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GFP3 Shown

FOR USE WITH THE FOLLOWING FIRES: Interlude™ Tranquillity™

INSTALLATION INSTRUCTIONS

GFP3/GFP4 SERIES

VENTED DECORATIVE GAS APPLIANCE / WALL FURNACE FOR INSTALLATION IN NON-COMBUSTIBLE FIREPLACES 503,429M 8/98



TABLE OF CONTENTS

Supersedes 11/97

DIMENSIONS	
GFP3/GFP4 GAS APPLIANCE / WALL FURNACE	
SHIPPING AND PACKING LIST	_
REQUIREMENTS	
GENERAL	3
COMBUSTION AIR	4
INSTALLATION CLEARANCES	
INSTALLATION	4
VENTING REQUIREMENTS	4
VENT LINER INSTALLATION	5
GAS SUPPLY	5
FASCIA ASSEMBLY INSTALLATION	
SPILLAGE TEST	7
START-UP	7
ADJUSTMENTS	
SERVICE	9
REPAIR PARTS	9
WIRING DIAGRAM	10

RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE







AWARNING

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

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.

WHAT TO DO IF YOU SMELL GAS:

- 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.

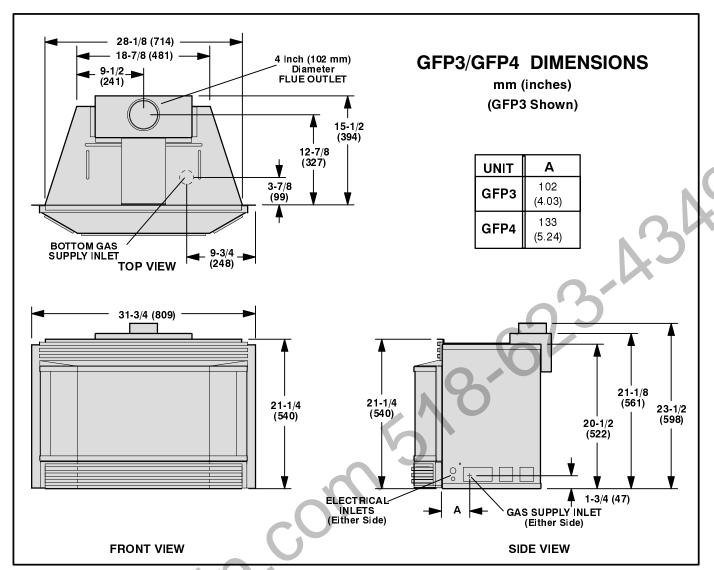


FIGURE 1

GFP3/GFP4 GAS APPLIANCE/WALL FURNACE

The GFP3/GFP4 is a vented decorative gas appliance / wall furnace which uses a millivolt, 100 percent safety shut-off gas control and a piezo ignition system. Decorative trim kits and a hand-held remote ON/OFF control are available.

Gas piping connections to the GFP3/GFP4 burner assembly may be made through left-side, right-side or the bottom. This appliance must be vented to the outside and must not be connected to a chimney flue servicing another appliance.

The GFP3/GFP4 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 this appliance.

Burner operation can be controlled by either an ON / OFF switch located on the right edge of the fascia or an approved millivolt thermostat (provided with the wall furnace). Burner flame is adjustable to achieve varying output levels for comfort.

When the GFP3/GFP4 appliance 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 (or 3) contains:

- 1 Assembled vented decorative appliance/
- 1 Assembly containing 1 set of louvers (upper)
- 1 Assembly containing decorative hood (GFP3 only)
- 1 Envelope GFP3/GFP4 containing installation instructions, user's manual, warranty, consumer and design response cards
 Envelope GFP3 contains additional items - 2 han-

Envelope GFP3 contains additional items – 2 handles and 4 screws for use with lower louvers

Package 2 of 2 (or 3) contains:

- 1 Log set and ember material
- 1 Burner assembly (includes gas valve)
- 1 Literature plate
- 1 Bag assembly containing installation instructions for burner/log assembly and four #10-16 x 3/8" screws

Package 3 (wall furnace only) contains:

1 - 750mv thermostat

NOTE – Thermostat is supplied with wall furnace only. The thermostat is part of the certified appliance and must be installed without modification or substitution.

NOTE – Fascia kits must be Lennox approved and are ordered separately. See page 6 for more detailed information.

NOTE – A Lennox Approved Unit Mounted Control Kit is available and ordered separately.

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

All venting components and trim kits are ordered and shipped separately.

REQUIREMENTS

Lennox GFP3/GFP4 vented decorative appliances / 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.

11 West 42nd Street

New York, NY 10036

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.

GFP3/GFP4 unit must be installed so that electrical components are protected from water.

The blower must be electrically grounded in accordance with local codes. 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

1 Battery March Park

Quincy, MA 02269

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.

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.

- 1 The GFP3/GFP4 unit is intended for installation in a non-combustible fireplace only.
- 2 The appliance must be connected to an approved venting system.
- 3 The flow of combustion and ventilation air must be unobstructed.
- 4 This appliance is equipped with a three-pronged grounding plug which will protect against shock hazard. It should be plugged into a properly grounded three-slotted receptacle. **Do not** cut or remove the grounding prong from the plug.
- 5 This appliance is certified for use with the factorysupplied glass door only. Do not operate the appliance if the glass is broken or cracked or if the glass has been removed. Striking the glass door may result in glass breakage. Replacement glass should only be installed by a qualified service technician.
- 6 All parts removed for servicing should be replaced before operating the appliance.
- 7 Solid fuel must not be used with the GFP3/GFP4.
- 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 of combustible materials, gasoline and other flammable vapors and liquids.

COMBUSTION AIR

The Lennox GFP3/GFP4 appliance needs fresh air for safe operation. Provisions must be made for adequate combustion and ventilation air. **Do not** block air openings at the bottom of the cabinet wrapper with insulation or by other means.

/ INSTALLATION CLEARANCES

The GFP3/GFP4 appliance is intended for installation in a non-combustible fireplace only. The minimum opening size for installation of this appliance is 30 in. (762mm) wide, 21 in. (533mm) high and 15-1/2 in. (394mm) deep. Vertical installation clearances from the top of the appliance to combustible mantels vary according to the depth of the mantel. Mantels up to 6 in. (152mm) deep must be a minimum of 29 in. (727mm) above the top of the appliance; mantels up to 12 in. (305mm) deep must be at least 31 in. (787 mm) above the top of the appliance. 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.

INSTALLATION

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

- 1 Carefully remove assembled vented decorative appliance / wall furnace from packaging.
- 2 In applications using the bay door (GFP3) appliance, remove bottom bay louvered frame by pulling the frame straight out. In applications using the picture window (GFP4) appliance, flip down the bottom louver set.
- 3 Remove four securing nuts holding the glass frame in place and remove the frame.
- 4 Install venting as outlined in venting and liner installation section.
- 5 Install fascia as outlined in fascia installation section.
- 6 Install logs, ember material and Vermiculite as outlined in instructions packaged with burner/log assembly.
- 7 Connect gas piping as outlined in the gas supply section.
- Reinstall glass frame. Torque all four securing nuts to 130 in.-lbs.
- 9 Continue with procedures outlined in start-up and adjustments section.
- 10 Conduct spillage test as outlined in spillage test section.
- 11 Unwrap louver set and install.
- 12 GFP3 Only Unwrap decorative hood and place it on top of the bay door. Bend the sides of the hood out to create a secure friction fit between the sides of the hood and the fascia panels.

- 13 GFP3 Only Two handles are supplied with the unit and may be installed on the bottom louver frame, if desired. See figure 2. Carefully remove the four hole plugs from the bottom louver frame. Install the two handles using the four provided screws.
- 14 In applications using the bay door (GFP3) appliance, reinstall bottom bay louvered frame by pushing the frame straight in. In applications using the picture window (GFP4) appliance, flip up the bottom louver set.

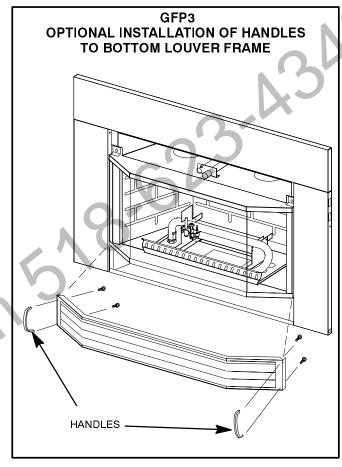


FIGURE 2

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.

The GFP3/GFP4 decorative gas appliance / wall furnace may be installed in any solid-fuel fireplace that has been installed in accordance with the national, state (provincial) and local building codes and is constructed of noncombustible material.

An approved 4 in. (102 mm) flue liner and vent cap must be installed into a Class A or masonry chimney. Minimum vent length is 30 in. (762 mm).

The appliance must not be connected to a chimney serving a separate, solid-fuel-burning appliance.

All chimney clean-outs must be tight-fitting, so air does not leak into the chimney.

Flue dampers must be removed or blocked open. The chimney must be clean and in good working order.

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

VENT LINER INSTALLATION

Insert liner from the top of the chimney and attach to the 4 in. (102 mm) flue collar on the top of the GFP3/GFP4 firebox. Secure using three sheet metal screws or a clamp. NOTE – If there is insufficient clearance to make flue connections, the draft hood may be removed, secured to liner and then reattached to firebox assembly. In this case, follow the steps outlined below:

- 1 To remove draft hood, remove screw securing flat sheet metal handle to the front of the appliance. Push the draft hood off the back of the appliance.
- 2 Attach the draft hood flue collar to the flue liner using three sheet metal screws or a clamp.
- 3 Pull draft hood assembly forward using the sheet metal handle. Center the sheet metal handle between two screws at the top front of the appliance. Push the appliance into the fireplace opening.
- 4 Engage the front flange of the draft hood under the retention bracket.
- 5 Re-install the handle-securing screw to ensure proper positioning of the draft hood assembly.

A WARNING

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

GAS SUPPLY

In the U.S. and Canada, both flexible and rigid gas pipe are approved for use with the GFP3/GFP4 vented decorative appliance / wall furnace. Consult local codes.

1 – The Lennox GFP3/GFP4 decorative appliance / wall furnace is shipped standard for left-side, right-side or bottom installation of gas piping. Simply connect gas supply to flex connector or gas valve using a 3/8" connection.

- 2 When connecting gas supply, factors such as length of run, number of fittings and appliance rating must be considered to avoid excessive pressure drop. Table 1 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 (6mm per 4.6m) upward toward the meter from the appliance. The piping must be supported at proper intervals [every 8 to 10 ft. (2.4m to 3.1m)] using suitable hangers or straps. A drip leg should be installed in vertical pipe runs to the appliance.
- 5 In some localities, codes may require installation of a manual main shut-off valve and union (furnished by installer) external to the appliance. Union must be of the ground joint type. See figure 3.

A IMPORTANT

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

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 3.

NOTE - In case emergency shutoff is required, shut off main manual gas valve and disconnect main power to appliance. 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 pressures greater than 1/2 psig (3.48 kPa).

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 psig (3.48 kPa).

HIGH ALTITUDE DERATE

See individual unit rating plates for information concerning high altitude operation.

TABLE 1 GAS PIPE CAPACITY (FT³/HR)

Nominal Iron Pipe	Internal Diameter	Length of Pipe (Feet)									
Size (Inches) Diameter (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.

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.

A IMPORTANT

When testing pressure of gas lines, gas valve must be disconnected and isolated. See figure 3. Gas valves can be damaged if subjected to more than 1/2 psig (3.48 kPa).

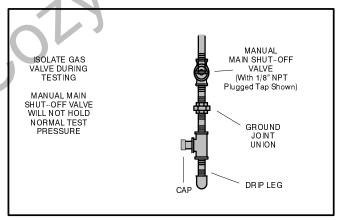


FIGURE 3

FASCIA ASSEMBLY INSTALLATION

Fascia kits provide decorative trim and appliance controls for use with the GFP3/GFP4. Fascia kits must be Lennox approved and are ordered separately.

- 1 Place the fascia top panel, left-side panel and rightside panel (with brass trim attached) finished-sidedown on a flat. non-abrasive surface.
- 2 Align junction box securing screws in the right panel with the rectangular cut-outs in the top panel. Slide top panel under the brass trim of the right panel. Secure using two screws provided. See figure 4.
- 3 Align screw holes in left-side panel with those in top panel and secure using two screws provided.
- 4 Place brass trim on left-side panel, then install brass trim across top panel. Use high temperature sealant on the back of the trim to secure trim to panels.

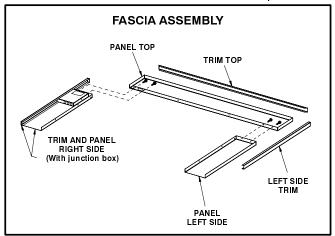


FIGURE 4

- 5 Make gas valve and blower motor electrical connections between jacks behind right fascia panel and plugs on the right side of the appliance. Extend cord from bottom right edge of fascia to existing wall plug to provide 120V power to blower.
- 6 Secure the assembled fascia to the appliance using the six remaining screws: two screws in the top of the cabinet and two screws on each of the left- and rightside flanges of the firebox wrapper. See figure 5.

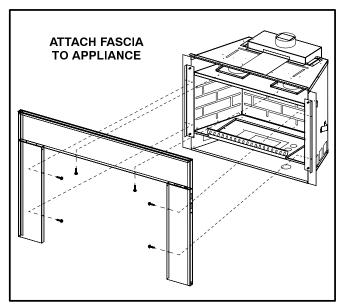


FIGURE 5

SPILLAGE TEST

- 1 Close all doors and windows in the room. Turn on all exhaust fans in the house.
- 2 Set gas valve controls to high and light the appliance. Ensure that the appliance blower is **OFF**.
- 3 Wait 5 minutes. Hold a lit match in front of the spill tube opening to check for venting action. Spill tube location is shown in figure 6.
- 4 Flame should be drawn into the spill tube. If this is not the case, turn off the appliance and check for cause(s) of lack of draft.

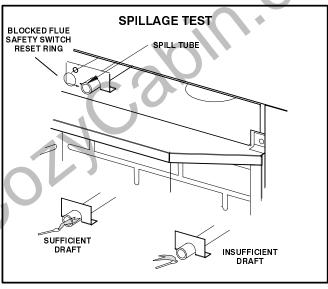


FIGURE 6

This appliance is equipped with a manual blocked flue safety switch. If, during appliance operation, the flame goes out (independently of the thermostat), allow the appliance to cool, then reset the blocked flue safety switch by pulling gently on the reset ring located next to the spill

tube. See figure 6. The appliance should relight and remain lit. If this does not occur, turn off the appliance and call a qualified service technician.

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 appliance / 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, disconnect the electrical power by unplugging the appliance.

A 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 GFP3/GFP4 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 7)

 1 - STOP! Read the safety information at the beginning of this section.

- 2 Turn **OFF** switch or set thermostat to lowest setting.
- 3 Turn off all electrical power to appliance.
- 4 Either remove bottom louvered section (GFP3) or open hinged panel (GFP4) to locate the gas valve. 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 **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.

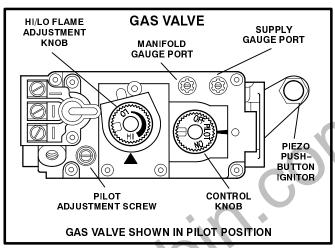


FIGURE 7

- 8 Depress partially and turn gas valve knob counterclockwise to **ON**.
- 9 Restore electrical power to appliance and turn ON main burner switch (or set thermostat to signal demand).
- 10 Replace bottom louvered section or 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** switch or set thermostat to lowest setting.
- 2 Turn off all electrical power to appliance.
- 3 Open hinged panel or remove bottom louvered sec-
- 4 Push in gas control knob slightly and turn clockwise → to OFF. Do not force.

5 – Close hinged louvers or replace bottom louvered section.

ADJUSTMENTS

NOTE – The air shutter on this burner assembly is factoryset. Do not adjust 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

For the purpose of input adjustment, a minimum of 4.5 in. w.c. and maximum of 10.5 in. w.c. for natural gas should be maintained. When LP/Propane is used, a minimum of 10.5 in. w.c. and a maximum of 13.0 in w.c. must be maintained.

ELECTRICAL

- 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

VENTING

- 1 Check flue liner and all connections for tightness and to make sure there is no blockage. Check vent cap for obstructions.
- 2 Check appliance for proper draft.

PILOT FLAME ADJUSTMENT

To ensure proper gas valve operation, the pilot flame should impinge upon both the thermopile and the low mass thermocouple. See figure 8 The pilot flame adjustment screw is shown in figure 7.

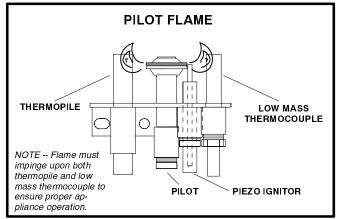


FIGURE 8

BURNER FLAME ADJUSTMENT

The Lennox GFP3/GFP4 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 rocker switch in ON position?
- 3 Is PILOT lit?
- 4 Is blocked flue safety switch reset?
- 5 Is gas turned on at meter?
- 6 Is manual main shut-off valve open?
- 7 Is internal manual shut-off valve open?

SERVICE

A WARNING

Disconnect power before servicing appliance.

A CAUTION

Label all wires prior to servicing controls. Wiring errors may cause improper and dangerous operation. Verify proper operation after servicing.

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

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

VENTING

Check flue liner and all connections for tightness and to make sure there is no blockage at vent cap.

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.

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. Ceramic glass cleaner is available as Lennox part number 19N74.

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

A WARNING

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

ELECTRICAL (Blower)

- 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.

Cabinet Parts

Glass frame (with glass)
Bay or Flat
Louver set
Bay or Flat
Bottom louvered frame
with louvers (GFP3)
Burner tray

Heating Parts

Decorative hood

Burner tube Gas manifold

Interlude™ Gas Logs Tranquillity™ Gas Logs

Control Parts

Gas valve Thermopile

Piezo push button ignitor

Electrode ignitor

Low mass thermocouple

Pilot burner
On/Off switch
Millivolt thermostat*
Blocked flue switch
Fan – tangential
Control – fan
Motor speed control

*Provided with wall

furnace

CO17/CO3/C

