

INSTALLATION

⚠ WARNING: Do not attempt to access or change the setting of the fuel selection means.

Access to and adjustment of the fuel selection means must only be performed by a qualified service person when connecting this appliance to a specified fuel supply at the time of installation.

Change of the selector setting to other than the fuel type specified at the time of installation could damage this appliance and render it inoperable.

The installer shall replace the access cover before completing the installation and operating this appliance.

⚠ NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house.

⚠ WARNING: A qualified technician must install heater. Follow all local codes.

⚠ WARNING: Never install the heater:

- in a bedroom or bathroom
- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 42 in. from the front, top or sides of the heater.
- in high traffic areas
- in windy or drafty areas

CAUTION: This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may cause walls to discolor.

⚠ WARNING: Any glass doors shall be fully opened when the appliance is in operation.

⚠ WARNING: Before installing in a solid-fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner.

⚠ WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

⚠ WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing heater in rooms without enough ventilation air may cause mildew to form from too much moisture. See Air for Combustion and Ventilation, pages 8 through 10.

CHECK GAS TYPE

Be sure your gas supply is right for your heater.

NOTICE: State or local codes may only allow operation of this appliance in a vented configuration. Check your state or local codes.

⚠ WARNING: This appliance is designed for installation in only a solid-fuel burning masonry or UL 127 factory-built fireplace or in a listed ventless firebox enclosure. Exception: DO NOT install this appliance in a factory-built fireplace that includes instructions stating it has not been tested or should not be used with unvented gas logs. s worksheet to determine if you have a confined or unconfined space.

⚠ WARNING: Solid-fuels shall not be burned in a fireplace in which an unvented room heater is installed.

⚠ WARNING: Any outside air ducts and/or ash dumps in the fireplace shall be permanently closed at time of appliance installation.

INSTALLATION

CHECK GAS TYPE

Make sure your gas supply is correct for your log set. If supply is not correct, do not install heater. Call dealer where you purchased heater for proper gas log set.

LOG SIZING REQUIREMENTS

Log Size	Minimum Firebox Size			
	Height	Depth	Front Width	Rear Width
18"	24 in.	14 in.	28 in.	20 in.
24"	24 in.	14 in.	32 in.	22 in.

Heater CLEARANCES

- ⚠ CAUTION:** If you install the heater in a home garage
- heater pilot and burner must be at least 18" above floor.
 - locate heater where moving vehicle will not hit it.

For convenience and efficiency, install heater

- where there is easy access for operation, inspection and service
- in coldest part of room
- If this appliance is to be installed directly on carpeting, tile or other combustable material, other than wood flooring, the appliance must be installed on a metal or wood panel extending the full width and depth of the appliance.

Minimum Clearances For Side Combustible Material, Side Wall and Ceiling

A. Clearances from the side of the heater cabinet to any combustible material and wall should follow diagram in Figure 3.

B. Clearances from the top of the heater opening to the ceiling should not be less than 36".

- ⚠ WARNING:** Maintain the minimum clearances. If possible, provide greater clearances from the floor, ceiling, and adjoining wall than required.

Fig. 3

Minimum Fireplace Clearance to Combustible Materials		
Log size	From edge of fireplace opening to side wall	From top of fireplace to ceiling
18 in.	16 in.	42 in.
24in.	16 in.	42 in.

- ⚠ WARNING:** Seal any fresh air vents or ash clean-out doors located on the floor or wall of fire place to prevent drafting caused by pilot outage or sooting. Use a heat-resistant sealant. Do not seal chimney flue damper.

INSTALLATION

MINIMUM NONCOMBUSTIBLE MATERIAL CLEARANCE

If Not Using Mantel

You must have noncombustible material(s) above the fireplace opening. Noncombustible materials (such as slate, marble, tile, etc.) must be at least 1/2 in. thick. With sheet metal, you must have noncombustible material behind it, such as a noncombustible fireplace hood accessory. See Fig. 5.

NOTICE: This heater may be used as a vented product. If so, you must always operate log set with chimney flue damper open. If running log set with damper open, noncombustible material above fireplace opening is not needed. Go to Installing Damper Clamp Accessory for Vented Operation, page 14. When used as a vented decorative appliance, use of the thermostat function is prohibited, operate manually only.

Fig. 4 - Minimum Clearance for Combustible to Wall

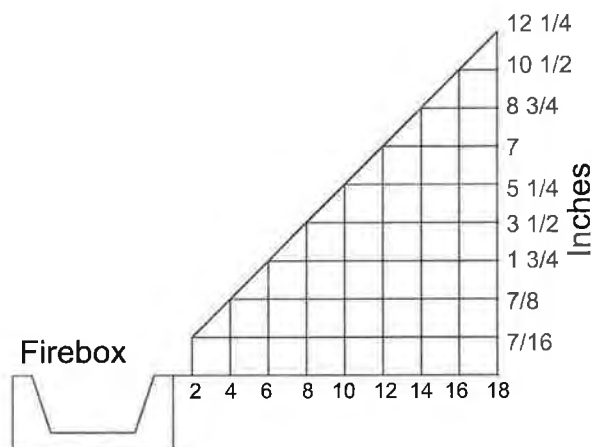
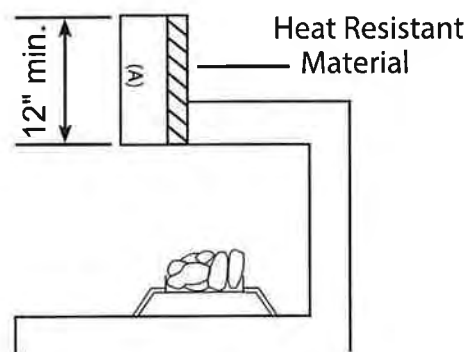


Fig. 5 - Heat resistant material (slate, marble, tile, etc.) above fireplace



If Using Mantel

You must have noncombustible material(s) (such as slate, marble, tile, etc.) at least 1/2 in. thick. With sheet metal, you must have noncombustible material behind it. Noncombustible material must extend at least 12 inches up. If noncombustible material is less than 12 in., you must install the fireplace hood accessory. Even if noncombustible material is more than 12 in., you may need the hood accessory to deflect heat away from mantel shelf. See Fig. 7.1 and 7.2 for minimum clearances requirements.

IMPORTANT: If these minimum clearances are not met, you must operate heater with chimney flue damper open. Go to "Installing Damper Clamp Accessory for Vented Operation," page 14.

INSTALLATION

MANTEL CLEARANCES

In addition to meeting noncombustible material clearances, you must also meet required clearances between fireplace opening and mantel shelf. If the clearances listed below are not met, you will need a hood.

Determining Mantel Clearances

If you meet minimum clearance requirements between mantel shelf and top of fireplace opening, a hood is not necessary (see Fig. 7.1).

Noncombustible Material Distance	Requirements for Safe Installation
8 in. or more	Noncombustible material okay.
Less than 8 in.	Noncombustible material must be extended to at least 8 in. See between 8 in. and 12 in. above. If you can not extend material, you must operate heater with flue damper open.

Determining Minimum Mantel Clearance When Using a Hood

If minimum clearances in Fig. 7.1 are not met, you must have a hood. When using a hood there are still certain minimum mantel clearances required. Follow minimum clearances shown in Fig. 7.2 when using a hood.

Fig. 7.1 - Minimum mantel clearances without using hood

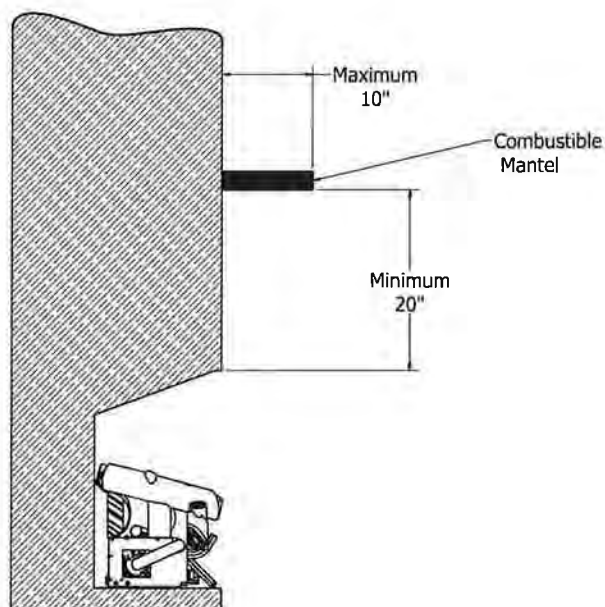
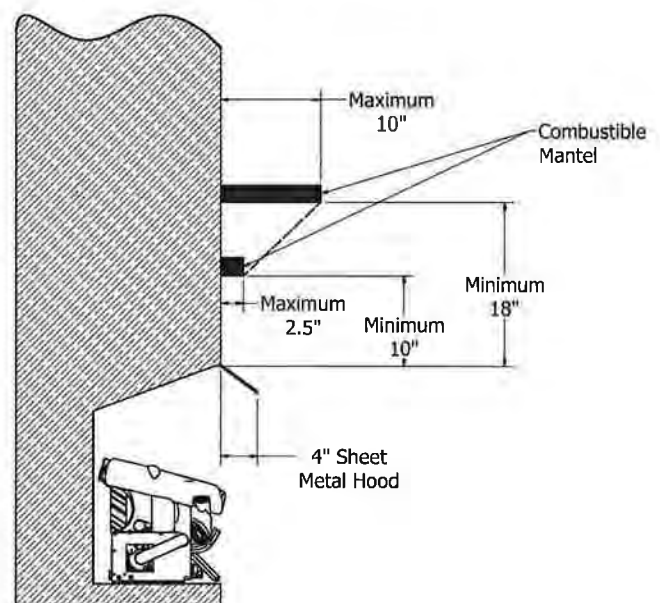


Fig. 7.2 - Minimum mantel clearances when using hood



NOTICE: Surface temperature of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become too hot to touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual.

NOTICE: If your installation does not meet the minimum clearances shown, you must do one of the following: Operate the logs with the flue damper open only. Raise the mantel to an acceptable height.

INSTALLATION

FLOOR CLEARANCES

- a) If installing appliance on floor level, you must maintain the minimum distance of 14 in. to combustibles (see Fig. 9).
- b) If combustible materials are less than 14 in. to the fireplace, you must install appliance at least 5 in. above the combustible flooring (see Fig. 8).

Fig. 8 - Minimum fireplace clearances above combustible flooring

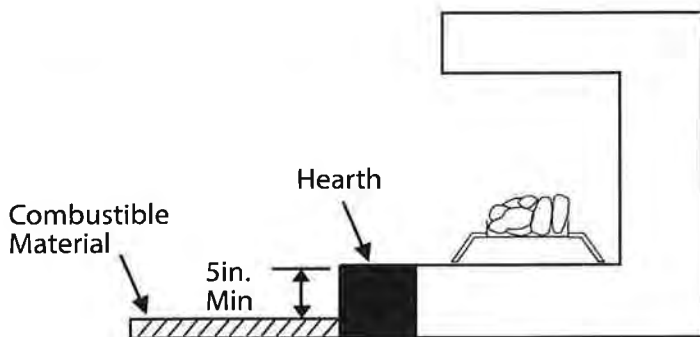


Fig. 9 - Minimum fireplace clearances if installed at floor level

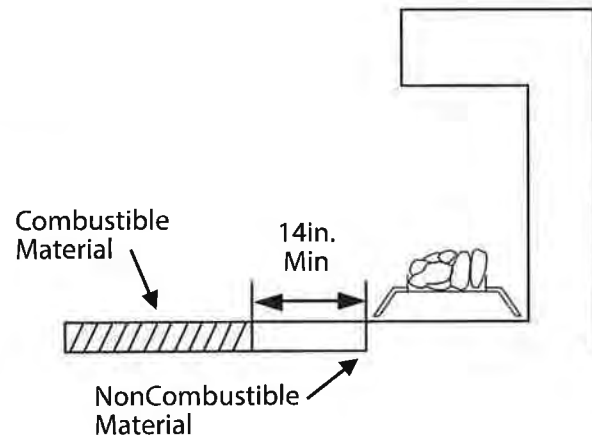
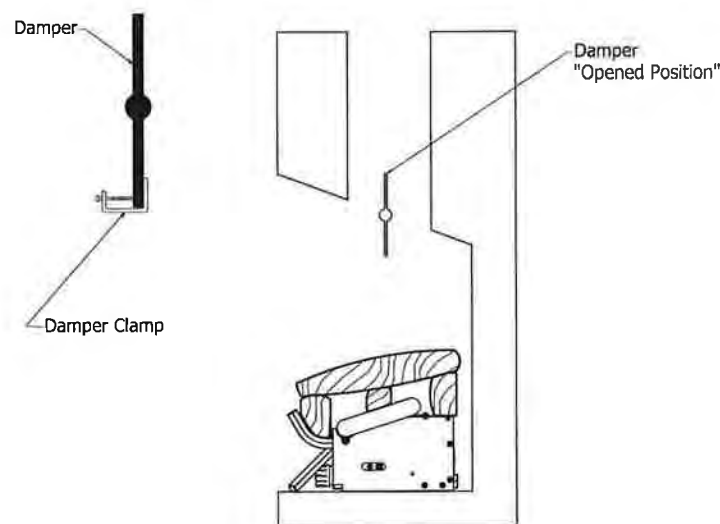


Fig. 10 - Attach Damper to Fireplace



INSTALLING DAMPER CLAMP ACCESSORY FOR VENTED OPERATION

NOTE: When used as a vented heater, appliance must be installed only in a solid-fuel burning fireplace with a working flue constructed of noncombustible material. You may use this heater as a vented product. When used as a vented decorative appliance, use of the thermostat function is prohibited, operate manually only. There are three reasons for operating your heater as a vented model:

1. The fireplace does not meet the clearance requirements for vent-free operation.
2. State or local codes do not permit vent-free operation.
3. You prefer vented operation.

INSTALLATION



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

Before beginning assembly or operation of the product, make sure all parts are present. Compare parts with package contents list. If any part is missing or damaged, do not attempt to assemble, install or operate the product. Contact customer service for replacement parts.

Estimated Assembly Time: 1 to 2 hours

Tools Required for Assembly (Not Included, unless otherwise stated):

Before installing heater, make sure you have the the following:

- Hardware package (provided with heater)
- Approved flexible gas hose if allowed by local codes
- Sealant (resistant to natural or propane/LP gas)
- Electric drill with 3/16- in. drill bit
- Phillips screwdriver
- External regulator (supplied by installer if required)
- Piping (check local codes)
- Equipment shutoff valve
- Test gauge connection
- Sediment trap
- Tee joint
- Pipe wrench
- 3/8" NPT to 3/8" flare fitting

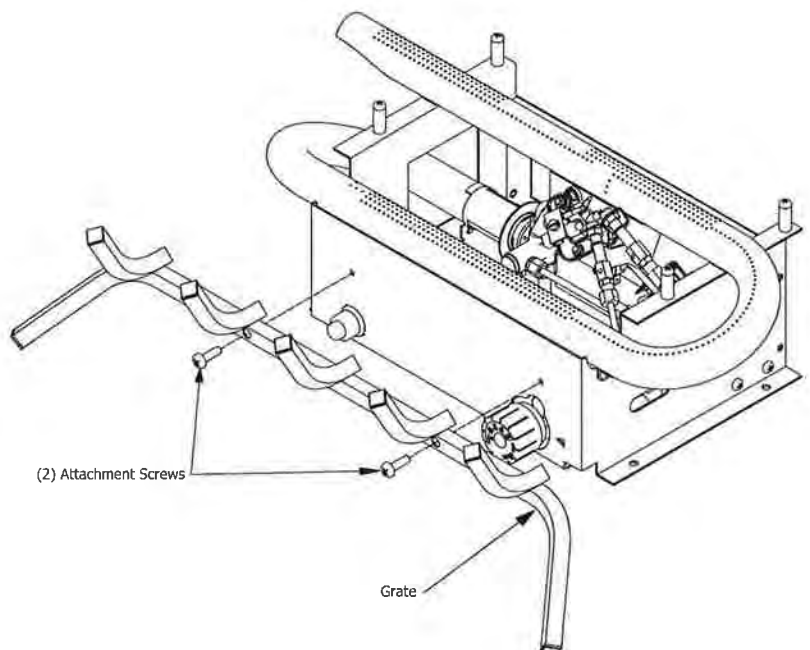
UNPACKING

1. Remove logs, grate, and burner base assembly from carton. NOTE: Do not pick up burner base assembly by burners as this could damage heater. Always handle base assembly by frame.
2. Remove all protective packaging applied to logs and heater for shipment.
3. Check all items for any shipping damage. If damaged, promptly inform dealer where you purchased the heater.

Fig. 11

GRATE ASSEMBLY PROCEDURE

1. Position the grate in front of the burner so the 2 legs are pointing downward, the "grate ends" that the logs sit on are pointing upward, and the screw holes line up with the screw holes on the burner unit (See Fig. 11)
2. Hand tighten the grate to the burner with (2) Attachment Screws, each at an equal distance until hand tightening is no longer possible.
3. Finish tightening each Attachment Screw with a screw driver, but make sure not to over tighten.



INSTALLATION

GAS SELECTION INSTRUCTIONS

⚠ WARNING: This appliance can be used with propane or natural gas. It is shipped from the factory adjusted for use with propane.

CAUTION: The knob to the gas selection means shall not be accessed or adjusted while the appliance is in operation.

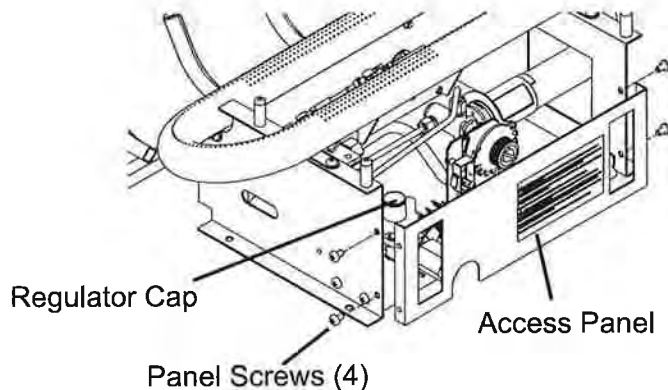
CAUTION: Two gas line installations at the same time are prohibited. The access plate to simple switching means shall not be opened while heater is in operation.

Installation and adjustments shall be made by a qualified technician only.

NOTE: If you are connecting this appliance to propane do not make any adjustments. Proceed to installing the gas line as instructed in the Owner's Manual.

Convert to natural gas:

Step 1 - Remove access panel



Step 2 - Converting the regulator

Unscrew the cap on top of the pressure regulator by turning it counter clockwise. Unscrew the plunger pin from the regulator cap by turning it counter clockwise. Flip the plunger pin 180 degrees and screw it back into the regulator cap by turning it clockwise. Replace the cap by turning it clockwise back onto the regulator. Make sure the plunger pin and cap are finger tight. (See Fig. 12)

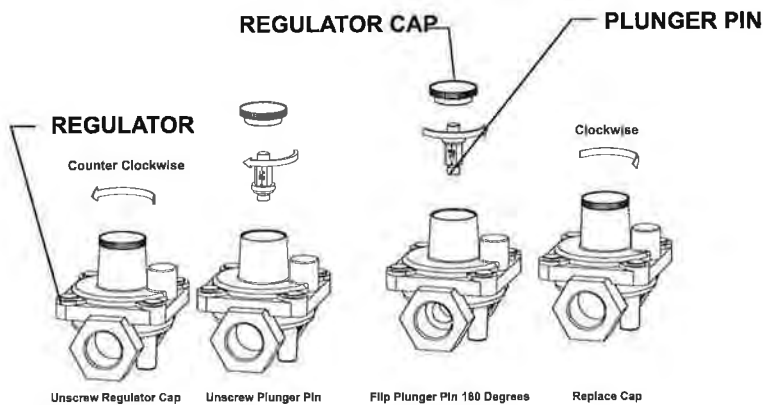


Fig. 12 - Regulator Conversion

Step 3 - Adjust the gas selector valve

Push in on the selector valve Knob and rotate the knob clockwise until it stops. Release the knob (See Fig. 13)

Ensure microswitch trips in correct position (see Fig. 13)

Do not operate the appliance between locked positions.

Step 4 - Replace Access Panel

Reverse steps 1 and 2 to convert back to propane gas.

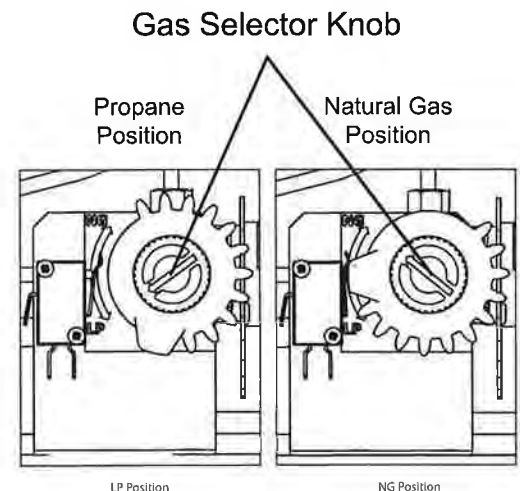


Fig. 13 - Selector Valve

INSTALLATION

CONNECTING TO GAS SUPPLY

⚠ WARNING: A qualified service technician must connect heater to gas supply. Follow all local codes.

CAUTION: Never connect heater directly to the gas supply. This heater requires an external regulator (not supplied). The external regulator between the gas supply and heater must be installed. Gas supplier provides external regulator for natural gas.

⚠ WARNING: Never connect heater to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

The installer must supply an external regulator for liquid propane. The external regulator is provided by the gas supplier for natural gas. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 in. of water column for propane and between 6 and 7 in. of water column for natural gas. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Fig. 15. Pointing the vent down protects it from freezing rain or sleet.

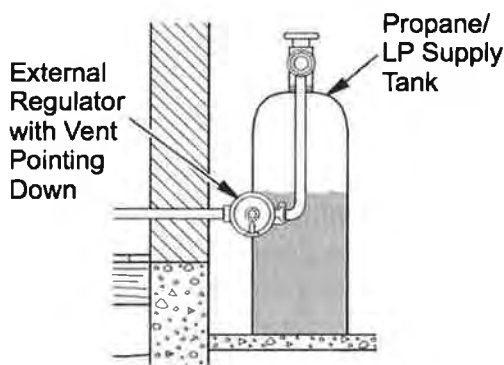


Fig. 14 - Regulator Conversion

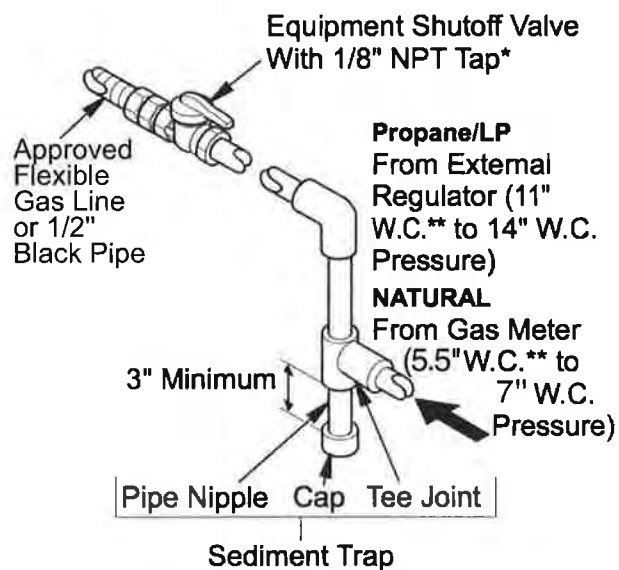


Fig. 15 - Gas Connection

* Purchase the optional equipment shutoff valve from your local Home Center store.

⚠ CAUTION: Use only new black iron or steel pipe. Internally tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of ½ in. diameter or greater to allow proper volume gas to heater. If pipe is too small, loss of pressure will occur. Installation must include an equipment shutoff valve, union, and plugged 1/8-in. NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from heater (See Fig. 15).

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance. Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged heater valves.

INSTALLATION

⚠ CAUTION: Use pipe joint sealant that is resistant to gas (PROPANE or NG). We recommend that you install a sediment trap in a supply line. Locate sediment trap where it is within reach for cleaning and not likely to freeze. Install in the piping system between fuel supply and heater. A sediment trap traps moisture and contaminants. This keeps them from going into heater controls. If sediment trap is not installed or is installed incorrectly, heater may not run properly.

⚠ CAUTION: Avoid damage to regulator. Hold gas regulator with wrench when connecting into gas piping and/or fittings. NG Models: 6 in. to 7 in. W.C. Gas supplier provides external regulator for natural gas.

Installation Items Needed (Not Provided)

- 8" Adjustable Wrench
- 8" Pipe Wrench
- 3/8" Flexible Gas Line (24" Min.) or 1/2" Black Pipe
- 90 Deg. 3/8 NPT x 3/8" Flare Fitting or 3/8" Street Elbow
- Sealant (Resistant to Propane (LP) Gas)
- Shut Off Valve

- 1) A variety of options are possible for routing the Gas Connection Lines depending on where your Gas Supply line is located. Install the 3/8" Fitting to the Heater Regulator using Sealant and direct the attachment and either left or right toward the Gas Supply Line.

NOTICE: Most building codes do not permit concealed gas connections. Check your local building code prior to using a Flexible Gas Line for this installation.

- 2) Install the Gas Line to the 90 Deg. fitting and attach to the Shut Off Valve. It may be necessary to cut and access hole in the side or bottom of the Mantel Cabinet depending on your particular connection.
- 3) Check all connections for gas leaks.

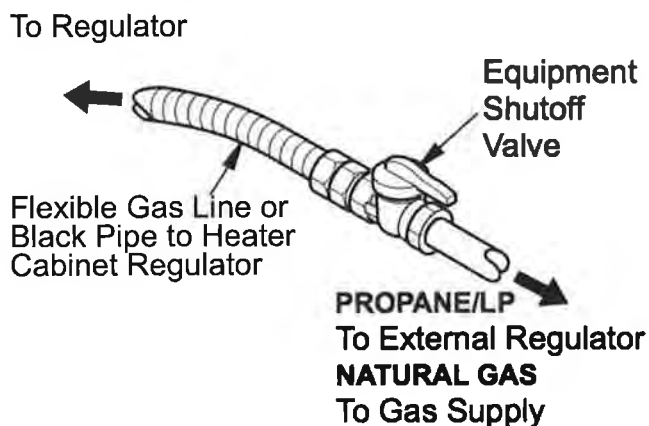
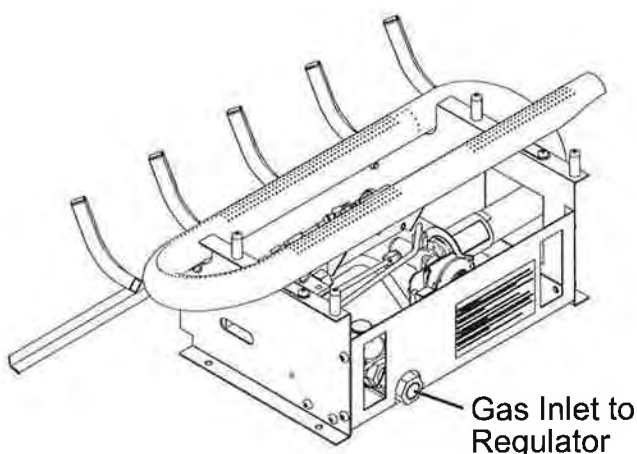


Fig. 16 - Attaching Flexible Gas Line to Equipment Shutoff Valve

INSTALLATION

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks immediately.

⚠ WARNING: Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. If bubbles form, there may be a leak. Correct all leaks immediately.

Pressure Testing Gas Supply Piping System Test Pressures In Excess Of 1/2 PSIG (3.5kPa)

1. Disconnect heater with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 PSIG will damage heater regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening gas supply tank valve.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. If bubbles form, there may be a leak.
5. Correct all leaks immediately.
6. Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve (See Fig. 17).
2. Pressure supply piping system by either using compressed air or opening gas supply tank valve.
3. Check all joints from gas meter to equipment shutoff valve (See Fig. 18.1 or 18.2). Apply mixture of liquid soap and water to gas joints. If bubbles form, there may be a leak.
4. Correct all leaks immediately.

Pressure Testing Heater Gas Connections

1. Open equipment shutoff valve (See Fig. 17).
2. Open gas supply tank valve.
3. Make sure control knob of heater is in the OFF position.
4. Check all joints from equipment shutoff valve to control valve (See Fig. 18.1 or 18.2). Apply mixture of liquid soap and water to gas joints. If bubbles form, there may be a leak.
5. Light heater (see Operation, page 23).
Check all other internal joints for leaks.
6. Turn off heater (see "To Turn Off Gas to Appliance," page 23).

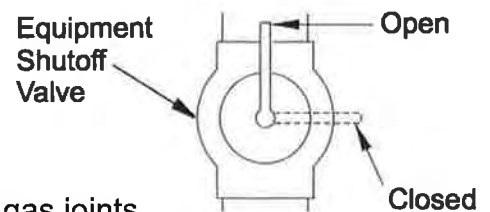


Fig. 17 - Equipment Shutoff Valve

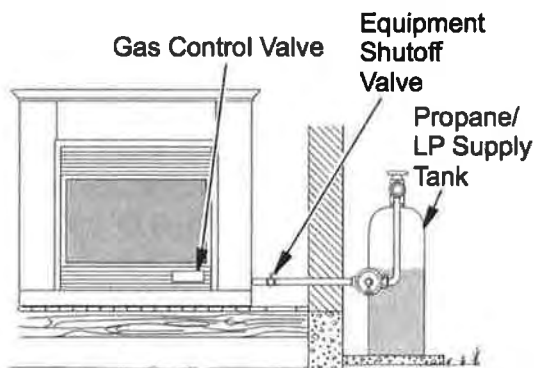


**Fig. 18.1 - Checking Gas Joints
(Propane/LP Only)**

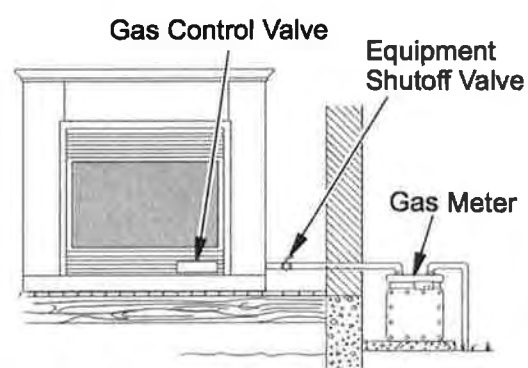


**Fig. 18.2 - Checking Gas Joints
(Natural Gas Only)**

INSTALLATION

In compliance with ANSI Z21.60•CGA2.26 and National Fuel Gas Code, Section 6.

BEFORE INSTALLING THE APPLIANCE

- Turn off gas supply to fireplace or firebox.
- Clean fireplace floor and chimney before installing log set. Seal any ash. Clean out doors to protect the unit from down drafts.

MOUNTING PROCEDURE

- Place grate/burner assembly into firebox with the front pan facing forward.
- Drill two (2) 5/32" diameter holes approximately 1" deep.
- Anchor the front pan to the floor using the (2) Concrete Attachment Screws (Not Included) (See Fig. 11.1).
- Proper installation of the grate is essential to prevent any movement of the gas logs and controls during operation.

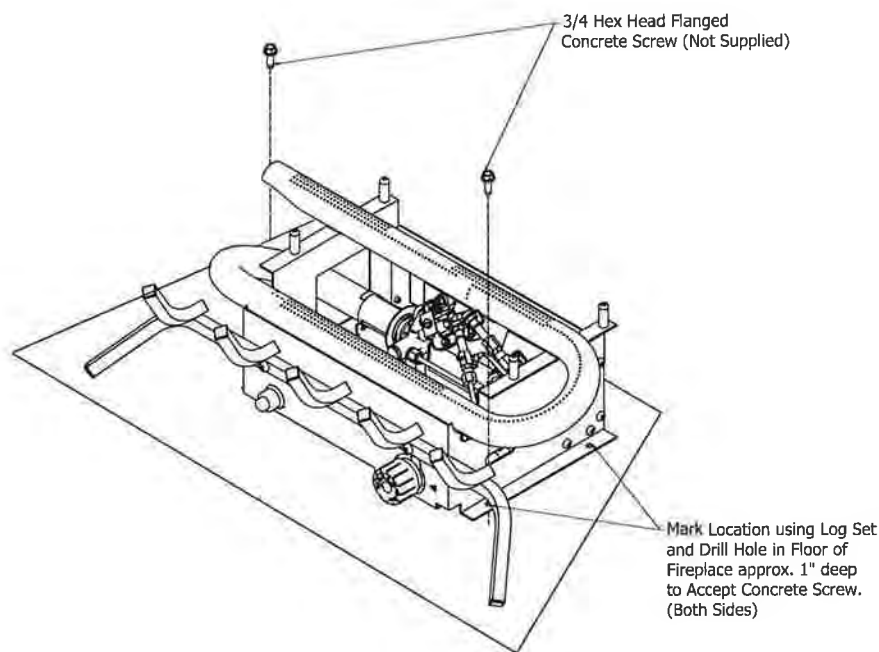


Fig. 11.1