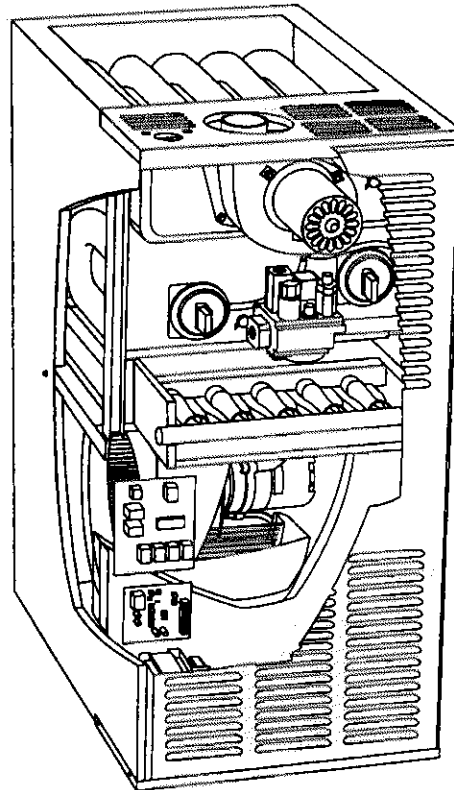


503,276M  
 2/95



**G25MV  
 SERIES  
 GAS FURNACE**



**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.



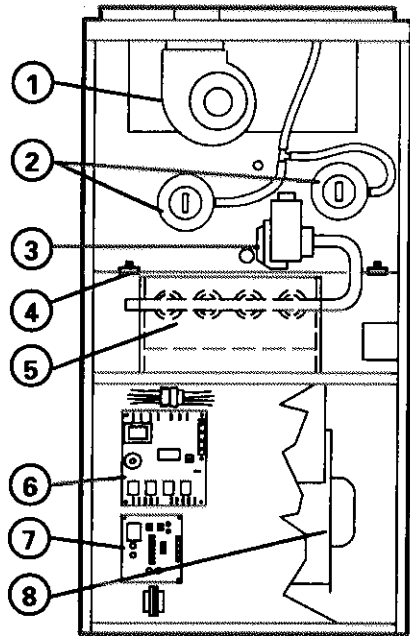
**Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**

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

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

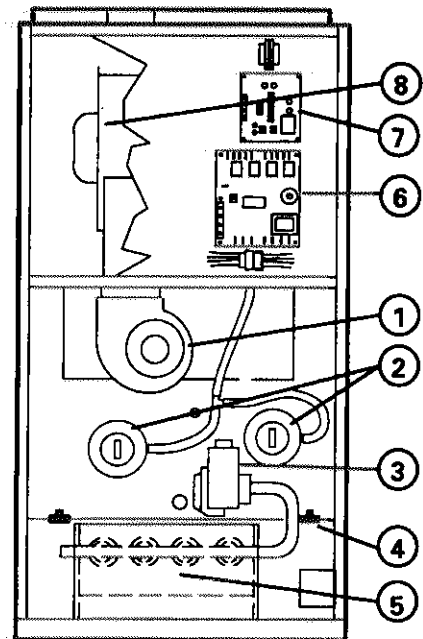
- Do not try to light any appliance.
- Extinguish any open flames.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire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

## G25MV PARTS IDENTIFICATION



UPFLOW POSITION

- 1 - COMBUSTION AIR BLOWER
- 2 - PRESSURE SWITCHES
- 3 - GAS VALVE
- 4 - ROLLOUT SWITCH (One on each side)
- 5 - BURNERS
- 6 - IGNITION CONTROL BOARD
- 7 - VSP2 BLOWER CONTROL
- 8 - BLOWER



DOWNFLOW POSITION

### ⚠ 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

### ⚠ 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.

### ⚠ 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.

## LIGHTING INFORMATION AND OPERATION

### ⚠ WARNING

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

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.

#### To place G25MV furnace into operation:

G25MV units are equipped with an electronic ignition system. Do not attempt to manually light burners on these furnaces. Each time thermostat calls for heat, the burner will automatically light.

#### Gas Valve Operation (Figure 2)

- 1 – **STOP!** Read the safety information at the beginning of this section.
- 2 – Set thermostat to lowest setting. See figure 1.

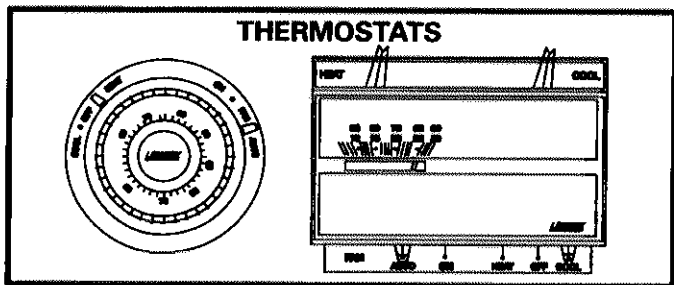


FIGURE 1

- 3 – Turn off all electrical power to appliance.
- 4 – This appliance is equipped with an ignition device which automatically lights the burner. Do **not** try to light the burner by hand.
- 5 – Remove control access panel.
- 6 – Turn knob on gas valve 180° either way to **OFF**. See figure 2. Do not force.
- 7 – 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.
- 8 – Turn knob on gas valve 180° either way to **ON**. Do not force.
- 9 – Replace control access panel.
- 10 – Turn on all electrical power to unit.
- 11 – Set thermostat to desired setting.

*NOTE—When unit is first started, steps 1 through 11 may need to be repeated to purge air from pilot line.*

- 12 – If the appliance still will not operate, follow the instructions "To Turn Off Gas To Unit" and call your service technician or gas supplier.

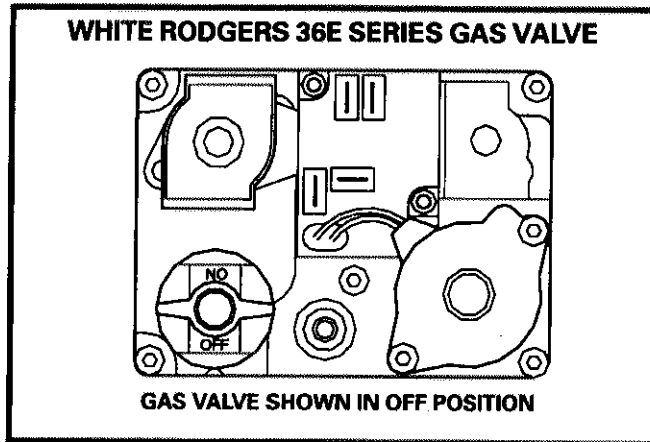


FIGURE 2

#### 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 panel.
- 4 – Turn knob on gas valve 180° either way to **OFF**. Do not force.
- 5 – Replace control access panel.

#### Two-Stage Operation

G25MV unit is a two-stage gas fired furnace. In two-stage mode, the unit automatically switches from high fire to low fire and from low fire to high fire without any need for adjustment by the homeowner. The unit starts at high fire. When the flue gasses reach a certain temperature, the furnace is allowed to switch to low fire. During low fire operation, a reduction of airflow from the vents may be noticed. This is normal operation. The unit's blower motor slows when the unit switches to low fire so that the conditioned space is not overheated. If the thermostat calls for more heat than is being produced at low fire, the unit will switch to high fire and the blower motor will speed up to satisfy the heating demand.

#### FILTERS

G25MV series units are equipped with external filters which should be inspected monthly and replaced when necessary to assure proper furnace operation. See table 1 for filter sizes. Replacement filters used with G25MV3-60/75 units must have a minimum velocity rating of 400 FPM. Replacement filters used with G25MV5-100/120 units require a minimum velocity rating of 625 FPM. Figures 4, 5 and 6 show possible filter locations.

TABLE 1

MODEL NO.	FILTER SIZE	
	UPFLOW	DOWNFLOW
	1 FILTER	2 FILTERS
G25MV3-60/75	16" X 20" X 1"	16" X 20" X 1"
G25MV5-100/120	20" X 20" X 1"	16" X 20" X 1"

#### UPFLOW FURNACE BOTTOM RETURN AIR

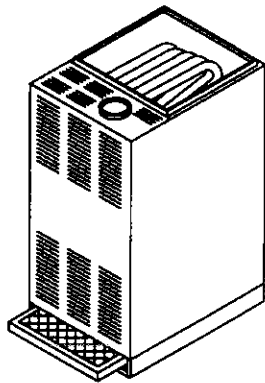


FIGURE 4

#### UPFLOW FURNACE SIDE RETURN AIR

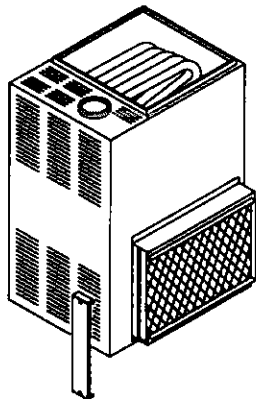


FIGURE 5

#### DOWNFLOW FURNACE FILTERS IN PLENUM RACK

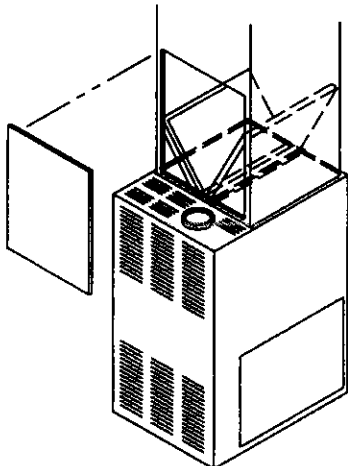


FIGURE 6

#### BLOWER

The G25MV blower is equipped with an ICM2+ variable speed blower motor. **DO NOT** attempt to service the blower motor assembly. Service must be performed by a qualified service technician. However, the homeowner may check and clean blower wheel for any debris. Make sure electrical power is disconnected. Blower motor is prelubricated for extended bearing life. No further lubrication is needed.

## ⚠ WARNING

Blower door must be securely in place when blower 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 G25MV 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.

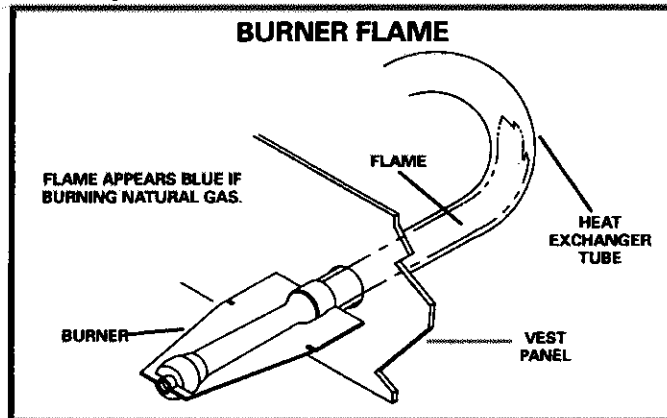


FIGURE 7

#### 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 flame rollout safety switches which shut off the gas supply to the furnace in case of heat exchanger blockage. If the furnace fails to operate due to the functioning 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 valve should be **ON**.
- 5 – Air filter 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.