# OPERATING YOUR FURNACE

## STANDING PILOT MODELS

3508631 / 3508632 / 5008631 / 5008632 / 6508631 / 6508632

#### NOTE

For models equipped with WILLIAMS gas valve P323209 or P322042 refer to this **page 22** for "SAFETY & LIGHTING INSTRUCTION" and "TURN GAS OFF TO APPLIANCE."

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:** The surface of the furnace is hot during operation. Keep children, clothing, furniture, and flammable material away from it. Do not store or use gasoline or other flammable liquids or vapors near the furnace.

# Safety Controls

These furnace are protected against unsafe operation by five automatic safety controls: (1) A safety pilot acts to shut OFF the gas valve in case of pilot failure; (2) A redundant gas valve; (3) A limit switch shuts down the main burner to prevent overheating the furnace cabinet; (4) A vent safety shutoff device shuts down the main burner to protect against improper venting of combustion products. These limit switches will reset when furnace cools; and (5) A thermal overload protects the motor against burnout caused by current surges or if anything should block the flow of air through the furnace. This switch will reset itself when the motor cools down and it cannot be adjusted.

MARNING: 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 3508631 / 3508632 are equipped with a single speed fan.

#### TWO-SPEED FAN OPERATION

**MODELS:** 5008631 / 5008632 / 6508631 / 6508632

For models equipped with WILLIAMS gas valve P323209 or P322042: Blower will first operate at low speed then shift to high speed as the furnace heats up.

#### **IMPORTANT**

KEEP BURNER AND CONTROL COMPARTMENT CLEAN.

**MARNING:** 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 the electric power.

#### **ELECTRONIC IGNITION MODELS\***

3508231 / 3508232 / 5508231 / 5508232

#### NOTE

For models equipped with WILLIAMS gas valve P323209 or P322042 refer to this page and page 23 for "SAFETY & LIGHTING INSTRUCTION" and "TURN GAS OFF TO APPLIANCE."

# THE FURNACE WORKS LIKE THIS:

- Thermostat turns on the control module.
- Automatic relight system (in module) opens gas valve and electronically ignites pilot. After pilot flame has been established and proven by the control module. the main valve circuit opens and pilot lights main burners.

Heat builds up in the furnace and starts the fan. The heated air comes out the front bottom louvered panel at floor level. When the thermostat setting is reached, it shuts off the main burner. 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 3508231 / 3508232 are equipped with a single speed fan.

TWO-SPEED FAN OPERATION MODELS: 5508231/ 5508232

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

# OPERATING YOUR FURNACE

**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.

**MARNING:** 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.

**MARNING:** Read owner's manual before using/ installing. Be sure CHAINED LIGHTING INSTRUCTION TAG hangs at the lowest position in the furnace under/ below the heat shield.

# 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.

- This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these Instructions exactly.
- 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.

- 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.
- 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.

**IMPORTANT:** KEEP BURNER AND CONTROL COMPARTMENT CLEAN. Make sure the "FOR YOUR SAFETY" hang tag (see below) hangs below the heat shield.

## FOR YOUR SAFETY READ BEFORE LIGHTING

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

- This appliance is equipped with an ignition device which automatically lights the pilot. 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.
- WHAT TO DO IF YOU SMELL GAS

  Do not try to light any appliance or strike a
- 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.
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  Use only your hand to push in or turn the gas control knob. Never use tools. If the knob wil not push in or turn by hand, don't try to repail it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- explosion.

  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.

#### **OPERATING INSTRUCTIONS**

- **STOP!** Read the safety information above. Turn off all electric power to the appliance (if applicable).
- (if applicable). Set the thermostat to lowest settling. Open control access panel. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand. Turn the g
- GAS CONTROL KNOB SHOWN
  IN "OFF" POSITION



- Wait (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
- Turn the gas control knob counter clockwise to "ON".

- Close control access panel.
   Turn on all electric power to the appliance (if applicable).
- (if applicable).

  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 shutdown, several ignition cycles may be required to purge gas lines of air. To accomplish the recycles - repeat steps 6 thru 11 until pilot is established.

- 12. Set thermostat to desired setting.
- After the room thermostat turns the system off, a dely of approximately one minute is required before the system can be turned
- un 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

- Set the thermostat to lowest setting.
  Turn off all electric power to the appliance if service is to be performed (if applicable).
- Open the control access panel.
- Turn gas control knob clockwise to OFF. Do not force.
- 5. Close the control access panel
- LICHTING PILOT: (If furnace is equipped with a manual spark igniter follow next steps).

  1. Review all operating instructions above.

  2. When lighting pilot, depress red button located on the lower right side of the burner compartment (view pilot through glass observation door, repeat several times if
- necessary).

  If pilot fails to light or spark is not present while actuating, follow steps 5 thru 10 above.

**WARING** - Do not store or use gasoline or other flammable liquids or vapors near the furnace.

WARING - 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.

**WARNING** - The surface of the furnace is hot during operation. Keep children, clothing, furniture and flammable material away.

Read owner's manual before using / installing. Be sure CHAINED LIGHTING INSTRUCTION HANGS at the lowest position in the furnace under/below the heat shield.

NOTE: 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

- **STOP!** Read the safety information above.
- Set the thermostat to lowest setting.
- Turn off all electric power to the appliance.
- Remove control access panel.
- Turn gas control knob clockwise to "OFF".

