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# INSTALLATION INSTRUCTIONS

## **GFP2/GFP2T SERIES**

DIRECT VENTED GAS FIREPLACE/ WALL FURNACE 503,634M 6/97 Supersedes 2/97



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# RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE





## **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.



## **FOR YOUR SAFETY**

## WHAT TO DO IF YOU SMELL GAS:

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

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

- Do not try to light any appliance.
- Extinguish any open flames.
- 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.

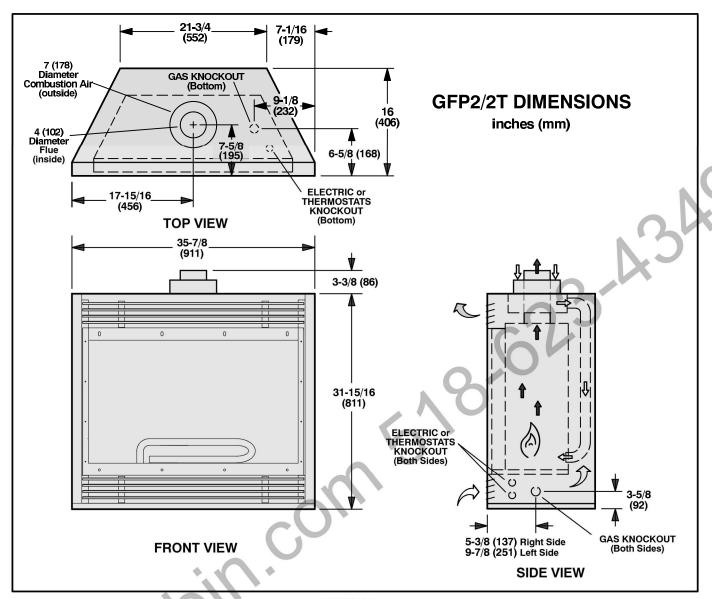


FIGURE 1

## GFP2/2T GAS FIREPLACE

The GFP2/2T is a sealed-combustion (direct vent), heat-circulating gas appliance utilizing a millivolt, 100 percent safety shut-off gas control and a Piezo ignition system. The appliance is designed to accept one of several burner/log assemblies. Decorative trim kits, forced air fan assembly and hand-held remote ON/OFF control are available as options.

The GFP2/2T burner assembly may be installed with leftside, right-side or bottom access for gas piping. This appliance must be vented to the outside and must not be connected to a chimney flue servicing another appliance. The GFP2/2T must be installed using only approved Lennox concentric gas fireplace / wall furnace venting components.

# The GFP2/2T gas valve is self-powered and requires no power wiring.

Do not attempt to alter or modify the construction of the appliance or venting components. Any modification or alteration of construction will void the warranty, certification and approval of these units.

Burner operation can be controlled by either simple wall-mounted ON / OFF switch (provided) or approved millivolt thermostat (provided with wall furnace). Burner flame is adjustable to achieve varying output levels for comfort.

When the GFP2/2T unit is installed as a wall furnace, it can be considered as a heat source during heat load calculations.

## SHIPPING AND PACKING LIST

## Package 1 of 2 contains:

- 1- Assembled fireplace/wall furnace
- 1 Assembly containing 2 sets of louvers
- 1 Bag assembly containing installation instructions, user's manual, warranty, consumer and design response cards. (Shipped inside gas valve compartment)

## Package 2 of 2 contains:

1 - Log set -- shipped separately

Check for shipping damage. The receiving party should contact last carrier immediately if any shipping damage is found.

All venting components are ordered and shipped separately.

## REQUIREMENTS

Lennox GFP2/2T gas fireplaces / wall furnaces are American Gas Association (A.G.A.) and Canadian Gas Association (C.G.A.) certified.

Installation of Lennox gas appliances must conform with local building codes. In the absence of local codes, units must be installed in accordance with the current National Fuel Gas Code (ANSI–Z223.1) in the United States. The National Fuel Gas Code is available from:

American National Standards Institute, Inc.

1430 Broadway

New York, NY 10018

In Canada, installation must conform with current National Standard of Canada CAN/CGA-B149.1 "Installation Code for Natural Gas Burning Appliances and Equipment" and CAN/CGA-B149.2 "Installation Code for Propane Gas Burning Appliances and Equipment" and other applicable local codes.

This appliance is A.G.A. and C.G.A. certified for installation clearances to combustible material as listed on appliance rating plate and in table 1. Accessibility and service clearances must take precedence over fire protection clearances.

TABLE 1

CLEARANCES TO	COMBUSTIBLES			
BACK	0"			
SIDES	0"			
TOP	0"			
FLOOR	0"			
VENT	1" (25mm)			
SERVICE CLEARANCES				
FRONT	3 ft. (.9m)			

NOTE - For installation on combustible floors, appliance shall not be installed directly on carpeting, tile, or other combustible material other than wood flooring.

GFP2/2T unit must be installed so that electrical components are protected from water.

When blower option is installed, appliance must be electrically grounded in accordance with local codes. In addition, in the United States, installation must conform with the current National Electric Code, ANSI/NFPA No. 70. The National Electric Code (ANSI/NFPA No. 70) is available from:

National Fire Protection Association

470 Atlantic Avenue

Boston, MA 02210

In Canada, all electrical wiring and grounding for the unit must be in accordance with the current regulations of the Canadian Electrical Code Part I (C.S.A. Standard C22.1) and/or local codes.

Field wiring connection with unit must meet or exceed specifications of type T wire and withstand a maximum temperature rise of 180°F (82°C).

This GFP2/2T unit has not been A.G.A. or C.G.A. certified for installation in mobile homes, recreational vehicles, or outdoors.

## GENERAL

These instructions are intended as a general guide and do not supersede local codes in any way. Authorities having jurisdiction should be consulted before installation.

## **WARNING**

Product contains fiberglass wool.

Disturbing the insulation in this product during installation, maintenance, or repair will expose you to fiberglass wool. Breathing this may cause lung cancer. (Fiberglass wool is known to the State of California to cause cancer.)

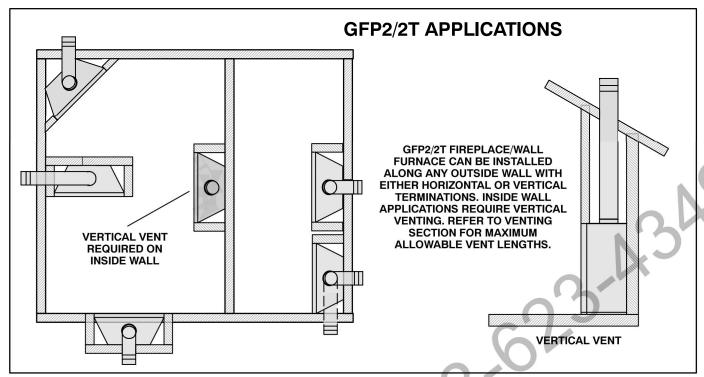
Fiberglass wool may also cause respiratory, skin, and eye irritation.

To reduce exposure to this substance or for further information, consult material safety data sheets available from address shown below, or contact your supervisor.

Lennox Industries Inc. P.O. Box 799900 Dallas, TX 75379-9900

### COMBUSTION AIR

The Lennox GFP2/2T gas fireplace / wall furnace has been designed to use 100 percent air from outdoors for combustion.



### FIGURE 2

## WARNING

Do not install appliance in a corrosive or contaminated atmosphere. Meet all combustion and ventilation air requirements, as well as all local codes.

## LOCATION SELECTION

Install the GFP2/2T out of direct sunlight to maximize the unit's visible glow effect. Also, consider the following when selecting a location for the Lennox GFP2/2T fireplace / wall furnace:

- 1 All requirements outlined in venting section must be met. This includes restrictions on horizontal and vertical vent lengths and vent termination locations.
- 2 Center appliance between two wall studs, if possible, to simplify venting.
- 3 If optional blower is to be used, consider power wiring requirements.
- 4 Air circulation patterns should be unobstructed.
- 5 See figure 2 for acceptable appliance applications.
- 6 Do not install appliance directly on carpeting.
- 7 If fireplace / wall furnace is to be installed on tile or other combustible material other than wood flooring, it must be installed on a metal or wood panel extending the full width and depth of the base.

- 8 Provide a minimum 3 ft. (.9m) clearance in front of the appliance for service and proper operation.
- 9 Surface temperatures on the appliance are very high. Make sure that both children and adults are aware of the danger of burns or clothing ignition.
- 10 Warn the homeowner against leaving young children unsupervised in the room with the appliance.
- 11 Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies
- 12 Instruct the homeowner not to leave damp or wet clothing or other flammable material to dry on or near the appliance.
- 13 Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

## INSTALLATION CLEARANCES

### **Clearances to Combustibles**

The GFP2/2T fireplace / wall furnace is approved with zero clearance to combustible materials on all sides, with the following exception: When the unit is installed with one side flush with a wall, the wall on the other side of the unit must not extend beyond the front edge of the unit. In addition, when the unit is recessed, the side walls surrounding the unit must not extend beyond the front edge of the unit. See figure 3 and table 1.

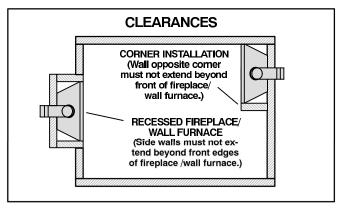


FIGURE 3

#### **Corner Installations**

GFP2/2T units installed across the corner of two joining walls require a 55 in. span across the unit to accommodate the unit depth. See figure 4.

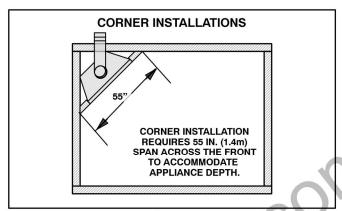


FIGURE 4

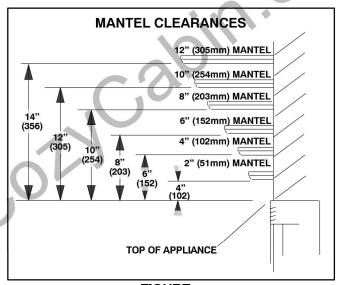


FIGURE 5

#### **Mantel Clearances**

Vertical installation clearances to combustible mantels vary according to the depth of the mantel. Figure 5 details these required clearances. Mantels constructed of non-combustible materials may be installed at any height above the appliance opening; however, take care not to unduly obstruct airflow from the top louvered panel.

NOTE – Paint or lacquer used to finish the mantel must be heat resistant in order to avoid discoloration.

## FRAMING

Wood framing must accommodate unit outer shell as shown in figure 6. If unit is to be elevated above floor level, a solid platform providing continuous support (e.g. plywood decking) must be constructed.

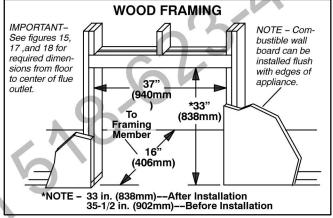


FIGURE 6

## INSTALLATION

Installation should be performed by a qualified technician according to these instructions and local codes.

- 1 Carefully remove assembled fireplace / wall furnace from packaging and place in desired location.
- 2 Pull outward on bottom of black outer trim to disengage magnetic seal and lift up to remove.
- 3 Remove 10 securing nuts holding glass frame in place and remove glass frame.
- 4 Install optional blower (if ordered) as outlined in instructions provided with blower kit.
- 5 Air shutter on primary air opening is not adjustable. Do not attempt to partially or fully block air opening
- 6 Mount field-provided handy box in convenient location adjacent to or in lower compartment of appliance. (Lower compartment has pre-drilled holes in the front lip.) Install field provided ON/OFF switch (or thermostat for wall furnace) and faceplate and wire per diagram in figure 7. Use two conductor wire for the thermostat/wall switch for18 ga. max. length 20 ft, for 14 ga. max. length 50ft.

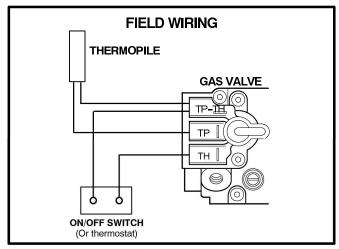


FIGURE 7

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the current National Electrical Code, ANSI/NFPA 70, in the U.S. and CSA C22.1 Canadian Electrical Code in Canada.

NOTE – The thermostat (750 MV) supplied with the direct vent wall furnace is a part of the certified unit and must be installed without modification or substitution.

- 7 Secure bottom of appliance frame to decking by driving two screws into the holes provided.
- 8 Install one set of louvers (wrapped in white foam) across the top of the appliance. See figure 10.

**Note** – GFP2/2T units are shipped with the Interlude <sup>™</sup> log set. The SereneHeat <sup>™</sup> and Shadowdance <sup>™</sup> log sets may also be installed in the GFP2 unit.

# The only acceptable log set for the GFP2T unit is the Interlude™ log set.

- 9 Carefully remove log set from protective packaging and install as follows:
  - IMPORTANT Hard, refractory logs are heavy and fragile. Place them gently. Do not expose logs to direct flame; logs are expansion and contraction sensitive.
  - a Install rear log so that bottom indentations rest on burner bracket. Pull log toward front of burner until left side indentation touches pilot air baffle and right side of log touches rear log stop.
  - b Install front log so that bottom recessed areas sit on burner bracket. Push log back until it touches the back of the burner.
  - c Install top logs to rest in recessed areas on front and rear logs. See figure 8.
     NOTE - Top logs fit one way only; however, each log is stamped with a part number for easy identification.
  - d Separate ember material into loose, fluffy pieces, approximately 1/2 in. to 3/4 in. (13mm to 19mm) in diameter. Take care not to compress the ember material. Place pieces roughly 1/4 in.

(7mm) apart onto front of burner. Ember material may be placed directly on top of burner ports.

# WARNING – Do not place ember material on back section of burner or on the side front of the burner tube under the log.

- 10- Attach either flexible or Lennox unitized rigid concentric vent to vent collar at top of appliance as outlined in venting section. Vent terminations are outlined in venting section.
- 11- Make gas piping connections as outlined in gas piping section. See figure 10 for gas valve location.
- 12- Install bottom louver set across the bottom of the appliance.
- 13- Position glass frame so that longer slotted holes are at the top and reinstall glass frame. Torque all 10 flanged nuts to 130 in.-lbs. Hook trim lip behind top of glass door to reinstall. Bottom of trim is magnetically held in place. See figure 10.
- 14- Continue with procedures outlined in start-up and adjustments section.

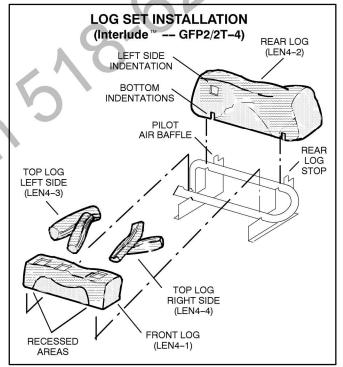


FIGURE 8

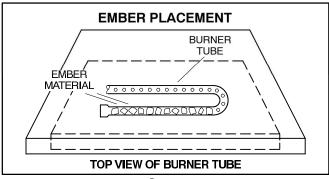


FIGURE 9

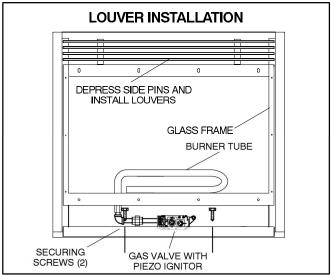


FIGURE 10

## **WARNING**

Do not operate appliance unless glass frame is properly installed. Glass must not be broken or cracked.

If glass is damaged, replace with high-temperature ceramic glass/frame assembly available through Lennox repair parts. Substitution of any other than Lennox-specified glass can lead to property damage or personal injury.

## / VENTING

### Requirements

These instructions should be used as a guideline and do not supersede local codes in any way. Install vent per local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the U.S.A. and the current standards of CAN/CGA-B149.1 and -B149.2 in Canada.

This gas fireplace / wall furnace is equipped with a concentric vent collar for ease of installation. The concentric vent pipe will bring in outdoor air for combustion and will remove exhaust gases. Vent terminations are ordered separately.

The GFP2/2T fireplace / wall furnace is currently approved for use of rigid vent pipe in vertical venting applications and rigid or flexible vent pipe in horizontal applications. Each vent must be terminated using a Lennox vent termination (ordered separately). Approved venting kits and components are listed on page 16 of this manual.

It is suggested that the installer make provisions for periodic inspection of entire venting system.

NOTE - The vent terminations are certified for use with this unit and must be installed without modification.

## **Securing Vent Pipe**

Flexible or rigid vent pipe is used when horizontally venting the GFP2/2T gas fireplace / wall furnace. In vertical venting applications, rigid vent pipe must be used.

When flexible vent pipe is used (in horizontal venting applications), both inner and outer pipes should be secured to the fireplace/wall furnace concentric collar using metal gear clamps and high temperature sealant (See page 16 for sealant part no.) When rigid vent pipe is used (in horizontal or vertical venting applications), apply high temperature sealant around outside of inner and outer collars and slide rigid vent pipes over collars. Outer pipe must also be secured to outer ring on collar using three sheet metal screws. See figure 11.

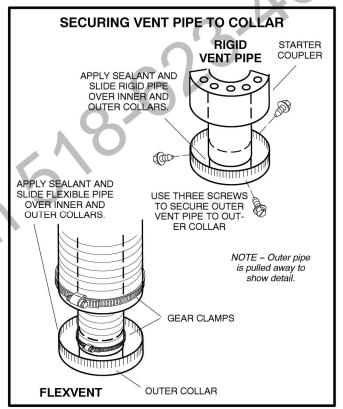


FIGURE 11

## **WARNING**

Failure to properly seal vent system could allow carbon monoxide leakage resulting in injury or death.

## Vertical Venting Through the Roof

See figure 12 for vent length requirements for vertical runs of concentric vent pipe used with the GFP2/2T appliance. Figure 13 provides detail of vertical vent termination.

- 1 Provide a firestop / spacer any time vent pipe must pass through a combustible floor or ceiling. See figure 14. Refer listing on page 16 for catalog number of Lennox firestop.
- 2 Use both flashing and a storm collar at the point where the vent pipe exits the roof. This is necessary to provide the required clearances to combustibles.
- 3 Maintain proper clearances any time vent pipe must pass through insulated spaces.

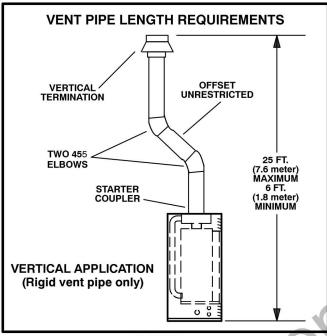


FIGURE 12

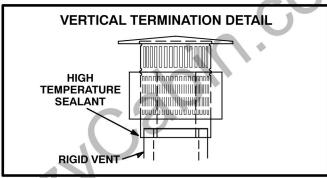


FIGURE 13

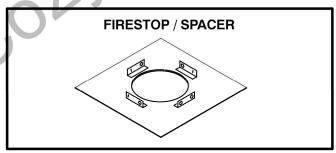


FIGURE 14

## Horizontal Venting Through a Side Wall

See figures 15 and 17 for vent length requirements for horizontal runs of concentric vent pipe used with the GFP2/2T gas appliance.

Horizontal termination is detailed in figure 16. Figure 17 and the chart on page 10 outline the maximum horizontal vent pipe run for a given vertical rise.

Venting should be sloped upward 1/4" per foot of horizontal vent run. The vent terminal must not be recessed into a wall or siding.

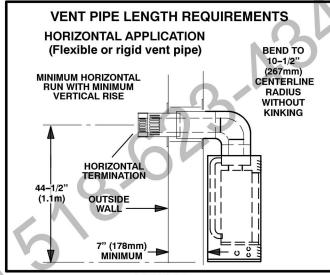


FIGURE 15

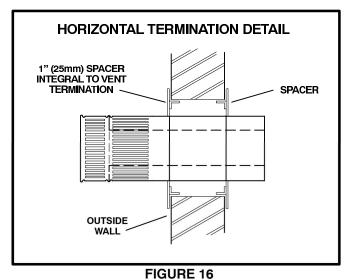
## **WARNING**

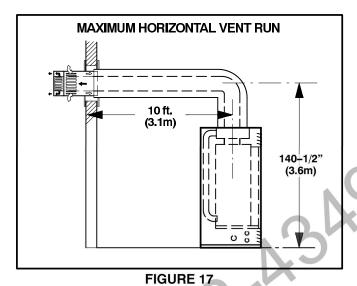
## **VENT TERMINATION LOCATION**

Vent termination will be hot due to high operating temperatures of fireplace / wall furnace. Install optional heat guard if vent termination is to be located where accidental contact is unavoidable.

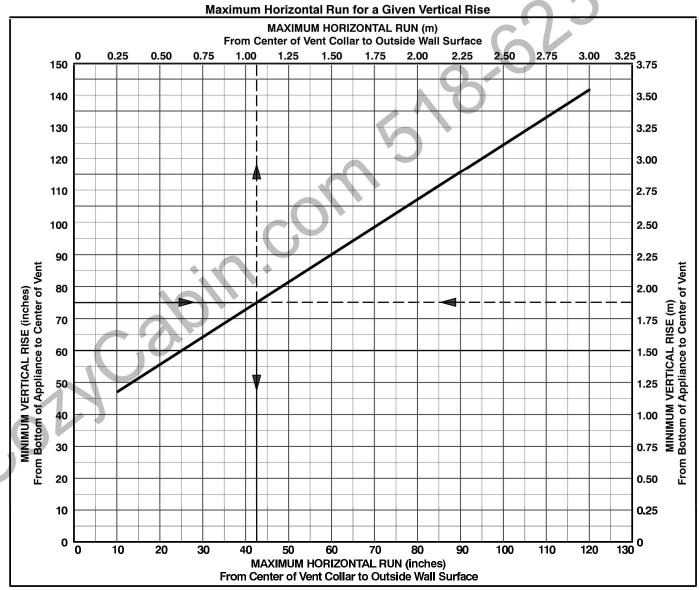
Vent termination must not be recessed into a wall or siding.

In the U.S., refer to local codes and ANSI Z223.1 for horizontal vent termination requirements. In Canada, refer to local codes, CAN / CGA B149.1 or .2 and the vent clearances outlined in figure 18.





VENT LENGTH CURVE

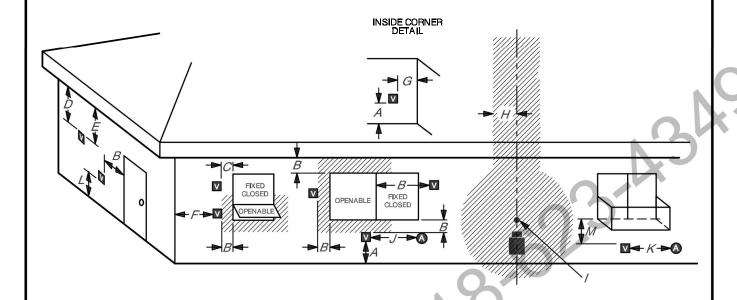


NOTE — VERTICAL RISE — Minimum 44–1/2 in. (1.13m) HORIZONTAL RUN — Minimum 7 in. (178mm) — Maximum 10 ft. (3.1m)

EXAMPLE — Vertical Rise of 75 in. (1.87m) gives a maximum of 42 in. (1.07m) horizontal run.

## CANADIAN HORIZONTAL VENT TERMINATION CLEARANCES

(In U.S., refer to current National Fuel Gas Code — ANSI-Z223.1 and local codes)



- A Clearance above grade, veranda, porch, deck, or balcony –– \*12 in. (305mm) minimum.
- B Clearance to openable window or door -- \*12 in. (305mm) minimum for appliances ≤ 100,000 Btuh (30 kW); 36 in. (.9m) minimum for appliances > 100,000 Btuh (30 kW).
- C Clearance to permanently closed window -- minimum 12 in. (305mm) recommended to prevent condensation on window.
- D Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24 in. (610mm) from the center line of the terminal –– 18 in. (457mm) minimum.
- E Clearance to unventilated soffit -- 12 in. (305mm) minimum
- F Clearance to outside corner when exterior of building is non-combustible, such as brick -- 7 in. (178mm); when exterior of building is combustible -- 12 in. (305mm).
- G Clearance to inside corner when exterior of building is non-combustible, such as brick -- 7 in. (178mm); when exterior of building is combustible -- 12 in. (305mm).

- H \*Not to be installed above a meter / regulator assembly within 3 ft. (.9m) horizontally from the center line of the regulator.
- I Clearance to service regulator vent outlet -- \*6 ft. (1.8m) minimum.
- J Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance -- \*12 in. (305mm) minimum for appliances ≤ 100,000 Btuh (30 kW);
   36 in. (.9m) minimum for appliances > 100,000 Btuh (30 kW).
- K Clearance to mechanical air supply inlet -- \*6 ft. (1.8m) minimum.
- L †Clearance above paved sidewalk or a paved driveway located on public property –– \*7 ft. (2.1m) minimum.
- M ‡Clearance under veranda, porch, deck, or balcony –– 24 in. (610mm) minimum. In addition, if balcony has a perpendicular side wall, vent must be a minimum of 24 in. (610mm) from side wall.
- N Vent termination must not be located in a recessed area.

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

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

\*As specified in CAN/CGA B149 Installation Codes.

NOTE - Local codes or regulations may require different clearances.

# TABLE 2 GAS PIPE CAPACITY (FT<sup>3</sup>/HR)

Nominal Iron Pipe	Internal Diameter	Length of Pipe (Feet)									
Size (Inches)	(Inches)	10	20	30	40	50	60	70	80	90	100
1/4	.364	43	29	24	20	18	16	15	14	13	12
3/8	.493	95	65	52	45	40	36	33	31	29	27
1/2	.622	175	120	97	82	73	66	61	57	53	50
3/4	.824	360	250	200	170	151	138	125	118	110	103
1	1.049	680	465	375	320	285	260	240	220	205	195
1-1/4	1.380	1,400	950	770	660	580	530	490	460	430	400
1-1/2	1.610	2,100	1,460	1,180	990	900	810	750	690	650	620
2	2.067	3.950	2.750	2.200	1.900	1.680	1.520	1.400	1.300	1.220	1.150
2-1/2	2.469	6,300	4,350	3,520	3,000	2,650	2,400	2,250	2,050	1,950	1,850
3	3.068	11,000	7,700	6,250	5,300	4,750	4,300	3,900	3,700	3,450	3,250
4	4.026	23,000	15,800	12,800	10,900	9,700	8,800	8,100	7,500	7,200	6,700

NOTE - Capacity given in cubic feet of gas per hour and based on 0.60 specific gravity gas.

## GAS SUPPLY

In the U.S. and Canada, both flexible and rigid gas pipe are approved for use with the GFP2/2T fireplace / wall furnace. Consult local codes.

- 1 The Lennox GFP2/2T gas fireplace / wall furnace is shipped standard for left- or right-side or bottom installation of gas piping. Simply connect gas supply to gas valve. Gas valve connection is 3/8".
- 2 When connecting gas supply, factors such as length of run, number of fittings and furnace rating must be considered to avoid excessive pressure drop. Table 2 lists recommended pipe sizes for typical applications.
- 3 Gas piping must not run in or through air ducts, clothes chutes, chimneys or gas vents, dumb waiters or elevator shafts.
- 4 Piping should be sloped 1/4 inch per 15 feet upward toward the meter from the furnace. The piping must be supported at proper intervals (every 8 to 10 feet) using suitable hangers or straps. A drip leg should be installed in vertical pipe runs to the unit.
- 5 In some localities, codes may require installation of a manual main shut-off valve and union (furnished by installer) external to the unit. Union must be of the ground joint type. See figure 20.

## **MIMPORTANT**

Compounds used on threaded joints of gas piping must be resistant to the actions of liquified petroleum gases.

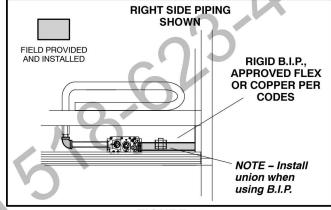


FIGURE 19

NOTE – Installer must provide a 1/8" N.P.T. plugged tap in the field piping upstream of the gas supply connection to the unit. Tap must be accessible for test gauge connection. See figure 20.

NOTE – In case emergency shutoff is required, shut off main manual gas valve and disconnect main power to unit. These devices should be properly labeled by the installer. The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5kPa).

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

### HIGH ALTITUDE DERATE

See individual rating plates for high altitude derate information.

#### **LEAK CHECK**

After gas piping is completed, carefully check all piping connections (factory and field) for gas leaks. Use a leak detecting solution or other preferred means.

## **A** CAUTION

Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak test has been completed. Do not use matches, candles, flame or other sources of ignition to check for gas leaks.

## **MIMPORTANT**

When testing pressure of gas lines, gas valve must be disconnected and isolated. See figure 20. Gas valves can be damaged if subjected to more than 1/2 psig (3.48 kPa).

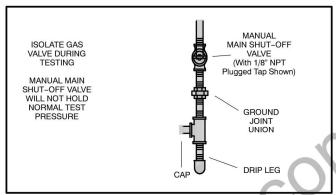


FIGURE 20

## START-UP

FOR YOUR SAFETY READ BEFORE LIGHTING

## **▲ WARNING**

Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the fireplace / wall furnace and to replace any part of the control system and any gas control which has been under water.

## **WARNING**

If overheating occurs or if gas supply fails to shut off, shut off the manual gas valve to the appliance before shutting off electrical supply.

## **A** CAUTION

Before attempting to perform any service or maintenance, turn the electrical power to appliance OFF at disconnect switch.

## **▲** WARNING

Do not operate appliance unless glass frame is properly installed. Glass must not be broken or cracked.

**BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

## PLACING UNIT INTO OPERATION

The Lennox GFP2/2T gas appliance is equipped with a pilot which must be lit by a Piezo ignitor. When lighting the pilot, follow these instructions exactly.

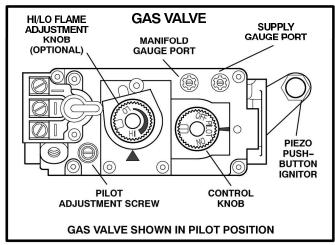
## WARNING

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

### **GAS VALVE OPERATION (Figure 21)**

- STOP! Read the safety information at the beginning of this section.
- 2 Turn OFF wall switch or set thermostat to lowest setting.
- 3 If fireplace is equipped with optional blower, turn off all electrical power to appliance.
- 4 Look behind bottom hinged access panel. Push in gas control knob slightly and turn clockwise to OFF.
  - NOTE Knob cannot be turned from **PILOT** to **OFF** unless knob is pushed in slightly. Do not force.
- 5 Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. If you do not smell gas go to next step.
- 6 Depress partially and turn gas valve knob counterclockwise to **PILOT**.

7 - Push control knob in until it stops and hold knob in this position. Immediately light the pilot by pushing the red Piezo ignitor button. Continue to depress control knob for 25 seconds after the pilot is lit. Release knob. It should pop back up. Pilot should remain lit. If pilot goes out, repeat steps 5 through 10.



#### FIGURE 21

- 8 Depress partially and turn gas valve knob counterclockwise to **ON**.
- 9 Restore electrical power to appliance (if applicable) and turn ON main burner wall switch (or set thermostat to signal demand).
- 10- Close hinged access door.

NOTE – If gas valve is turned to **OFF** from **ON** or **PILOT** while appliance is in operation, gas valve will latch in **OFF** position for 25 seconds.

### **TURNING OFF GAS TO UNIT**

- 1 Turn OFF wall switch or set thermostat to lowest setting.
- 2 If appliance is equipped with optional blower, turn off all electrical power to appliance.
- 3 Open hinged access panel.
- 4 Push in gas control knob slightly and turn clockwise to **OFF**. Do not force.
- 5 Close hinged access panel.

## **ADJUSTMENTS**

NOTE – The air shutter on this burner primary air opening is factory–set. Do not adjust the factory–set position.

## **GAS FLOW**

This burner / log set has been adjusted for the proper gas flow at the factory. No adjustment is necessary other than the pilot flame. See pilot flame adjustment section.

### **GAS PRESSURE**

In order to adjust input, a minimum of 4.5" w.c. for natural gas and a minimum of 10.5" w.c. for LP/Propane must be maintained. The maximum gas supply pressure for natural gas is 10.5" w.c. and for LP/Propane is 13.0" w.c.

**TABLE 3** 

MANIFOLD GAS PRESSURES				
GAS TYPE	AGA/CGA 0 – 4500 FT. (0–1372m)	AGA 4500 FT. (1372m) & UP		
NATURAL	3.5" w.c.	4% DERATE PER 1000 FT. (305m) ABOVE SEA LEVEL		
PROPANE	10" w.c.	SEA LEVEL		

#### **ELECTRICAL**

NOTE - These checks are necessary only if optional blower kit has been applied.

- 1 Check all wiring for loose connections.
- 2 Check for correct voltage at unit (unit operating).
- 3 Check amp-draw on blower motor.Motor Nameplate Actual

### VENT PIPE AND VENT TERMINATION

- 1 Check concentric vent pipe and all connections for tightness and to make sure there is no blockage. Check vent termination for obstructions.
- 2 Check appliance for proper draft.

### PILOT FLAME ADJUSTMENT

To insure proper gas valve operation, the pilot flame should impinge upon both the thermopile and the low mass thermocouple. See figure 22. The pilot flame adjustment screw is shown in figure 21.

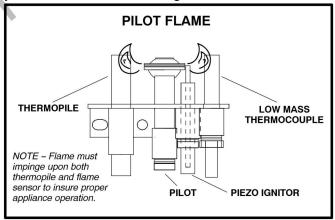


FIGURE 22

## **BURNER FLAME ADJUSTMENT**

The Lennox GFP2/2T burner flame can be adjusted at the gas valve to obtain the required heating output and flame appearance. The burner flame should be inspected at the beginning of each heating season and burners should be cleaned by a service technician. The flame color will stabilize after 10 minutes of operation.

#### **FAILURE TO OPERATE**

If unit fails to operate check the following:

- 1 Is thermostat calling for heat, if applicable?
- 2 Is ON/OFF wall switch in ON position?
- 3 Is PILOT lit?
- 4 Is gas turned on at meter?

- 5 Is manual main shut-off valve open?
- 6 Is internal manual shut-off valve open?

## SERVICE

## **A WARNING**

If unit is equipped with optional blower, disconnect power before servicing unit.

Service should be performed by a qualified technician. Control compartment, burners and circulating air passageways must be kept clean. The system should be inspected annually; however, more frequent cleaning may be necessary due to excessive amounts of lint or dust. At the beginning of each heating season, the system should be checked as follows:

## **BLOWERS (If applicable)**

Check and clean blower wheels for any debris. Blower motors are prelubricated for extended bearing life. No further lubrication is needed.

#### VENT PIPE AND VENT TERMINATION

Annually, before the heating season, check vent pipe and all connections for tightness and to make sure there is no blockage at vent termination. Contact your Lennox dealer for a periodic inspection by a qualified service technician.

## **PILOT AND BURNERS**

Pilot and burner flames should be inspected at the beginning of each heating season. If necessary, lightly brush burner ports to dislodge any obstructions.

## **A** CAUTION

Some soaps used for leak detection are corrosive to certain metals. Carefully rinse piping thoroughly after leak test has been completed. Do not use matches, candles, flame or other sources of ignition to check for gas leaks.

#### **HEAT EXCHANGER**

Periodically inspect fire box for corrosion. If necessary, wipe clean using a damp rag or vacuum using brush attachment.

### **GLASS / FRAME ASSEMBLY**

Clean inside and outside glass surfaces using a mild detergent/water solution and a soft cloth. DO NOT use abrasive cleansers which might scratch the high-temperature ceramic surface. DO NOT clean glass when surface is hot to the touch.

Glass/frame assembly must be properly reinstalled after service. All 10 nuts must be installed and torqued to 130 in.-lbs.

## **WARNING**

Do not operate appliance unless glass frame is properly installed. Glass must not be broken or cracked.

## **ELECTRICAL** (If optional blower is applied)

- 1 Check all wiring for loose connections.
- 2 Check for correct voltage at unit (unit operating).
- 3 Check amp-draw on blower motor.Motor Nameplate Actual

## REPAIR PARTS LIST

The following repair parts are available through independent Lennox dealers. When ordering parts, it is important to include the complete appliance model number listed on the A.G.A. or C.G.A. rating plate — Example: GFP2-4.

### **Cabinet Parts**

Glass frame (with glass)

Louver set

Glass cover

Burner tray

## **Heating Parts**

Burner tube Gas manifold

Gas Logs -- InterludeE -- GFP2/2T-4

## **Control Parts**

Gas valve

Thermopile

Piezo push button ignitor

Ignitor

Pilot burner

On/Off switch

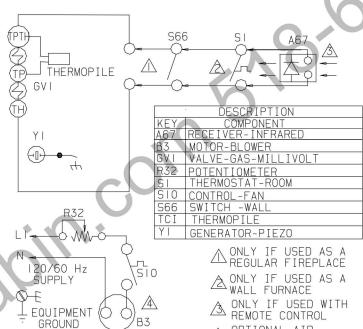
Millivolt thermostat\*

Low mass thermocouple

\*Thermostat (750 MV) is standard on GFP2/2T wall furnace. Thermostat is optional in Canada for use with fireplace.

## /WIRING DIAGRAM

5024



OPTIONAL AIR

A CIRCULATION FAN

NOTE: IF ANY WIRE IN THIS APPLIANCE IS REPLACED, IT MUST BE REPLACED WITH WIRE OF LIKE SIZE, RATING AND INSULATION THICKNESS.

LENNOX ® Industries Inc.	WIRING	DIAGRAM	2/97	
MILLIVOLT SYSTEM				
GFP11,1P,2,2P,3,4,4P				
GFP21,1P,2,2P,3,4,4P				
GFP2T4,4P				
Supersedes Form No. New Form No.				

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Litho U.S.A.

## VENTING KITS AND AVAILABLE COMPONENTS

The following is a list of venting kits and components approved for use with the GFP2/2T direct vented gas fireplace / wall furnace:

Catalog Number	Description
10K81	High temperature sealant
12N33	CFP2 2 ft. flex with gear clamp conector
12N44	CFP3 3 ft. flex with gear clamp connector
12N45	CFP4 4 ft. flex with gear clamp connector
12N46	RTV horizontal vent terminal with 12 in. flex and gear clamp connector
13N00	WTF horizontal vent terminal for flex pipe
12N98	Firestop spacer for flexible pipe
13N01	WTR horizontal vent terminal for rigid pipe with connector
13N02	Vertical vent terminal with connector
13N06	Heat guard for horizontal vent terminal
11N45	CRFS fire stop spacer for rigid pipe
11N40	CRP1 1 ft. rigid pipe
11N41	CRP2 2 ft. rigid pipe
11N42	CRP3 3 ft. rigid pipe
11N43	CRP5 5 ft. rigid pipe
11N46	E90 90° elbow
28K58	Straight starter coupler