OPERATING YOUR HEATER

Manual Control Models ■LIGHTING■ INSTRUCTIONS

- 1. STOP! Read the safety information on the side of heater.
- 2. Check that gas supply to heater is on.
- 3. Push in gas control knob slightly and turn clockwise to the OFF position.

NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

- 4. Wait five (5) minutes to clear out any air. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on the side of the heater. If you do not smell gas, go to the next step.
- Push in gas control knob slightly and turn counterclockwise to "PILOT/IGN" and depress for five(5) seconds

NOTE: The first time that the heater is operated after connecting the gas supply, the control knob should be depressed for about thirty (30) seconds. This will allow air to bleed from the gas system.

 With control knob pressed in, push down and release the ignitor button. This will light pilot. If needed, keep pressing ignitor button until pilot lights.

NOTE: If pilot does not stay lit, refer to *Troubleshooting*, pages 14 through 16. Also contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*.

- 7. Keep control knob pressed in for thirty (30) seconds after lighting pilot. After 30 seconds, release control knob.
- If control knob does not pop up when released, contact a qualified service person or gas supplier for repairs.

NOTE: If pilot goes out, repeat steps 3 through 7. Wait one (1) minute before lighting pilot again

8. Turn control knob counterclockwise to desired heating level. The main burner should light. Set control knob to any heat level between HI and LO.

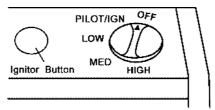


Figure 16 - Control Knob In The OFF Position

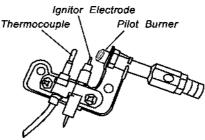


Figure 17 - Pilot

■TO TURN OFF■ GAS TO APPLIANCE

Shutting Off Heater

- Turn control knob clockwise to the OFF position.
- Turn off all electric power to the appliance if service is to be performed.

SHUTTING OFF BURNER ONLY (PILOT STAYS LIT)

Turn control knob clockwise \curvearrowright to the PILOT/IGN position.

■MANUAL LIGHTING■ PROCEDURE

- Remove lower front panel (see Figure 7 page 7).
- 2. Follow steps 1 through 5 under *Lighting Instructions*.
- With control knob pressed in, strike match. Hold match to pilot until pilot lights.
- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Follow step 8 under Lighting Instructions.
- 5. Replace lower front panel.

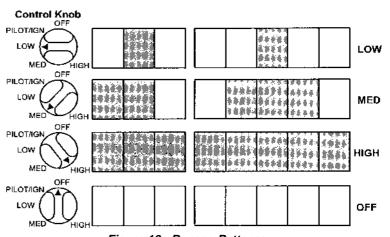


Figure 18 - Burner Patterns

OPERATING YOUR HEATER

THERMOSTAT MODELS ■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. When lighting the pilot, follow these instructions exactly.
- B. 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.
- 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 or gas supplier. 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.

■LIGHTING■ INSTRUCTIONS

- 1. STOP! Read the safety information on the side of heater.
- 2. Make sure equipment shutoff valve is fully open.
- Turn control knob clockwise
 to the OFF position.
- 4. Wait five(5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information on the side of heater. If you don't smell gas, go to the next step.
- 5. Turn control knob counterclockwise to the PILOT position. Press in control knob for five(5) seconds. (see Figure 19). Note: You may be running this heater for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds. This will allow air to bleed from the gas system.
 - If control knob does not pop up when released, contact a qualified service person or gas supplier for repairs.
- 6. With control knob pressed in, push down and release ignitor button. This will light pilot. The pilot is attached to the front of burner. If needed, keep pressing ignitor button until pilot lights.

NOTE: If pilot does not stay lit, refer to *Troubleshooting*, pages 14 through 16. Also contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*.

- 7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
 - If control knob does not pop up when released, contact

a qualified service person or gas supplier for repairs.

NOTE: If pilot goes out,repeat steps 3 through 7. This heater has a safety interlock system. Wait one(1)minute before lighting pilot again.

 Turn control knob counterclockwise to desired heating level. The main burner should light. Set control knob to any heat level between HI and LO.(see Figure 19)

CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

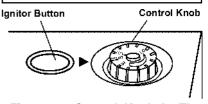


Figure 19 - Control Knob In The OFF Position

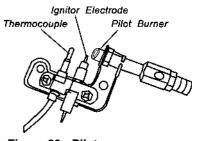


Figure 20 - Pilot

■TO TURN OFF■ GAS TO APPLIANCE

Shutting Off Heater

- Turn control knob clockwise to the OFF position.
- Turn off all electric power to the appliance if service is to be performed.

Shutting Off Burner Only (pilot stays lit)

Turn control knob clockwise $oldsymbol{\wedge}$ to the PILOT position.

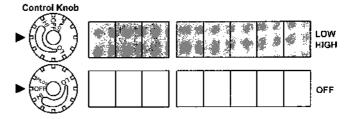


Figure 21 - Burner Patterns

OPERATING YOUR HEATER

Continued

■THERMOSTAT■ CONTROL OPERATION

The thermostatic control used on these Models differs from standard thermostats. Standard thermostats simply turn on and off the burner. The thermostat used on this heater senses the room temperature. At times the room may exceed the set temperature. If so, the burner will shut off. The burner will cycle back on when room temperature drops below the set temperature. The control knob can be set to any heat level between HI and LO.

NOTE: The thermostat sensing bulb measures the temperature of air near the heater cabinet. This may not always agree with room temperature (depending on housing construction, installation location, room size, open air temperatures, etc.)Frequent use of your heater will let you determine your own comfort levels.

PROCEDURE

- 1. Remove lower front panel (see Figure 7 page 7).
- Follow steps 1 through 5 under Lighting Instructions on page 12.
- With control knob pressed in, strike match. Hold match to pilot until pilot lights.
- Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Follow step 8 under Lighting Instructions on page 12.
- 5. Replace lower front panel.

INSPECTING BURNER

Check pilot flame pattern and burner flame pattern often.

PILOT FLAME PATTERN

Figure 22 shows a correct pilot flame pattern. Figure 23 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the heater will shut down. If pilot flame pattern is incorrect, as shown in Figure 23.

- turn heater off (see To Turn Off Gas To Appliance. page 11 for non-thermostat models or page 12 for thermostat models)
- see Troubleshooting. pages 14 through 16.



Figure 22 - Correct Pilot Flame
Pattern

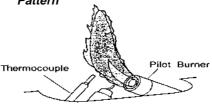


Figure 23 - Incorrect Pilot Flame Pattern

BURNER FLAME PATTERN

Figure 24 shows a correct burner flame pattern. Figure 25 shows an incorrect burner flame pattern. If burner flame pattern is incorrect, as shown in Figure 25.

- turn heater off (see To Turn Off Gas to Appliance, page 11 for non-thermostat models or page 12 for thermostat models)
- see Troubleshooting. pages 14 through 16



Figure 24 - Correct Burner Flame Pattern

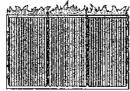


Figure 25 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

WARNING: Turn off heater and let cool before servicing.

A CAUTION: You must keep control areas, burner, and circulating air passageways of heater clean. Inspect these areas of heater before each use. Have heater inspected yearly by a qualified service person. Heater may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

CLEANING ODS/PILOT AND BURNER

 Use a vacuum cleaner, pressurized air. or a small, soft bristled brush to clean.

CLEANING BURNER PILOT AIR INLET HOLE

We recommend that you clean the unit every 2.500 hours of operation or every three months. We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, vou could damage the pilot assembly.

- Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
- 2. Inspect burner, and pilot for dust and dirt.
- 3. Blow air through the ports/slots and holes in the burner.

Also, clean the pilot assembly. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figure 26). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

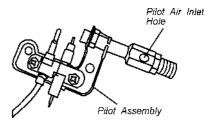


Figure 26 - Pilot Inlet Air Hole

CLEANING HEATER CABINET

Air Passageways ● Use a vacuu

Use a vacuum cleaner or pressurized air to clean.

Exterior

 Use a soft cloth dampened with a mild soap and water mixture.
 Wipe the cabinet to remove dust.