### Start-Up Instructions

 Connect the electrical cord to an approved electrical outlet.

A selector switch located on the back of the heater allows operation in either heating or ventilation (no heat) modes. See Fig. 17.

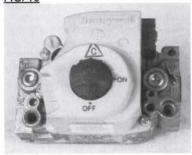
#### FIG. 17



## A. Heat Mode Operation

a. Open all manual fuel supply valves. Check for gas leaks using an approved leak detector. The gas control valve in the heater has a manual shut-off feature incorporated into the valve assembly. Ensure the indicator on the valve is positioned to ON. See Fig 18.

FIG. 18



- b. Push the selector switch to heat.
  See, Fig. 17.
- Set the thermostat above room temperature
- -- The fan motor will start
- -- Igniter will spark
- -- Ignition occurs
- d. The thermostat cycles the heater on and off based on set point.

(It is normal for air to be trapped in the gas hose on new installations. The heater may attempt more than one trial for ignition before air is finally purged from line and ignition takes place.)

When the switch is set to heat, four status lights (see Fig.17) will be activated in sequence as specific circuits are checked by the ignition control. If the heater does not light, and a status light is off, refer to the troubleshooting label on the inside of the heater's burner end access door or the troubelshooting of the manual.

### B. Vent Mode Operation



- -- Push the selector switch to off, O, then to vent
- Only the fan motor will operate. The igniter will not spark,nor will ignition occur.

The ventilation feature is used when air circulation is required. The heater will not cycle on its thermostat setting.

### C. Off O

- 1. Position the switch to midpoint O.
- Do not exceed input rating stamped on nameplate or manufacturer's recommended burner orifice pressure for size orifice(s) used. Make certain that the primary air supply to main burner is open and free of dust, dirt and debris for complete, proper combustion.

### Manual Reset High Limit Switches

# **AWARNING**

### Fire Hazard

- Do not operate the heater with the high limit switch bypassed.
- Operating the heater bypassed high limit switch may lead to overheating, possibly resulting in a fire, with subsequent damage to the heater or property damage.

This heater has two limit switches: one inside the solid door end on the heat chamber, the other inside the louvered door end mounted on the fan housing side panel. Both are easily identified by a red reset button in the center of the switch. See Figs. 26 and 27, Premier 170 shown.

FIG. 26

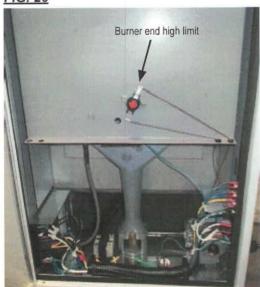
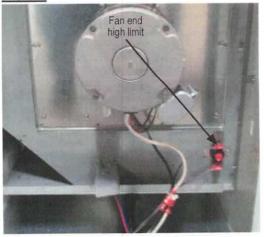


FIG. 27



#### Function

If the heater overheats, one or both of the limit switches can trip, opening the electrcial circuit to the gas control valve. Overheating is generally caused by duct restrictions, low voltage, blocking the heater's air inlet, or excessive gas pressure.

### Resetting

If either trips, remove the red cap and firmly press the reset button in the middle of the switch. Then, shut the heater off and turn it back on. Determine the cause of the limit tripping.

### Testing

To ensure proper function of these critical safety components, both switches should be tested annually, typically when the heater is given a thorough cleaning.

- 1. Remove either high limit switch.
- Holding the switch by one of its mounting legs, apply a small, soft flame only to the sensing portion on the back of the switch. See Fig. 28. Be careful not to melt the plastic housing of the switch when conducting this test.
- Within a minute, you should hear a click coming from the switch, indicating the contacts of the switch have opened.
- Allow the switch cool down for about a minute. Remove the red cap and firmly press the reset button on the switch.
- Check for electrical continuity across the switch terminals to make sure the contacts have closed. Install the red cap.

FIG. 28

