



# LENNOX®

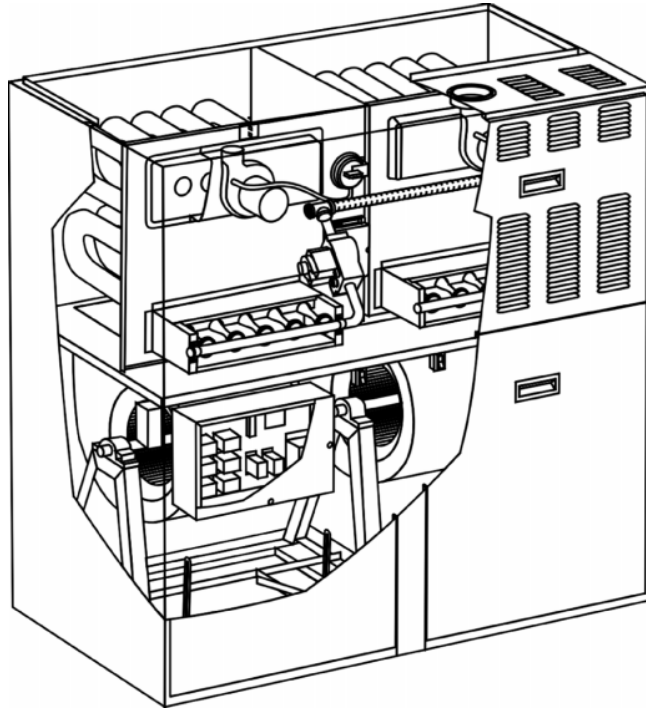
**PRODUCT LITERATURE**

©1998 Lennox Industries Inc.  
Dallas, Texas

503.614M  
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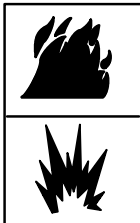
## USER'S INFORMATION MANUAL

# G24-200 UPFLOW GAS FURNACE



**RETAIN THESE INSTRUCTIONS  
FOR FUTURE REFERENCE**

**TP** Technical  
Publications  
Litho U.S.A.



### **⚠ WARNING**

**If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**



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

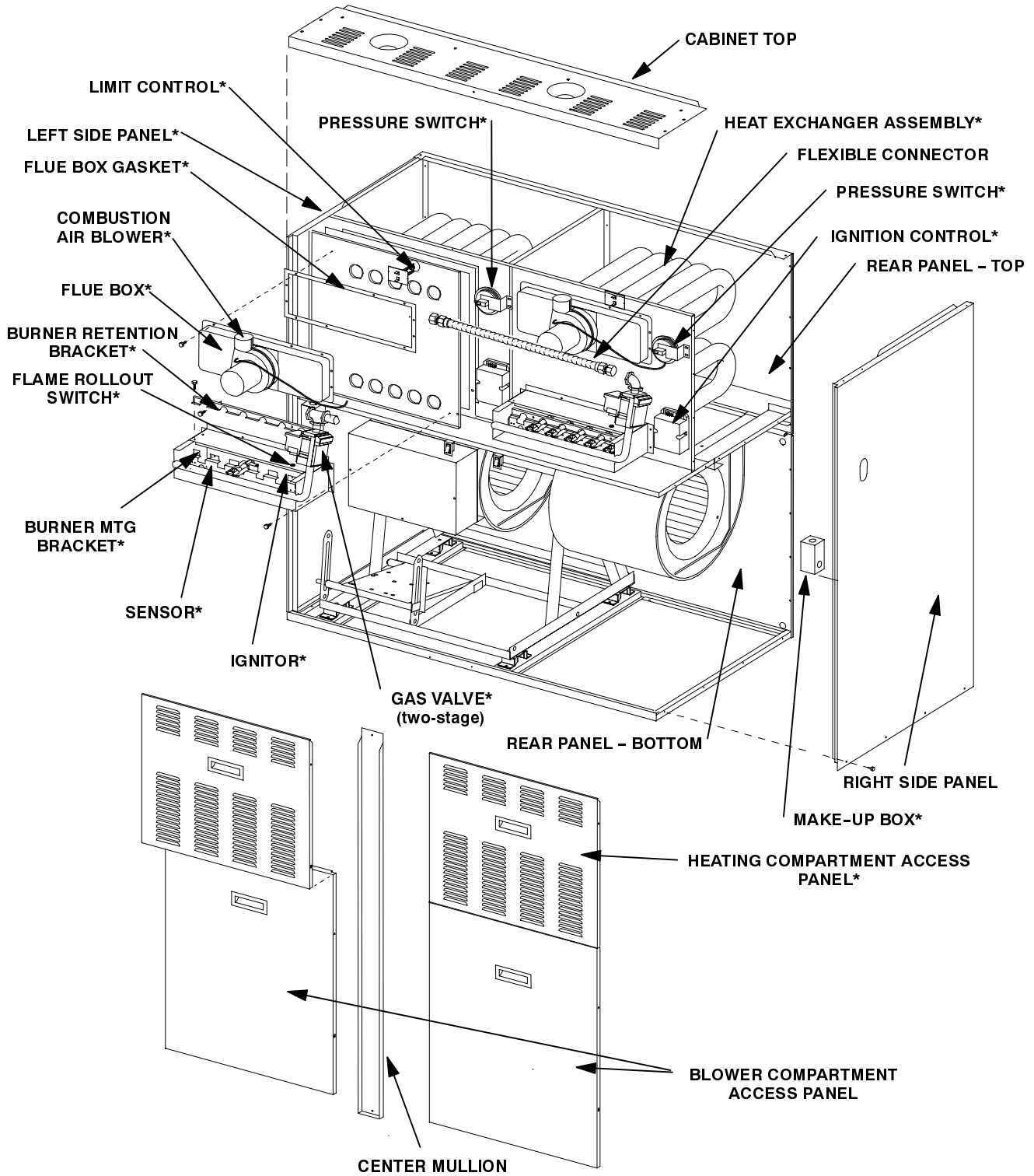
**Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

### **WHAT TO DO IF YOU SMELL GAS:**

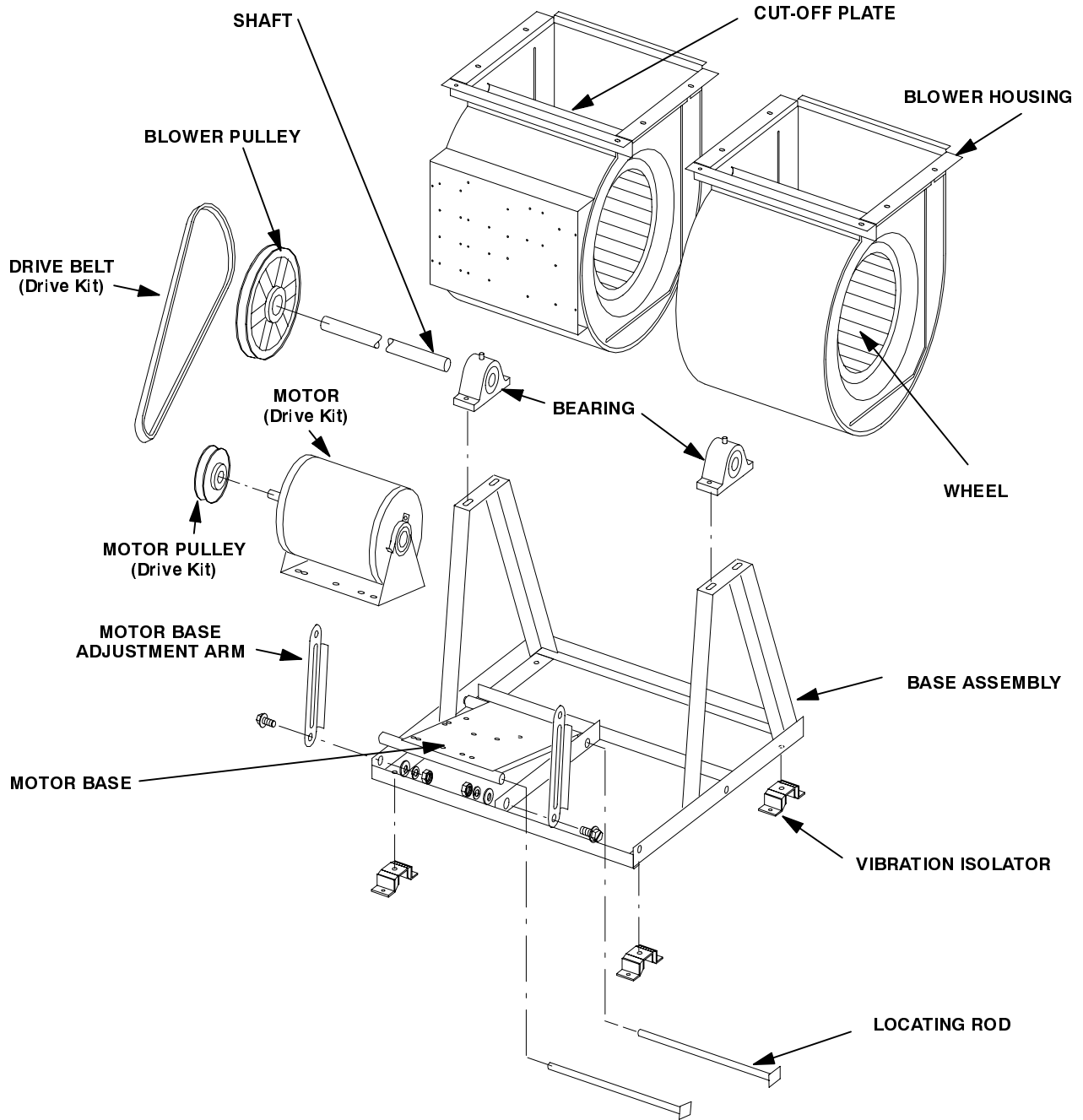
- **Do not try to light any appliance.**
- **Extinguish any open flames.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

# G24-200 HEAT SECTION AND CABINET

(THIS UNIT CONTAINS TWO HEAT SECTIONS. EACH HEAT SECTION CONTAINS ONE OF THESE ITEMS.)



# G24-200 BLOWER SECTION



## **⚠ 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

## **⚠ 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.

## **⚠ WARNING**

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

## **⚠ CAUTION**

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

## **⚠ IMPORTANT**

Any additions, changes, or conversions required in order for the appliance to satisfactorily meet the application needs must be made by a Lennox service technician using factory specified and approved parts.

### **IMPORTANT DIRECTIONS**

- 1 – Keep the furnace area clear and free of combustible material, gasoline, and other flammable vapors and liquids. If installed in an insulated area, furnace must be kept free of insulating material. Insulating material may be combustible. Inspect furnace venting system to make sure it is in place, physically sound, and without

holes, corrosion, or blockage. Inspect furnace return air duct connection to ensure duct is sealed to the furnace and terminates outside the space containing the furnace. Inspect the physical support of the furnace to guarantee that it is sound without sagging, cracks or gaps around base and it maintains seal between base and support.

- 2 – DO NOT obstruct air flow to unit. Unit must receive an unobstructed flow of combustion and ventilating air.
- 3 – DO NOT store chlorine or fluorine products near unit or introduce these products into the combustion air. These products can cause furnace corrosion.

**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 push in or turn the gas control knob. Never use tools. If the knob will not push in or 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**

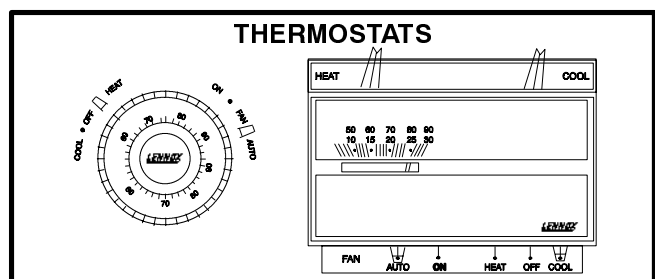
G24-200 units are equipped with two direct spark ignition systems – one for each heat section. Do not attempt to manually light burners on these furnaces. Each time thermostat calls for heat, the burners will be automatically lit.

## **⚠ WARNING**

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

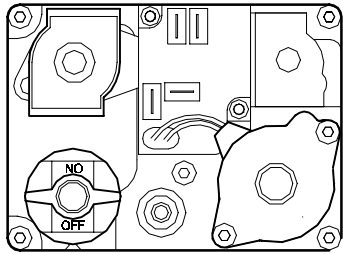
### **LIGHTING INFORMATION AND OPERATION**

- 1 – **STOP!** Read the safety information at the beginning of this section.
- 2 – Set thermostat to the lowest setting. See figure 1.
- 3 – Turn off all electrical power to appliance.
- 4 – This appliance is equipped with two ignition devices which automatically light the burners. Do **not** try to light burners by hand.
- 5 – Remove control access panels.



**FIGURE 1**

## WHITE RODGERS 36E TWO-STAGE GAS VALVE



GAS VALVE KNOB SHOWN IN "OFF" POSITION

FIGURE 2

- 6 – Perform the following to **both** gas valves: turn knob on gas valve 180° either way to **OFF**. Do not force.
- 7 – Wait five minutes to clear out any gas. If you then smell gas, **STOP!** Immediately call your gas supplier from your neighbor's phone. Follow the gas supplier's instructions. If you don't smell gas go to next step.
- 8 – Perform the following to **both** gas valves: turn knob on gas valve 180° either way to **ON** position.
- 9 – Replace control access panels.
- 10 – Turn on electrical power to unit.
- 11 – Set thermostat to desired setting.
- 12 – Both combustion air blowers will start. Burners in both heat sections will light after a 30 second pre-purge.
- 13 – If unit does not light first time (gas line not fully purged) it will attempt up to two more ignitions before locking out.
- 14 – If lockout occurs, repeat steps 1 through 10.
- 15 – If the appliance will not operate, follow the instructions "To Turn Off Gas To Unit" and call your service technician or gas supplier.

### B-To Turn Off Gas To Unit

- 1 – Set thermostat to lowest setting.
- 2 – Turn off all electrical power to unit if service is to be performed.
- 3 – Remove control access panels.
- 4 – Perform the following to both gas valves: White Rodgers 36E series valves: turn knob on gas valve 180° either way to **OFF**. Do not force.
- 5 – Replace control access panels.

## FILTERS

All G24-200 filters are installed external to the unit. Filters should be inspected monthly and cleaned or replaced when necessary to assure proper furnace operation. If optional filter box is used, see figures 3 or 4 for replacement directions. The filter box contains four 16x25 inch (406mmx635mm) filters.

*NOTE – Replacement filters must be U.L.C. certified or equivalent for use in Canada.*

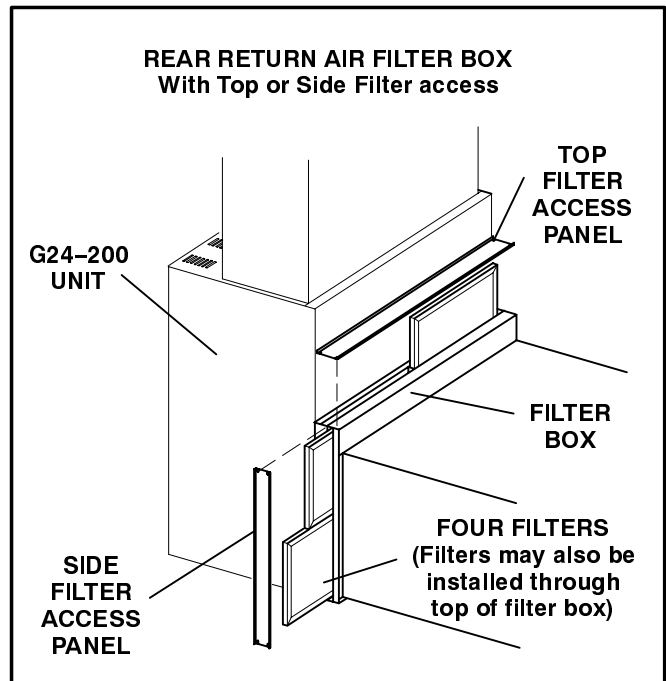


FIGURE 3

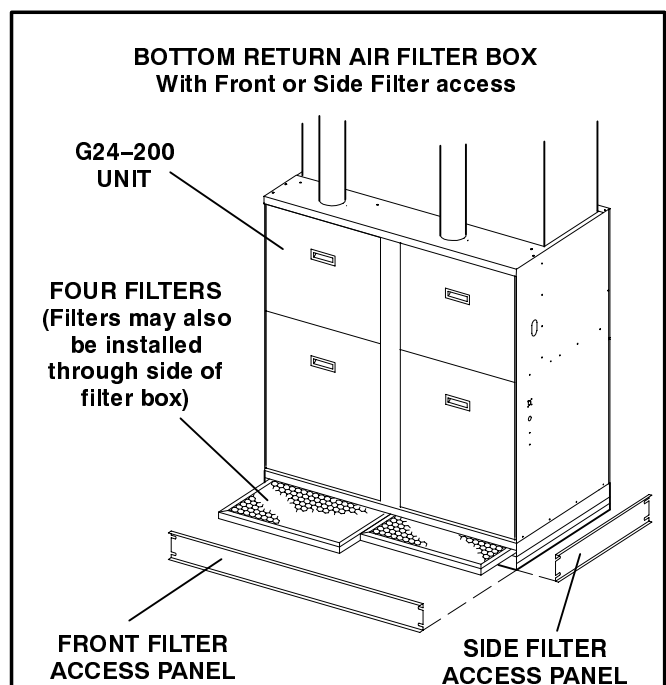


FIGURE 4

## BLOWER

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

Blower shaft bearings are prelubricated. For extended bearing life, relubricate at least once every two years with a lithium base grease, such as Alvania 3 (Shell Oil), Chevron BRB2 (Standard Oil) or Regal AFB2 (Texas Oil). Use a hand grease gun for relubrication. Add only enough grease to purge through the bearings so that a bead of grease appears at the seal lip contacts.

## WARNING

Blower doors must be securely in place when blowers and burners are operating. Gas fumes, which could contain carbon monoxide, can be drawn into living space resulting in personal injury or death.

## BURNER FLAME

The G24-200 burner flame is not adjustable; however, the flame should be inspected at the beginning of each heating season and burners should be cleaned, if necessary. Burner flame should be blue when burning natural gas.

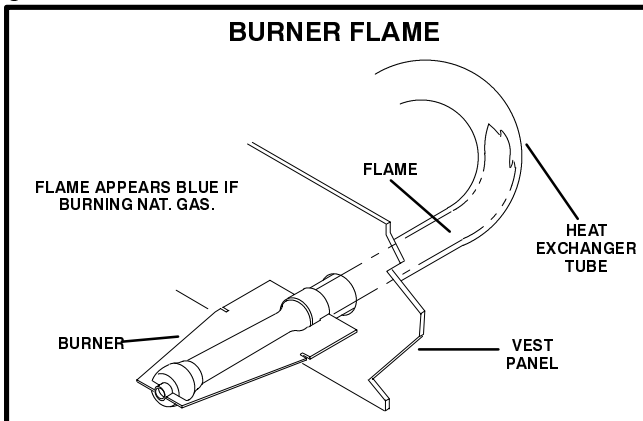


FIGURE 5

## VENTING SYSTEM INSPECTION

Annually (before heating season) inspect furnace venting system, vent cap, heat exchanger and burners for corrosion, deterioration, or deposits of debris. Remove any obstructions.

Contact your Lennox dealer for a periodic unit inspection by a qualified service technician.

## FLAME ROLLOUT SAFETY SWITCHES

Your Lennox furnace is equipped with two sets of flame rollout safety switches (one in each heat section). Each switch shuts off the gas supply to the heat section it controls when blockage occurs to its heat exchanger. If the furnace fails to operate due to the functioning of one or both of these safety switches, DO NOT attempt to place the furnace into operation. Contact a qualified service technician.

## SERVICE REMINDER

Call your Lennox service technician if unit is inoperative. Before calling, always check the following to be sure service is required.

- 1 – Check that electrical disconnect switches are **ON**.
- 2 – Check room thermostat for proper setting.
- 3 – Replace any blown fuses or reset circuit breakers.
- 4 – Gas valves should be **ON**.
- 5 – Air filters should not be plugged limiting air flow.
- 6 – Is gas turned on at meter?
- 7 – Is manual main shut-off valve open?

To keep your Lennox gas heating system in peak operating condition year after year, contact your independent Lennox dealer about a planned service program.