

# Operating Your Furnace

## ELECTRONIC IGNITION MODELS\*

3508331; 3508332

5508331, 5508332

### NOTE:

For models equipped with WILLIAMS gas valve P322043 or P322044 refer to this sheet and sheet 29 for "SAFETY & LIGHTING INSTRUCTION" and "TURN GAS OFF TO APPLIANCE."

For models equipped with WILLIAMS gas valve P321897 or P321898 refer to this sheet and sheet 30 for "SAFETY & LIGHTING INSTRUCTIONS" and "TURN GAS OFF TO APPLIANCE."

(All other models refer to sheet 25, 26 & 27.)

### THE FURNACE WORKS LIKE THIS:

1. Thermostat turns on the control module.
2. Automatic relight system (in module) opens gas valve and electronically ignites pilot. After pilot flame has been established and proven by the control module, main gas valve circuit opens and pilot lights main burners.
3. Heat builds up in the furnace and starts the fan. The heated air comes out the front bottom louvered panel at floor level.
4. When the thermostat setting is reached, it shuts off the main burner.
5. The fan runs until the heat is removed from furnace, then it turns off.

### IMPORTANT

KEEP BURNER AND CONTROL COMPARTMENT CLEAN.

### SAFETY LIMIT CONTROL

These furnaces are protected against unsafe operation by three automatic safety controls: (1) The electronic ignition system; (2) A limit switch shuts down the main burner to prevent overheating the furnace cabinet; this limit switch will reset when furnace cools; (3) A thermal overload protects the motor against burnout caused by current surges or if anything should block the flow of air through the furnace, the switch will turn the main burner off. When motor cools down, this switch will reset itself. This switch cannot be adjusted.

### WARNING

DANGER OF IGNITION FLASH  
AND EYE INJURY OR BLINDNESS

PROTECT YOUR EYES. NEVER ATTEMPT TO  
LIGHT PILOT WITH GAS CONTROL VALVE KNOB  
IN "ON" POSITION. FLASHBACK COULD OCCUR.

**NOTE:** Models 3508331; 3508332 are equipped with a single speed fan.

### TWO-SPEED FAN OPERATION

**MODELS: 5508331; 5508332**

For models equipped with WILLIAMS gas valve P322043 or P322044.

Blower will first operate at low speed then shift to high speed as the furnace heats up.

For models equipped with WILLIAMS gas valve P321897 or P321898.

Models are equipped with a two-rate control valve. The rate knob on the gas valve is marked "LO" and "HI." Turn the rate knob to the "LO" position and the room thermostat will operate the main burner at about 70% of maximum capacity, blower will operate at low speed. Turn the rate knob to the "HI" position only when a fast heat-up is desired during extremely cold weather. High operation develops maximum capacity of the furnace, blower will first operate at low speed then shift to high speed as the furnace heats up.

### WARNING

THE SURFACE OF THE FURNACE IS HOT DURING  
OPERATION. KEEP CHILDREN, CLOTHING,  
FURNITURE, AND FLAMMABLE MATERIAL AWAY  
FROM IT.

On new installations the gas lines will be filled with air and it may take several minutes to establish the pilot flame.

Keep all access doors and panels in place except for inspection and maintenance.

### WARNING

DANGER OF PROPERTY DAMAGE,  
BODILY INJURY OR DEATH

IF THE FURNACE OVERHEATS OR FAILS TO  
SHUT OFF, CLOSE MANUAL GAS VALVE FOR THE  
FURNACE BEFORE TURNING OFF ELECTRIC  
POWER.

## FOR YOUR SAFETY, READ BEFORE LIGHTING

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

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- B. **BEFORE LIGHTING** smell 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.


### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance or strike a match.
- Do not touch any electric 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.

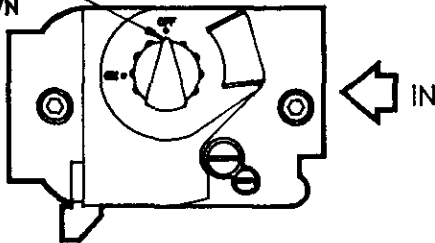
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

NOTES: FOR ADDITIONAL INFORMATION REFER TO THE INSTALLATION AND OPERATION INSTRUCTION MANUAL SUPPLIED WITH THIS APPLIANCE OR CONTACT THE MANUFACTURER IDENTIFYING THE PRODUCT BY ITS MODEL NUMBER LOCATED ON THE RATING PLATE, FOUND NEAR THE GAS VALVE.


## LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Set the thermostat to lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
5. Remove control access panel.
6. Turn gas control knob clockwise  to "OFF".


GAS CONTROL  
KNOB SHOWN  
IN "OFF"  
POSITION



7. Wait five (5) minutes to clear out any gas, then smell for gas, including near the floor. If you then smell gas, stop! Follow "B" in the safety information above. If you don't smell gas, go to next step.

8. Turn the gas control knob counterclockwise  to "ON".
  9. Replace control access panel.
  10. Turn on all electric power to the appliance.
  11. Turn thermostat to on (HEAT) position. Set thermostat higher than room temperature. Pilot will automatically light and main burner(s) will light in approximately 45 seconds.
- NOTE: On initial start-up or after prolonged shut down, several ignition cycles may be required to purge gas lines. To accomplish the recycle – repeat steps 6 through 11 until pilot is established.
12. Set thermostat to desired setting.
  13. After the room thermostat turns the system off, a delay of approximately one minute is required before the system can be turned on again.
  14. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

## TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Remove control access panel.
4. Push in gas control knob slightly and turn clockwise  to "OFF". Do not Force.
5. Replace control access panel.

**WARNING: DUE TO HIGH SURFACE TEMPERATURES — KEEP CHILDREN, CLOTHING, FURNITURE OR ANY COMBUSTIBLE MATERIAL AWAY FROM FURNACE.**

**IMPORTANT: KEEP BURNER AND CONTROL COMPARTMENT CLEAN.**