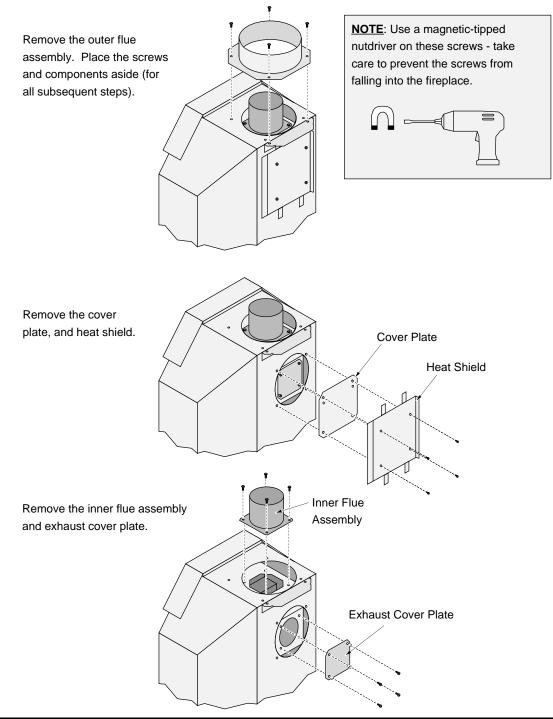
Top Vent or Rear Vent Configuration

This appliance is shipped in the top vent configuration. To change to the rear vent configuration, follow the directions below.

NOTE: top or rear vent configuration affects several aspects of installation (framing, maximum vent rise, maximum vent run). Make sure the vent configuration is correct prior to installation.

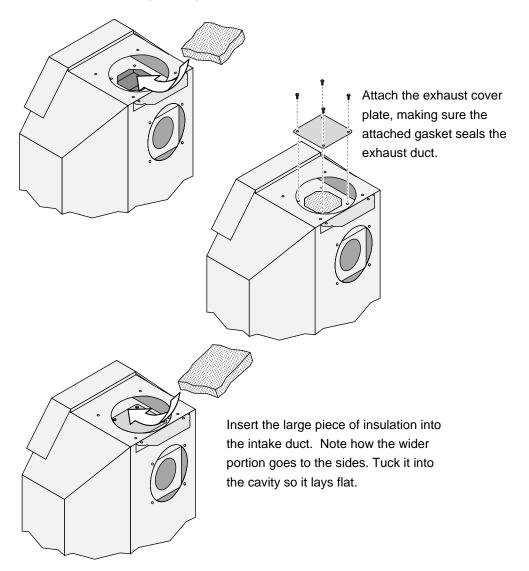
<u>HINT</u>: the diffuser is easiest to modify when converting the vent to rear-vent configuration. Refer to the vent configuration charts to determine if the vent diffuser requires adjustment to position # 2.

Converting the Fireplace to Rear Vent Configuration

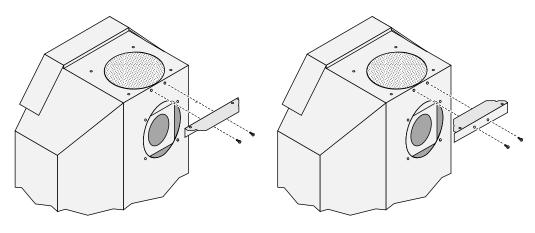


Converting the Fireplace to Rear Vent (continued)

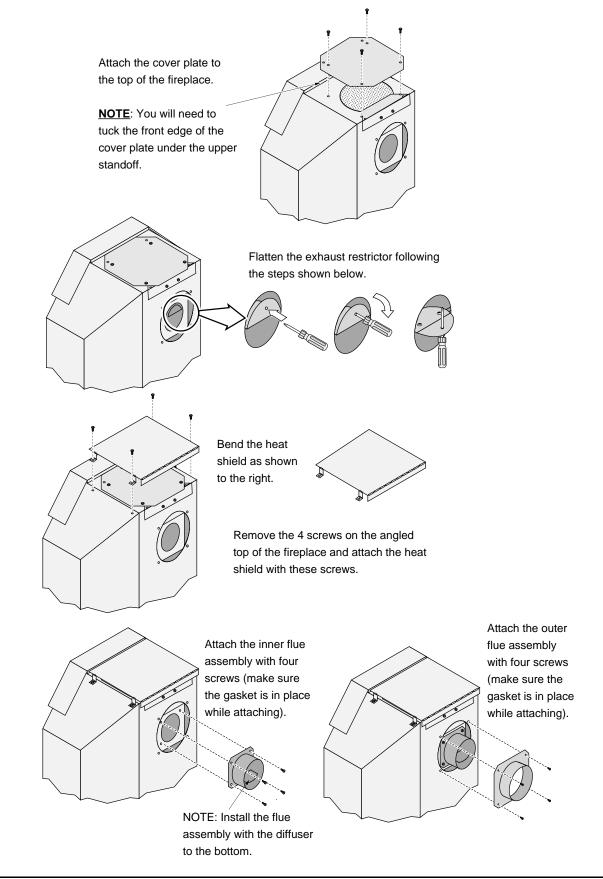
Insert the small piece of insulation into the exhaust duct. Tuck it into the cavity so it lays flat.



Remove the flue collar suport, rotate it 180°, and re-attach it to the fireplace.



Converting the Fireplace to Rear Vent (continued)



Fireplace Placement Requirements

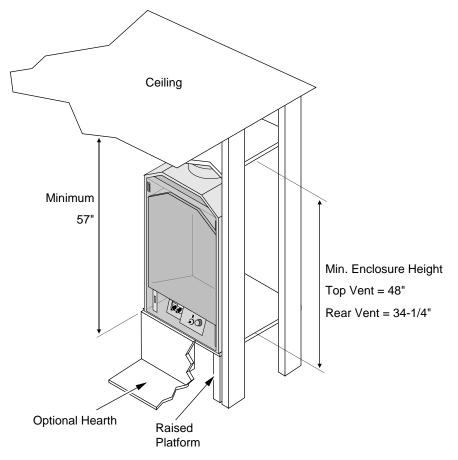
- The fireplace requires a 1/2" clearance from the angled sides and back of the fireplace to the framing members. No material (insulation, framing, etc.) may be placed into this area. The stand-offs (and nailing brackets) may contact the framing members but no material may be placed into this area.
- Fireplace must be installed on a level surface capable of supporting the fireplace and vent.
- Fireplace must be placed directly on wood or non-combustible surface (not on linoleum or carpet).
- This heater may be placed in a bedroom.

Clearances

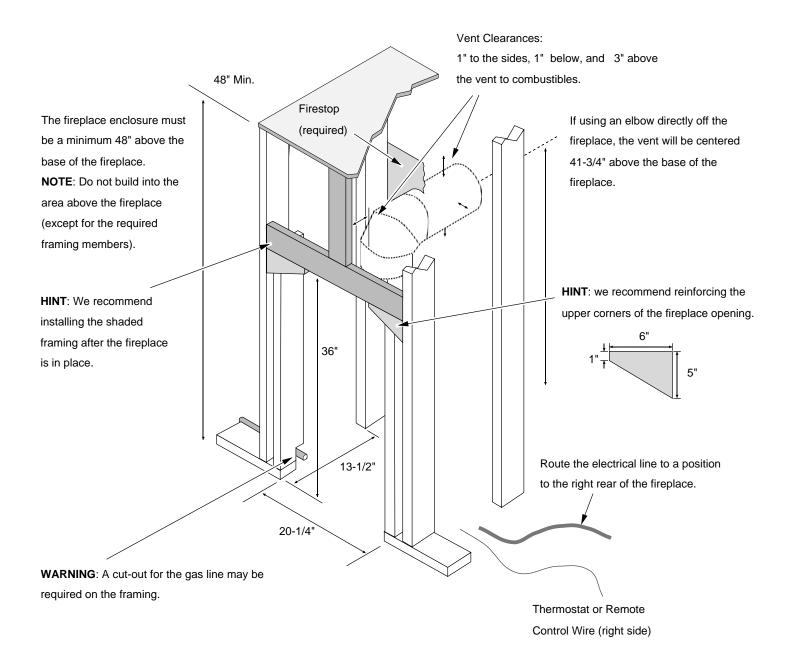
- Walls in front of the fireplace must be a minimum 1" to the side of the face.
- Due to the high temperature, the heater should be located out of traffic and away from furniture and draperies.
- Fireplace must be placed so the vents below and above the glass do not become blocked.

Raised Fireplaces

- **NOTE:** Looking Glass and Wilmington Faces require a raised fireplace see "Dimensions" for details.
- The fireplace (and hearth, if desired) may be placed on a platform designed to support the fireplace (95 Lbs.) and vent.



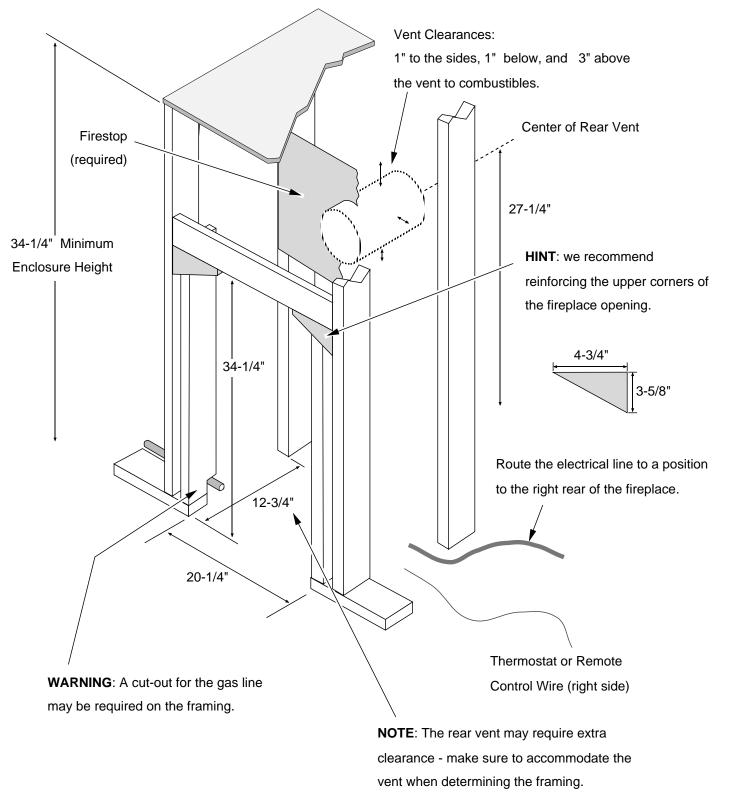
Minimum Framing Dimensions - Top Vent Configuration



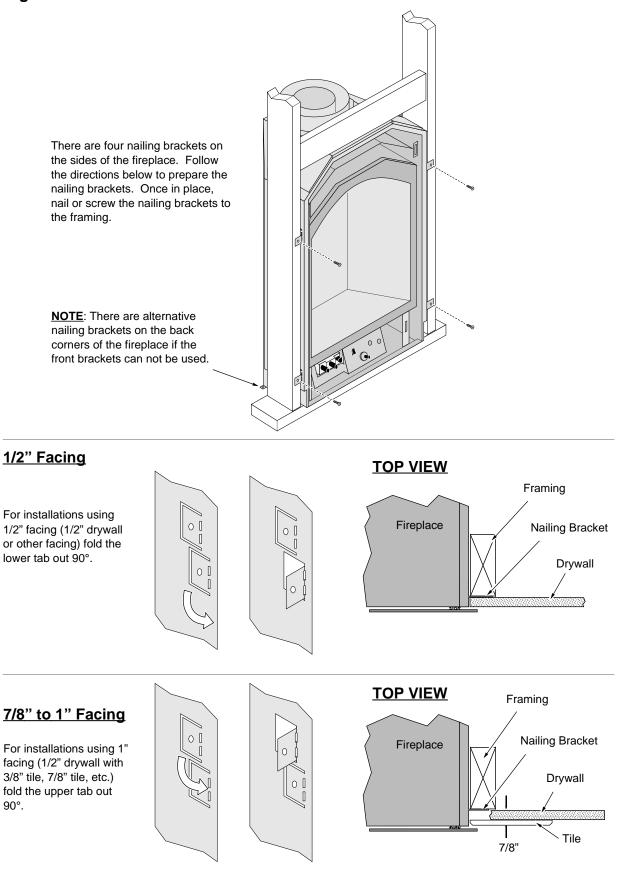
© Travis Industries

16

Minimum Framing Dimensions - Rear Vent Configuration

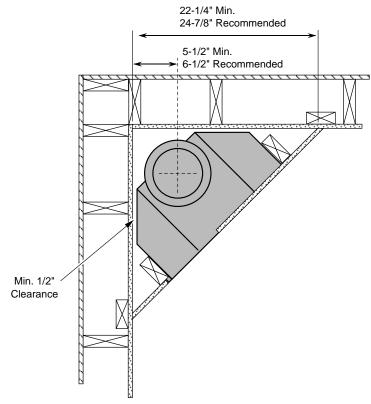


Nailing Brackets



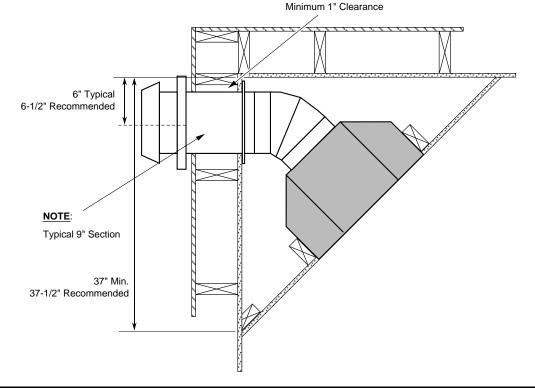
Corner Installations - Top Vent Configuration

Typical 45° installation uses the framing dimensions shown in the illustration below (NOTE: all clearances apply).



Corner Installations - Rear Vent Configuration

Typical 45° installation uses the framing dimensions shown in the illustration below (NOTE: all clearances apply).



Gas Line Requirements

MASSACHUSETTS INSTALLATIONS - WARNING:

THIS PRODUCT MUST BE INSTALLED BY A LICENSED PLUMBER OR GAS FITTER WHEN INSTALLED WITHIN THE COMMONWEALTH OF MASSACHUSETTS.

OTHER MASSACHUSETTS CODE REQUIREMENTS:

- Flexible connector must not be longer than 36 inches.
- Shutoff valve must be a "T" handle gas cock.
- Only direct vent sealed combustion products are approved for bedrooms or bathrooms.
- Fireplace dampers must be removed or welded in the open position prior to the installation of a fireplace insert or gas log.
- A carbon monoxide (CO) detector is required in the same room as the appliance.
- The gas line must be installed in accordance with all local codes, if any; if not, follow ANSI 223.1 and the requirements listed below.
- The fireplace and gas control valve must be disconnected from the gas supply piping during any pressure testing of that system at test pressures in excess of 1/2 psig. For pressures under 1/2 psig, isolate the gas supply piping by closing the manual shutoff valve.
- Leak test all gas line joints and the gas control valve prior to and after starting the fireplace.

Fuel

• This fireplace is designed either for natural gas or for propane (but not for both). Check the sticker on the top of the gas control valve to make sure the correct fuel is used.

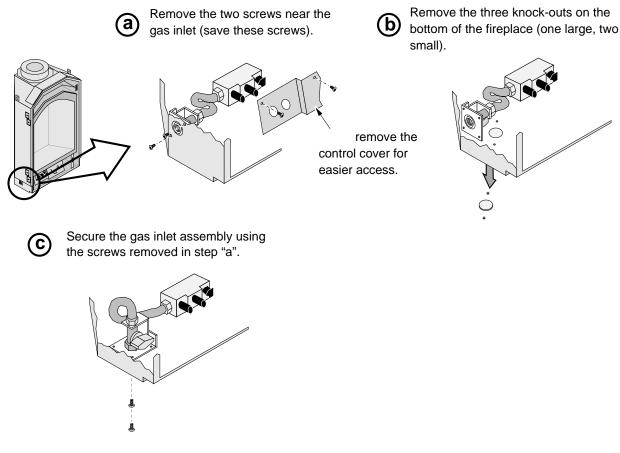
Gas Line Connection

• Installation must be performed by a qualified installer, service agency or the gas supplier (In Massachusetts a licensed plumber/gasfitter).

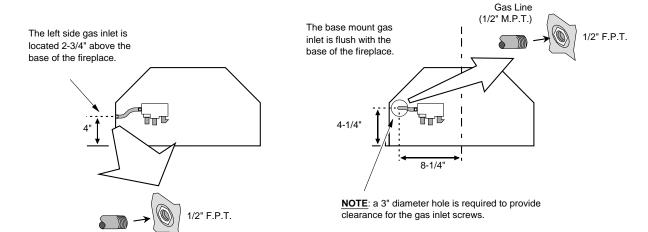
Gas Inlet Pressure		Standard Input Pressure
	Natural Gas	7" W.C. (1.74 kPA)
	Propane	13" W.C. (2.73 kPA)

- If the pressure is not sufficient, make sure the piping used is large enough, the supply regulator is adequately adjusted, and 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.

Optional Gas Line Location



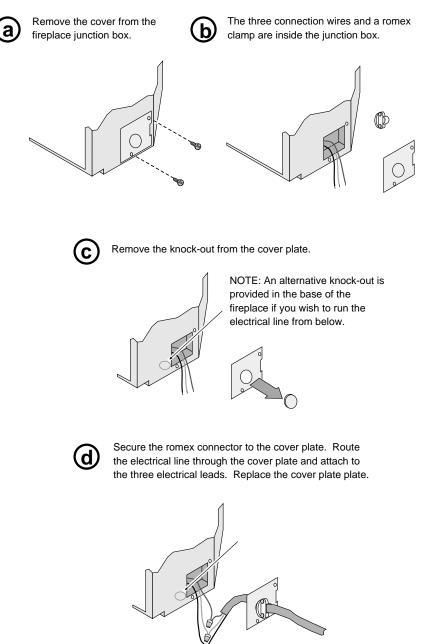
Gas Line Location



Gas Line (1/2" M.P.T.)

Electrical Connection (required)

- The electrical line to the grounded input wires inside the fireplace must be installed by a qualified installer and must meet all local codes.
- Make sure the household breaker is shut off prior to working on any electrical lines.
- The appliance, when installed, 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 electrical line must be a min. 14 gauge, and supply 120 Volts at 60 Hz (2 Amps)
- **<u>Caution</u>**: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.



Wall Switch or Thermostat Installation

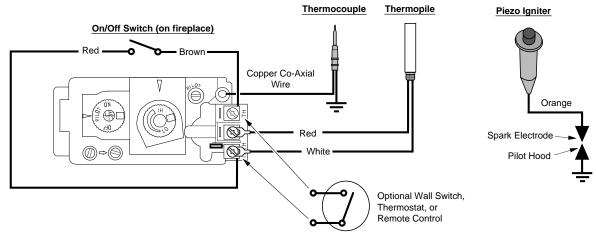
Wiring Diagram (Millivolt System)



22

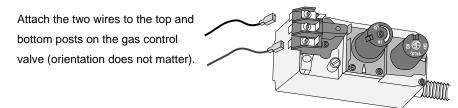
Do not connect 110-120 VAC to the gas control valve or wiring system of this fireplace. The switch must be installed by a qualified installer.

<u>Caution</u>: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

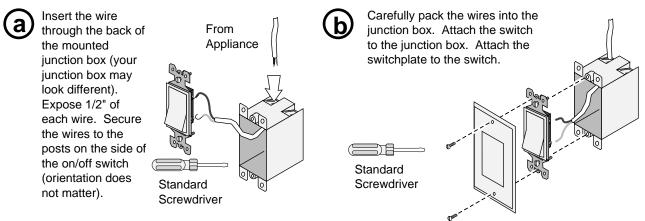


Installation

1. Attach the included wire to the gas control valve.



- 2. Determine a location for the wall switch or thermostat (maximum 25' long). Route the wire through the grommet on the right side of the fireplace (next to the electrical junction box).
- 3. If using a thermostat, attach it following the manufacturer's instructions. If using a wall switch, attach following the directions below.
- NOTE: Set the on/off switch on the appliance to "OFF" to control the appliance with the wall switch or thermostat.



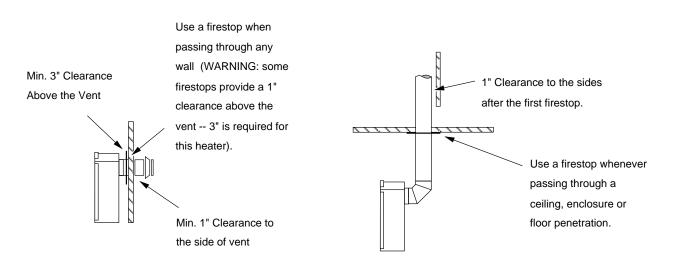
Vent Requirements

- The gas appliance 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. Each direct vent gas appliance must use it's own separate vent system.
- In addition to the requirements listed here, follow the requirements provided with the vent.
- A firestop is required whenever the vent penetrates a wall, floor, or ceiling (passes through framing members). Use the included firestop. It incorporates a 3" clearance above, 1" clearance below and to the sides of the vent.
- Always use the high-wind termination.

Vent Clearances

• The vent must maintain the required clearance to combustible materials to prevent a fire. Do not fill air spaces with insulation.

Sides	1"
Above	3"
Below Horizontal or 45° Section	1"

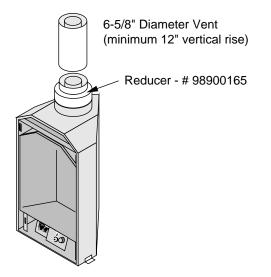


Altitude Considerations

- This heater has been tested at altitudes ranging from sea level to 6,000 feet. In this testing we have found that the heater, with its standard orifice, burns correctly with just an air shutter adjustment.
- Failure to adjust the air shutter properly may lead to improper combustion which can create a safety hazard. Consult your dealer or installer if you suspect an improperly adjusted air shutter.

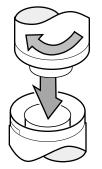
Approved Vent

- Rear vent configurations use 8" diameter Simpson Dura-Vent Model GS or Pro vent.
- Top vent configurations use 8" or 6-5/8" diameter Simpson Dura-Vent Model GS or Pro vent. If using 6-5/8" diameter vent, attach the 8" to 6-5/8" reducer (Travis part # 98900165) directly to the fireplace (see the illustration below).
- Installation instructions for Simpson Dura-Vent may be found at www.duravent.com



Vent Installation

• Slide the vent sections together and turn 1/4 turn until the sections lock in place.



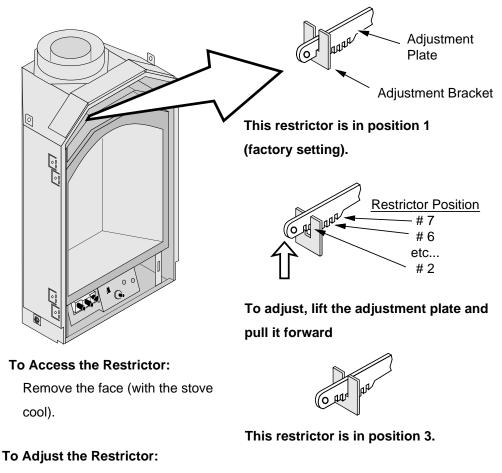
- Screws are not required to secure the vent. However, three screws may be used to secure vent sections together if desired.
- High temperature sealant is recommended at the appliance starter section connection (use high-temperature silicone or Mill-Pac®).
- If disassembly is required, at time of re-assembly check to see if the vent creates a tight fit. If it does not, apply high temperature sealant to the joints of the affected sections.
- Horizontal sections require a 1/4" rise every 12" of travel
- Horizontal sections require non-combustible support every three feet (e.g.: plumbing tape)

Approved Vent Configurations

Restrictor and Diffuser Position

 An exhaust restrictor and diffuser are built into the appliance to adjust the flow rate of intake air and exhaust gases. Depending upon the vent configuration, you may be required to adjust the restrictor and/or diffuser. The charts for acceptable vent configurations detail the correct vent restrictor and diffuser positions.

Exhaust Restrictor Adjustment



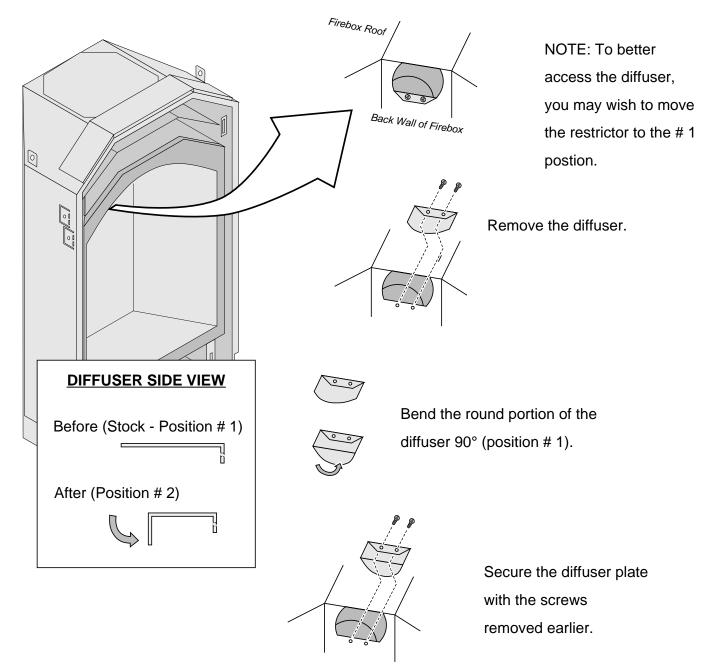
- Determine the correct restrictor position (see the charts under "Approved Vent Configurations" - the factory position is #1).
- **2** Lift up the adjustment plate and move it so the correct notch falls into the slot on the adjustment bracket.

Diffuser Plate Adjustment

Certain vent configurations require the diffuser plate to be adjusted (refer to the approved vent configuration charts for details). Position # 1 is stock (flat). Position # 2 is bent. See the directions below to change the diffuser to position #2.

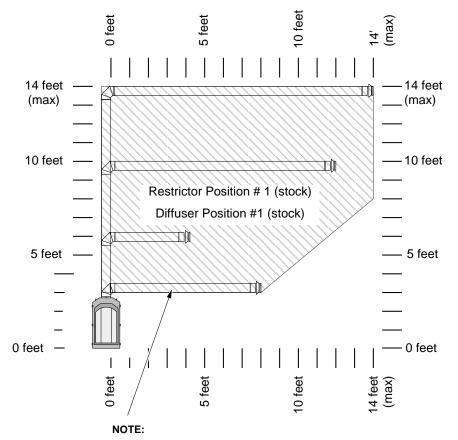


If the diffuser is required to be in position # 2, you may wish to adjust the diffuser while converting the appliance to rear-vent configuration.



Top Vent Configuration with Horizontal Termination

- The termination must fall within the shaded area shown in the chart. Use the indicated restrictor and diffuser positions.
- Only one horizontal elbow may be used (see illustration at the bottom of the page).
- May use 8" or 6-5/8" diameter vent (see page for 24 details).

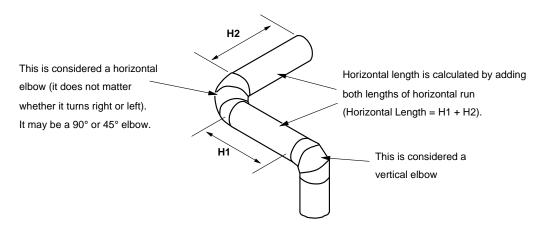


If using 6-5/8" diameter vent, a minimum 12" vertical rise is required.

NOTE:

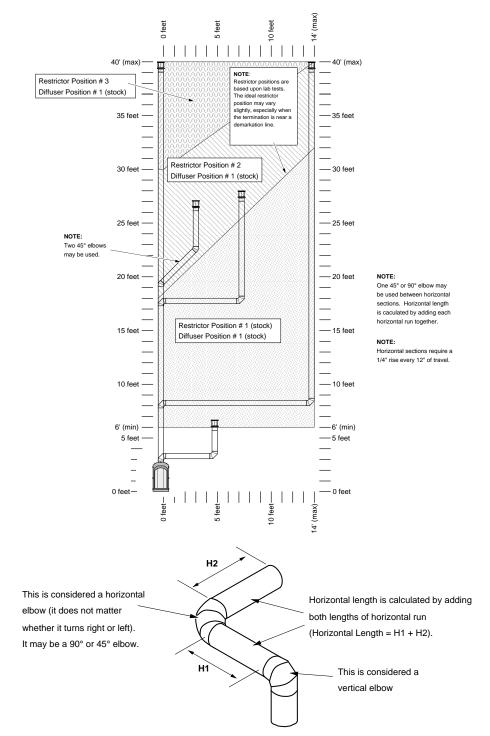
Horizontal sections require a 1/4" rise every 12" of travel.

NOTE:



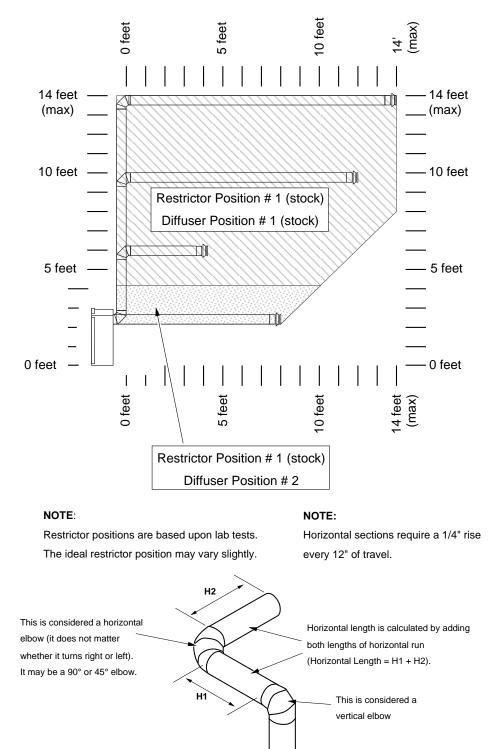
Top Vent Configuration with Vertical Termination

- The termination must fall within the shaded area shown in the chart. Use the indicated restrictor and diffuser positions.
- Up to four elbows (45° or 90°) may be used.
- Only one horizontal elbow may be used (see illustration at the bottom of the page).
- May use 8" or 6-5/8" diameter vent (see page for 24 details).



Rear Vent Configuration with Horizontal Termination

- The termination must fall within the shaded area shown in the chart. Use the indicated restrictor and diffuser positions.
- Up to four elbows (45° or 90°) may be used.
- Only one horizontal elbow may be used (see illustration at the bottom of the page).
- Use 8" diameter vent.



Installation (for qualified installers only)

Rear Vent Configuration with Vertical Termination

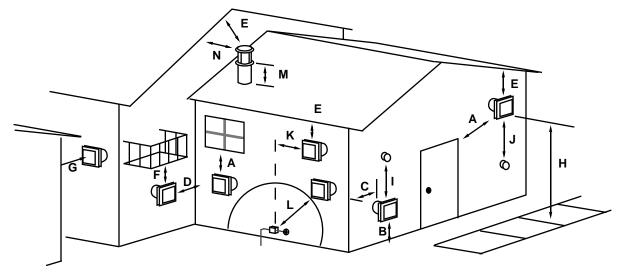
(max) The termination must fall • 0 feet 5 feet feet within the shaded area <u>1</u> 4 shown in the chart. Use the indicated restrictor and 40' (max) - 40' (max) diffuser positions. Restrictor Position # 3 NOTE: Restrictor positions are Up to four elbows (45° or • Diffuser Position # 1 (stock) based upon lab tests. 90°) may be used. The ideal restrictor position may vary slightly, especially when Only one horizontal elbow • .35 feet 35 feet the termination is near a may be used (see demarkation line. illustration at the bottom of the page). Use 8" diameter vent. ___ 30 feet 30 feet __ Restrictor Position # 2 Diffuser Position # 1 (stock) N 25 feet ____ 25 feet NOTE: Two 45° elbows may be used. 20 feet ____ 20 feet NOTE One 45° or 90° elbow may be used between horizontal sections. Horizontal length is caculated by adding each 15 feet _ 15 feet horizontal run together. NOTE: Restrictor Position # 1 (stock) Horizontal sections require a Diffuser Position # 1 (stock) 1/4" rise every 12" of travel. 10 feet ___ 10 feet K 6' (min) Π __6' (min) 5 feet _5 feet _ _ _ 0 feet 0 feet_ T L 5 feet. 0 feet. 10 feet. 14' (max) H2 This is considered a horizontal Horizontal length is calculated by adding elbow (it does not matter both lengths of horizontal run whether it turns right or left). (Horizontal Length = H1 + H2). It may be a 90° or 45° elbow. H1 This is considered a vertical elbow

30

Termination Requirements

!	Venting terminals shall not be recessed into a wall or siding.					
А	Minimum 9" clearance from any door or window					
В	Minimum 12" above any grade, veranda, porch, deck or balcony	Roof Surface				
С	Minimum 1" from outside corner walls NOTE : Clearance in accordance with local installation codes and the requirements of the gas supplier.	11" Min. Roof 6" Min. Eaves				
D	Minimum 1" from inside corner walls NOTE : Clearance in accordance with local installation codes and the requirements of the gas supplier.	↓ ↓6" Min. Eaves				
E	Minimum 11" clearance below unventilated soffits or roof surfaces Minimum 18" clearance below ventilated soffits Minimum 6" clearance below roof eaves NOTE : Vinyl surfaces require 24" NOTE : Clearance in accordance with local installation codes and the requirements of t	the gas supplier.				
F	Minimum 12" clearance below a veranda, porch, deck or balcony NOTE: Permitted only if veranda, porch, deck, or balcony is fully open on a minumum of two sides beneath the floor. NOTE: Clearance in accordance with local installation codes and the requirements of the gas supplier.					
G	Minimum 48" clearance from any adjacent building					
Н	Minimum 84" clearance above any grade when adjacent to public walkways or driveway NOTE: may not be used over a walkway or driveway shared by an adjacent building	'S				
I	Minimum 9" clearance to any nonmechanical air supply inlet to the building or the comb appliance.	ustion air inlet to any other				
J	Minimum 36" clearance above any mechanical air supply inlet if within 10' horizontally					
k	Minimum 26" from the area above the meter/regulator (vent outlet) this extends 15' a	have the regulator				

- K Minimum 36" from the area above the meter/regulator (vent outlet) this extends 15' above the regulator **NOTE**: Clearance in accordance with local installation codes and the requirements of the gas supplier.
- L Minimum 36" from the meter/regulator (vent outlet) **NOTE**: Clearance in accordance with local installation codes and the requirements of the gas supplier.
- M Minimum 12" above the roof line (for vertical terminations)
- N Minimum 24" horizontal clearance to any surface (such as an exterior wall) for vertical terminations



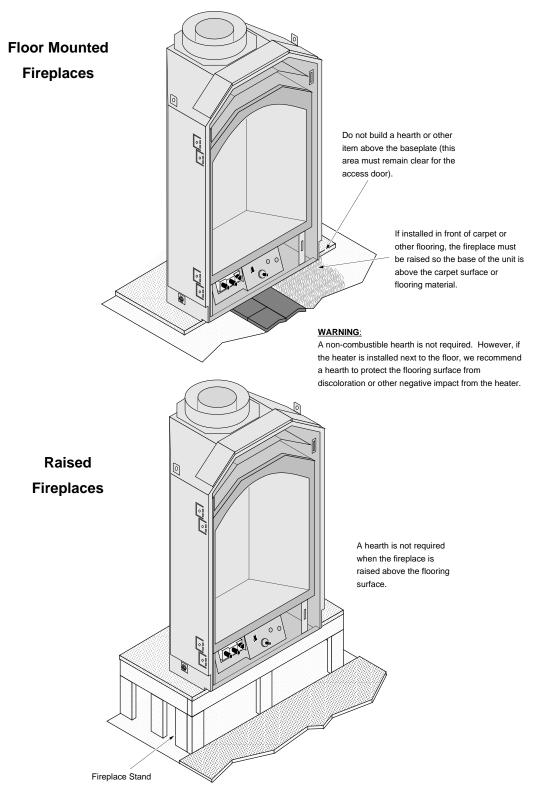
NOTE: Measure clearances to the nearest edge of the exhaust hood.

- Use the vinyl siding standoff when installing on an exterior with vinyl siding.
- Vent termination must not be located where it will become plugged by snow or other material

Hearth Requirements

32

<u>NOTE</u>: Looking Glass and Wilmington Faces require a raised fireplace – see Face Dimensions on page 33 for details.



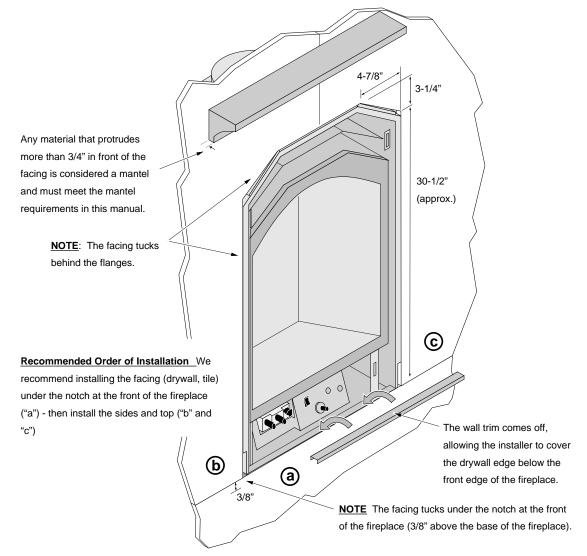
Facing Requirements

NOTE: The combustible area above the facing must not protrude more than 3/4" from the facing. If it does, it is considered a mantel and must meet the mantel requirements listed in this manual.

Face Dimensions

<u>Face</u>	<u>Height</u>	<u>Width</u>	Bottom of Face	Installation Notes
Arched Faces	35-1/2"	21-1/8"	Flush w base of fireplace	Arched top is 25-3/4" radius
Bungalow, T. of L.	35-3/8"	21-1/8"	Flush w base of fireplace	
Vict. Lace	35-1/2"	21-1/8"	Flush w base of fireplace	
Looking Glass	36-3/4"	23-1/2"	1-1/4" BELOW base of fireplace	Cast face is approx. 2" thick
Wilmington	36-3/4"	22-1/8"	1-1/4" BELOW base of fireplace	

Facing Under 1" Thick

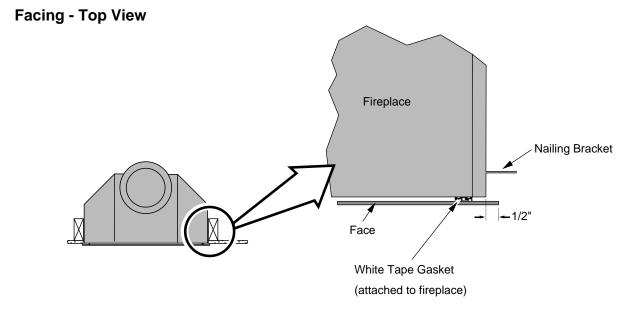


Facing Over 1" Thick

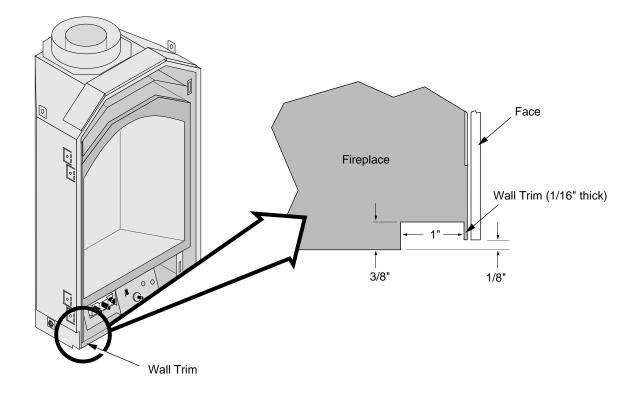
• Facing that protrudes in front of the face above the face (or within 1/2" of each side) must be made of non-combustible materials.

NOTE A 3/8" gap above the face is required for face installation and removal.

Facing – Fireplace Overview

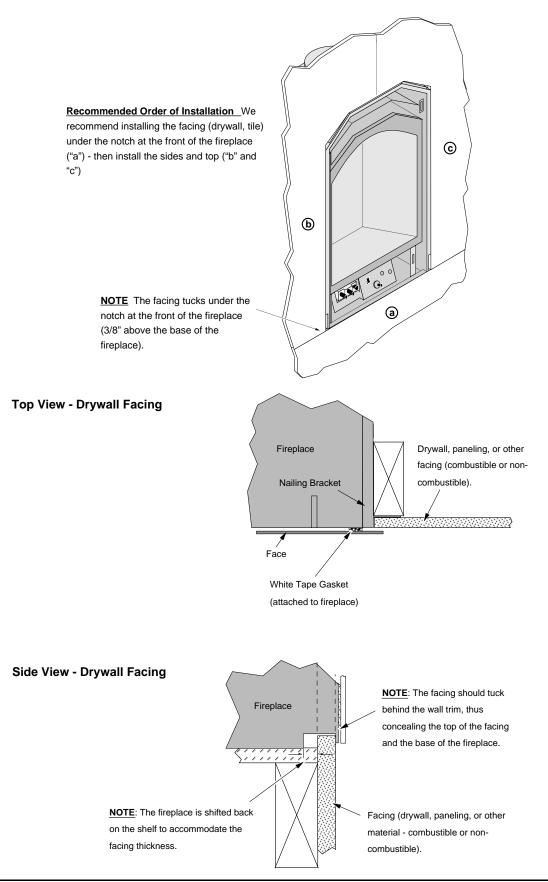


Facing - Side View



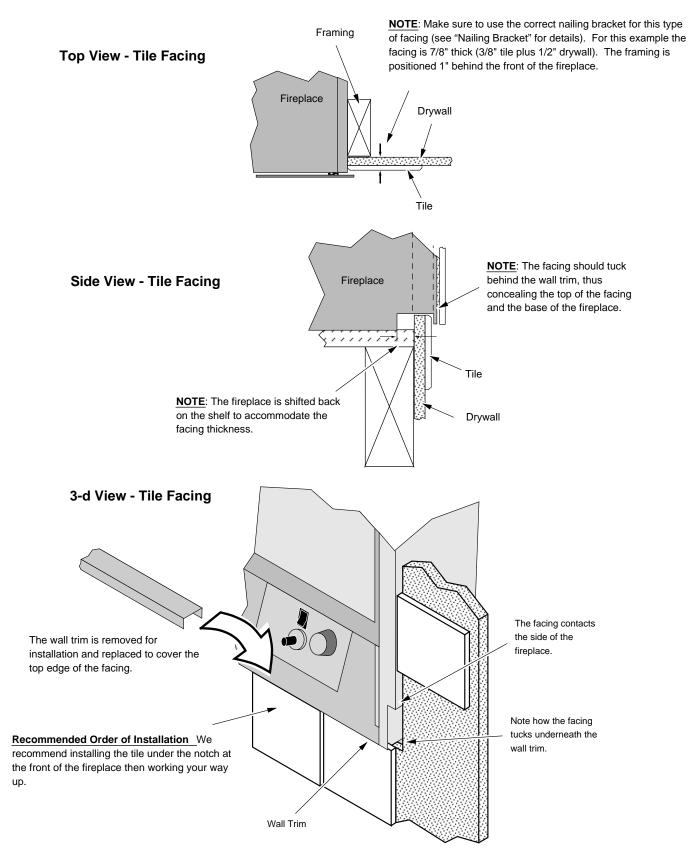
Installation (for qualified installers only)

Facing Detail – Drywall Facing



36 Installation (for qualified installers only)

Facing Detail – Tile Facing



Installation (for qualified installers only)

Facing Detail – Facing Over 1" Thick (Brick)

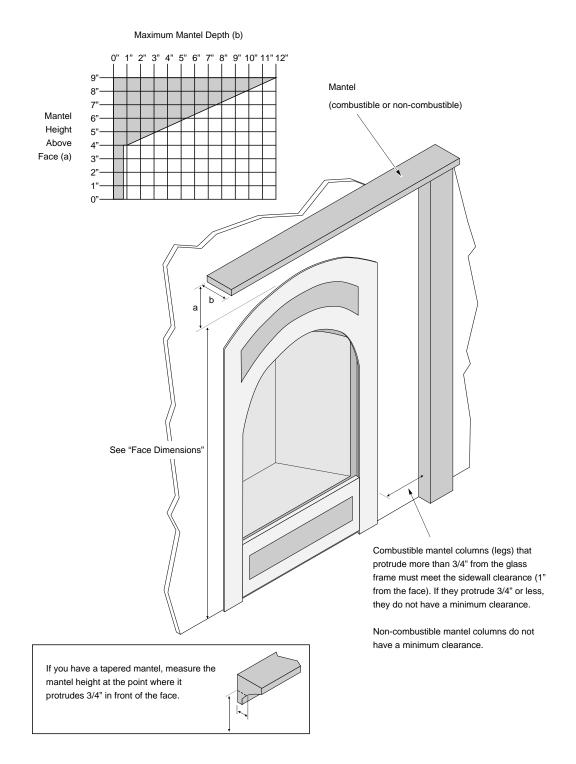
WARNING: Any facing that extends in front of the faceplate on the sides or top must be non-combustible.

NOTE: A 3/8" gap is required above the face for face installation.

NOTE: Make sure to leave a 1/8" gap Framing **Top View** around the sides of the face and 3/8" above (for face installation). Fireplace Drywall 3/8" + Non-combustible facing material (brick, stone, Face 1/8"+ marble, tile) - required if the facing extends in front of the face on the sides or top. NOTE: When installed, there must be a minimum 1/8" gap between the face and facing. Side View Fireplace NOTE: Bring the facing up to the ŧ base of the fireplace. 1/8" In this example brick is used. The side facing should be spaced 1/8" 3-d View from the face (3/8" from the side of the fireplace). 00 Wall Trim The facing is brought up to the wall trim.

Mantel Requirements

- The illustration below details mantel clearances and maximum mantel depth.
- Any material that protrudes more than 3/4" from the non-combustible facing is considered a mantel and must meet the mantel requirements.



Steps for Finalizing the Installation

- Remove the glass (see page 41).
 <u>NOTE</u>: If using propane (LP) convert the appliance prior to installing the logs.
- 2. We recommend you purge the gas line at this time (with the glass removed). This allows gas to be detected once it enters the firebox, ensuring gas does not build up.
- 3. Install the logs (see page 43).
- 4. Turn on the gas to the fireplace. Turn on gas to the heater. Leak test all gas joints prior to starting the appliance. Start the pilot.

Starting the Pilot Flame

<u>WARNING</u>: When lighting or re-lighting the pilot, the glass must be removed (see page 41).

- **a** Remove the glass (see page 41 for details).
- b Push the gas control knob in slightly and turn it to the "OFF" position. The knob will not turn from "ON" to "OFF" unless the knob is depressed slightly. Wait five minutes to let any gas that may have accumulated inside the firebox escape. If you smell leaking gas, follow the directions on the cover "IF YOU SMELL GAS".
- **c** Turn the gas control knob to the "PILOT" position and press the knob in, this will allow gas to flow to the pilot light. Press the button on the pilot igniter repeatedly until you see the pilot light.

<u>WARNING:</u> If the pilot does not light after 15 seconds, release the knob and call your dealer for service. Do not attempt to light pilot until service has been performed.

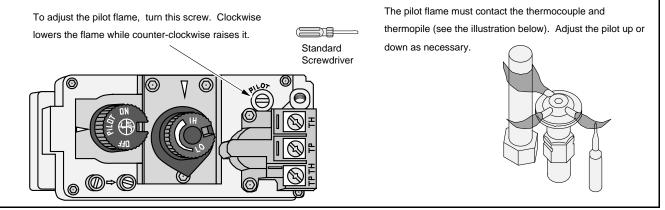
NOTE:

You may wish to remove the log set to gain a better view of the pilot (see page 43).

- d Keep the gas control knob depressed for 30 seconds once it is lit.
- e Release the gas control knob. If the pilot goes out, repeat step C. If the pilot refuses to stay lit, call your dealer for service. With the pilot lit, proceed to step "f".
- f Replace the glass.
- **g** Turn the gas control knob counter-clockwise to "ON". The pilot is now lit and the heater can be turned on and off.
- 5. Check the pilot flame following the directions below.

Pilot Flame Inspection

The pilot flame should look like the illustration below. Adjust the pilot flame if necessary.



6. Start the main burner (the main burner circuit is detailed on page 22). Leak test all gas joints again.

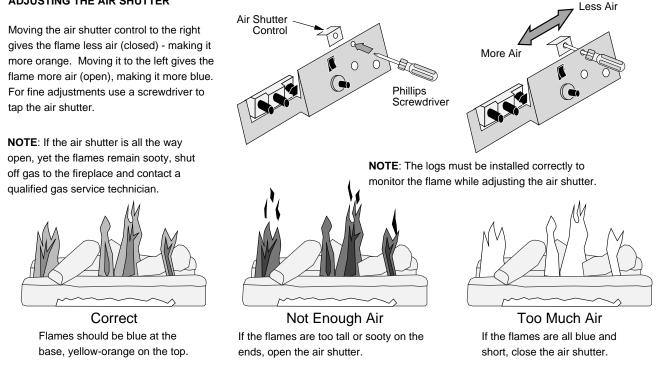
40 Finalizing the Installation (for qualified installers only)

7. Check the air shutter following the directions below.

Air Shutter Adjustment

Let the heater burn for fifteen minutes (make sure the logs and glass are in place). The flames should be yellow with no sooting. Adjust the air shutter, if necessary, to achieve the correct looking flame.

ADJUSTING THE AIR SHUTTER



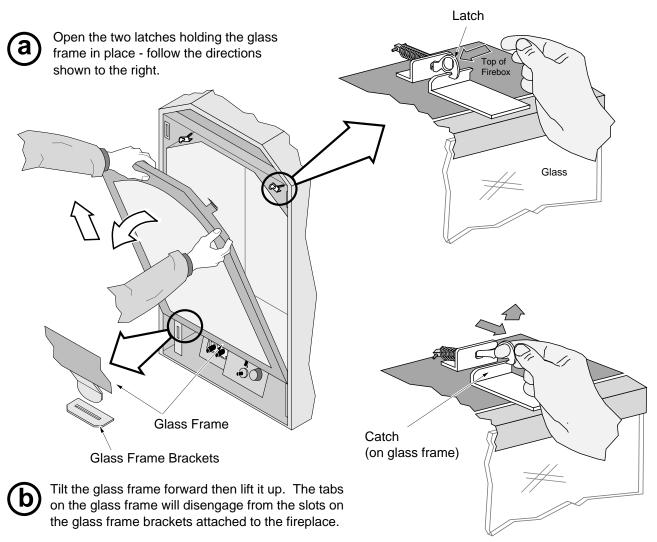
- Turn the flame adjust knob to its highest position the flames should not contact the top of the 8. firebox. Check the flame on low position. The flames should burn off of each burner hole. If the heater does not work correctly, contact your Travis dealer for a remedy.
- Give this manual to the home owner for future reference and fully explain operation of this heater. For 9. comprehensive operating and maintenance instructions, refer to the Owner's Manual (part # 100-01186).

ACID WASH WARNING: Before installing the faceplate, make sure any masonry that has been treated with acid wash has been properly neutralized (this is used primarily with brick faces). Acid wash (muriatic acid) is used to remove excess mortar. If not properly neutralized with an ammonia solution, the plated face may develop a permanent tarnish when the acid evaporates over time. Contact your dealer if uncertain your facing has been properly neutralized.

Glass Frame Removal and Installation

Warning: The appliance must be completely cool before removing the glass.

Warning: Do not strike or slam the glass.



Re-Attaching the Glass Frame:

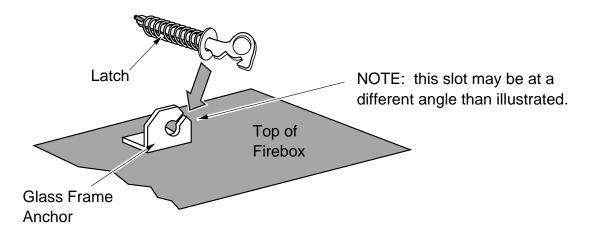
- a) Tilt the glass frame as shown above.
- b) Insert the tabs on the glass frame into the slots on the glass frame bracets (attached to the fireplace).
- c) Attach the two glass latches.

NOTE: Make sure the glass frame is all the way in place - it should be flush with the front of the fireplace when installed.

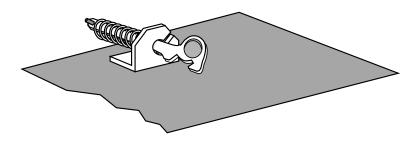
Glass Frame Removal and Installation (continued)

The latch can come loose from glass frame anchor. This occurs when it is turned 1/4 turn when it is disengaged. Follow the directions below to re-install the latch if it becomes loose.

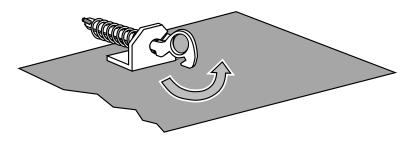
Hold the latch at an angle and insert it into the slot on the glass frame anchor.



Note how the washer on the latch fits behind the flange on the glass frame anchor.



Once fully inserted, turn the latch until it is upright.



Log Set Installation

Rear Log Installation

Place the rear log with the left side flush to the edge of the burner and the right side flush to the metal deflector on the back edge of the burner. The bottom edge of the log should be located behind the burner ports (see the illustration below).



CROSS-SECTIONAL VIEW Rear Log Burner

Make sure the ledge on the burner lines up with stepped-down portion of the rear log.

Right Rear Log Installation

Place the right rear log on top of the rear log. When placed correctly there is a minimal gap between the two logs. Make sure the bottom is placed so no burner ports are blocked.



NOTE: Make sure the right rear log does not rest against the back of the firebox (or liner). If it does, it will block the light from the optional accent light, creating a large shadow.

Right Front Twig Installation

Place the right front twig as shown below. The bottom of the twig is placed one inch to the right of the center screw on the burner. The top of the twig rests in the groove on the right rear log.



Left Front Twig Installation

Place the left front twig as shown below. Note how both ends of the twig are directly over the center and left hand screw on the burner



These two projections on the bottom of the twig insert into screw holes on the burner.

Left Front Twig Installation (continued)

Double check that the front twigs are not blocking any burner ports.



Place an ember over this screw.

Log Installation Overview

Correct view of complete log installation.

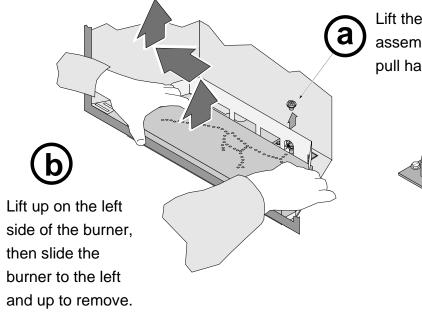


Place embers in the firebox corners and along the front edge of the burner. Do not place embers over burner holes or allow the embers to block airflow.

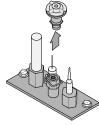
LP Conversion Instructions

Install the conversion kit prior to installing the gas line to ensure proper gas use.

- 1 Remove the glass (see page 41). Remove the logs and coals (if installed page 43)
- 2 Remove the burner (see illustration below).



Lift the pilot hood off the pilot assembly (you may need to pull hard to remove).



Burner Replacement:

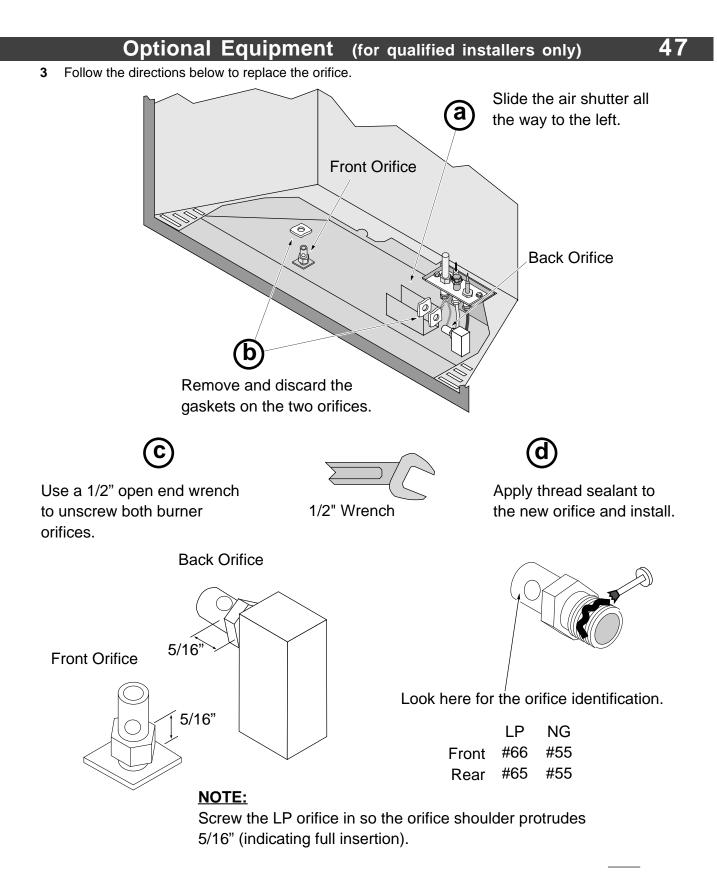
Make sure the orifice on the firebox floor inserts into the fitting on the bottom of the burner.

After replacing the burner re-attach the pilot hood.

The mixing tube slides onto the orifice.

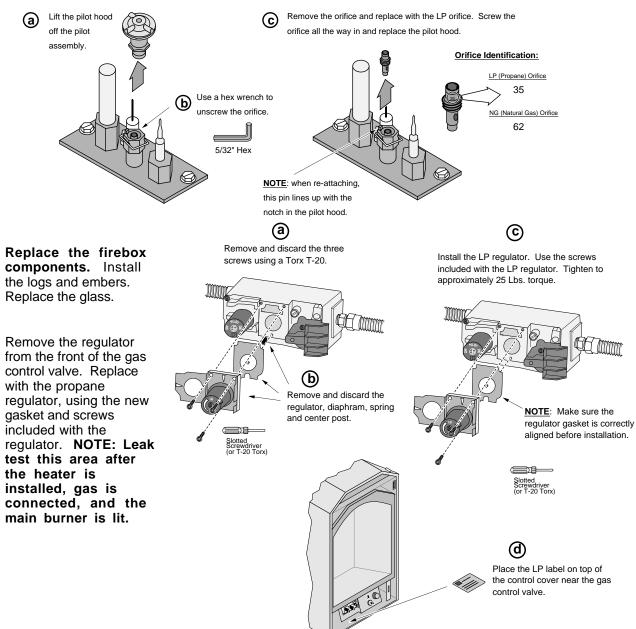
Before replacing the burner, slide the air control all the way to the right.

Make sure the burner is fully seated and pilot hood lines up with the burner holes at the rear edge of theburner.



Optional Equipment (for qualified installers only)

4 Remove the pilot orifice following the instructions below. Replace with the propane pilot orifice



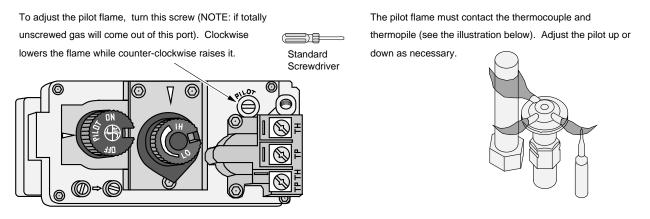
5

6

Optional Equipment (for qualified installers only)

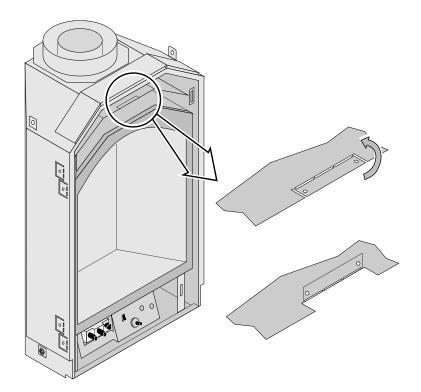
7 Make the gas line connection, bleed the gas line (if applicable), start the heater and thoroughly leaktest all gas connections and the gas control valve. Check the pilot. Adjust if necessary.

WARNING: When lighting or re-lighting the pilot, the glass must be removed (see page 41).



Aromatherapy Modification

If you are using the aromatherapy option with the 21 TRV, you will need to bend up the mounting flange on the front of the fireplace (see the illustration below). The aromatherapy extension assembly attaches to this flange.

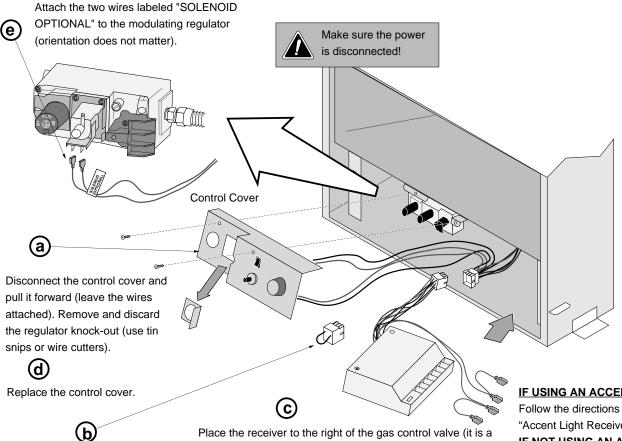


Optional Equipment (for qualified installers only) 50

Omega Remote Notes

If you are using the Omega remote option with the 21 TRV, follow the directions below for installing the receiver and attaching the accent light leads (if applicable - see the following page).

Receiver Installation



Remove the jumper connector on the wiring harness and place it near the gas control valve (it is required if you wish to remove the remote). Attach the molex connector from the receiver to the molex connector on the appliance.

Place the receiver to the right of the gas control valve (it is a very tight fit). Make sure the wires do not contact the burner or any moving parts (use lock ties if necessary). NOTE: When installing the receiver, make sure to place the receiver with the "Learn" button in a forward position. Before replacing the control cover, make sure to verify the remote works correctly. Once the control cover is installed, the "Learn" button can not be readily accessed.

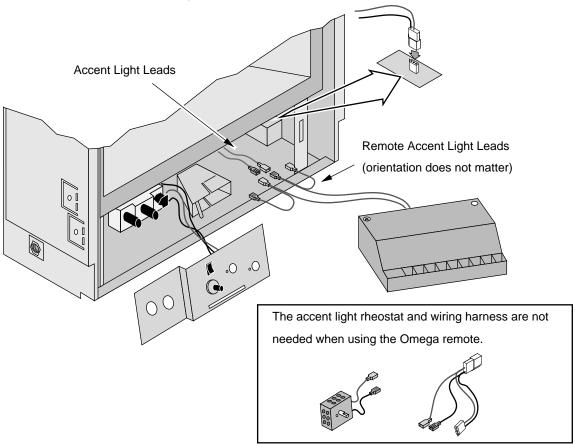
IF USING AN ACCENT LIGHT

Follow the directions listed under "Accent Light Receiver Connection". **IF NOT USING AN ACCENT LIGHT** Secure the two white wires, making sure they do not contact the burner or any moving parts.

Accent Light Connection to Omega Remote

If using the accent light with an Omega remote, you will want to remove and discard the accent light rheostat and wiring harness. Plug the wiring harness (included with the blower) into the junction box on the fireplace. The leads from the accent light are connected to the leads from the Omega remote.

The molex connector on the blower wiring harness



plugs into the molex connector on the junction box.

Index

Additional Items Required	7
Air Shutter Adjustment	40
Altitude Considerations	23
Approved Vent Configurations	25
Approved Vent	24
Aromatherapy Modification	49
Clearances	14
Converting the Fireplace to Rear Vent Configuration.	11
Corner Installations - Top Vent Configuration	18
Corner Installations - Rear Vent Configuration	18
Diffuser Plate Adjustment	26
Dimensions	6
Electrical Connection (required)	21
Exhaust Restrictor Adjustment	25
Facing Requirements	33
Features	6
Fuel	19
Gas Inlet Pressure	19
Gas Line Connection	19
Gas Line Location	19
Gas Line Requirements	19
Glass Frame Removal and Installation	41
Hearth Requirements	32
Heating Specifications	6
Index	52
Installation Options	6
Installation Overview	8
Listing Details	2
Log Set Installation	43
Mantel Requirements	38

MinimumFraming Dimensions - Top Vent Configuration
MinimumFraming Dimensions - Rear Vent Configuration
Nailing Brackets17
Overview2
Packing List7
Pilot Flame Inspection
Raised Fireplaces14
Top Vent Configuration with Horizontal Termination
Top Vent Configuration with Vertical Termination
Rear Vent Configuration with Horizontal Termination29
Recommended Installation Procedure7
Restrictor and Diffuser Position25
Safety Precautions4
Starting the Pilot Flame
Steps for Finalizing the Installation
Termination Requirements
Thick Facing Installation with FPX Arched Faces
Thick Facing Installation
Thin Facing Installation
Rear Vent Configuration with Vertical Termination30
Vent Clearances23
Vent Installation24
Vent Requirements23
Installation22
Wall Switch or Thermostat Installation22
Wiring Diagram (Millivolt System)22