



**heatilator®**  
*The first name in fireplaces*

Heatilator Inc.  
1915 W. Saunders Street  
Mt. Pleasant, IA 52641  
Division, HON INDUSTRIES

# **G340E   G340LE   GC340E   GC340LE**

## **INSTALLATION & OPERATING INSTRUCTIONS FOR RESIDENTIAL USE**

### **I. LISTINGS AND CODE APPROVALS**

These vented decorative gas appliances with electronic ignition have been tested in accordance with National Safety Standards, and have been LISTED by Underwriters Laboratories Inc. for installation and operation as described in these Installation & Operating Instructions. Installations must be done by qualified installers only.

Check with your local building code agency before you begin installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification of any of the instructions contained here, contact: Customer Relations Department, Heatilator Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641. HEATILATOR® is a registered trademark of Heatilator Inc., Division, HON INDUSTRIES.

#### **FOR YOUR SAFETY**

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

- **DO NOT TRY TO LIGHT ANY APPLIANCE.**
- **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.**

#### **FOR YOUR SAFETY**

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.**

#### **WARNING**

**IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.**

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.

## G340E, G340LE, GC340E & GC340LE GAS APPLIANCES

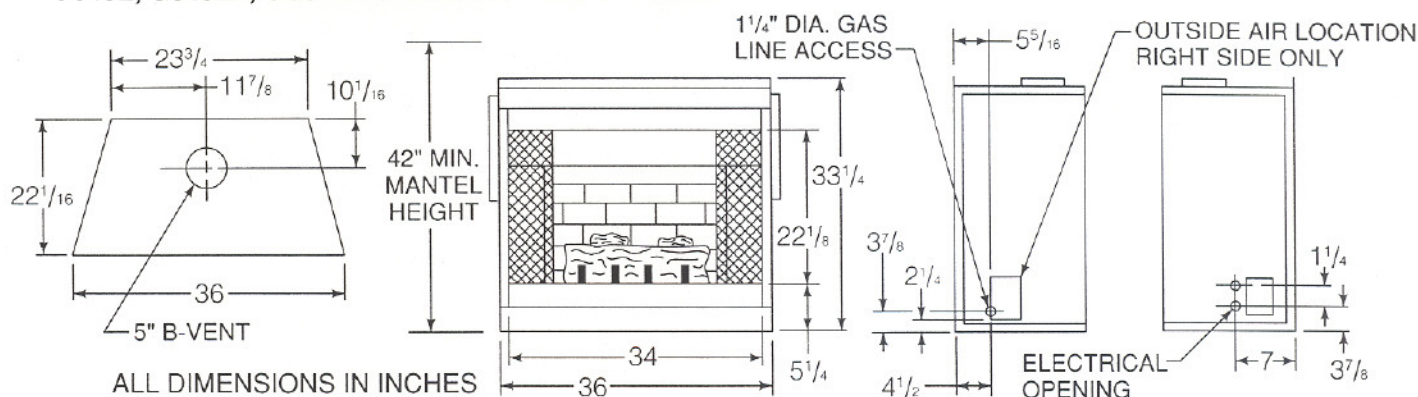


Figure 1

The table below shows only those components which may be safely used with these decorative gas appliances.

| Catalog Number | Description  |
|----------------|--|
| G340E          | 5" Up Vent Natural Gas Decorative Appliance (Non-Circulator) |
| GC340E         | 5" Up Vent Natural Gas Decorative Appliance (Circulator)     |
| G340LE         | 5" Up Vent LP Gas Decorative Appliance (Non-Circulator)      |
| GC340LE        | 5" Up Vent LP Gas Decorative Appliance (Circulator)          |
| GD1            | Glass Doors - Polished Brass                                 |
| TK5            | Trim Kit - Polished Brass                                    |
| FK10           | Fan Kit  |
| AK14           | Air Kit - Outside Air  |
| ID4            | Insulated Duct/Outside Air                                   |
| UD4            | Uninsulated Duct/Outside Air                                 |
| BC10           | Motor Speed Control  |
| RC5            | Remote Burner Control  |

**NOTE:** An optional thermally actuated vent damper may be purchased from your B-Vent supplier to help reduce heat loss through the flue area while the appliance is not in operation.

## II. GENERAL INFORMATION

This installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-1988.

**INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.**

Provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

Minimum clearances to combustibles are: Top of unit 0", Floor 0", Back 1/2", Sides 1/2", Ceiling 30".

Minimum mantel height: 42" from base of appliance.

The appliance must be installed on a flat, solid, continuous surface (i.e. wood, metal, concrete).

Provide for adequate combustion and ventilation air.

For Natural Gas, the minimum inlet gas supply pressure is 4.0 inches water column, and the maximum inlet gas pressure is 11.0 inches water column, for the purpose of input adjustment. Input rate is 23,500 BTU/HR. For LP Gas, the water column pressure must be at 11.0 inches minimum to 14.0 inches maximum.

A 1/8" NPT plugged tapping is provided on the gas control, near the outlet to the Main Burner immediately upstream of the gas supply connection to the appliance, for a test gage connection.

For high elevation, refer to ANSI Z223.1-1988, Appendix F, for resizing orifice.



**DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.**

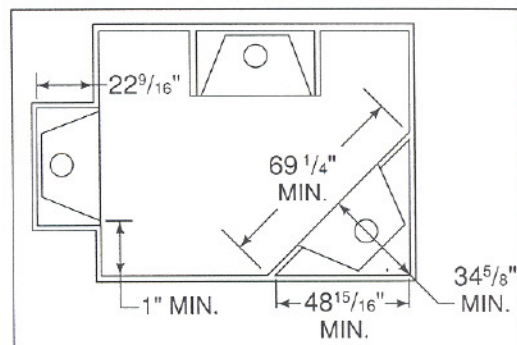
#### **WARNING**

**THIS APPLIANCE MAY ONLY USE A B-VENT SYSTEM AND MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVICING A SEPARATE SOLID FUEL BURNING APPLIANCE.**

### **III. GAS APPLIANCE LOCATIONS, SPACE AND CONSTRUCTION REQUIREMENTS**

The G340E(LE) or GC340E(LE) gas appliances can be installed in a wide variety of ways and will fit nearly any room layout. It may be installed in a recessed position, framed out into the room, or across a corner. The unit may be installed at a height level with the floor, or it can be raised up from the floor to enhance its visual impact. Figure 2 illustrates a variety of ways the appliance may be located in a room.

Proper clearances to combustable sidewalls, as illustrated in Figure 2, must be maintained.



**Figure 2**

### **IV. STEP-BY-STEP INSTALLATION**

#### ☐ **STEP 1**

The appliance will fit a framed opening of 36 3/8" wide x 33 1/4" tall. The cavity depth must be no less than 22 5/8".

#### ☐ **STEP 2**

Install the gas line piping up to the right side of the appliance. For a gas line connection of 25' long, it is recommended to use 1/2" pipe, then reduce to 3/8" pipe at the unit. A separate shut-off gas valve (not supplied) should always be installed. Plan ahead for easy access. This unit provides a listed flexible gas connector.

#### ☐ **STEP 3**

If an optional FK10 Fan Kit or RC5 Remote Burner Control are to be used, wiring should be done at this time. The appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-1984. Wiring diagrams are provided with these accessories. Each optional item needs a separate 120/60 supply to the built-in Junction Box located on the left hand side of the firebox assembly. A separate wall switch for each accessory is recommended.

#### ☐ **STEP 4**

Slide the appliance into position.

#### ☐ **STEP 5**

Secure the appliance to the wall using a minimum of (4) fasteners.

#### ☐ **STEP 6**

Connect 5" listed type B-1 Vent to the vent collar of the appliance. Follow all B-1 Vent listings and requirements.

**NOTE: This appliance cannot be power vented or side wall vented. It must vent upward only through a roof or chase in accordance with building codes. In cold climate regions it is recommended to have all B-Vent enclosed in an insulated chase.**

#### ☐ **STEP 7**

Connect the gas line to the appliance manual valve inlet. Check for gas leaks with a soap and water solution. Use of a listed flexible connector and manual shut-off valve (supplied) are recommended.

**NOTE: During any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 psig, this appliance and its individual shut-off valve must be disconnected from the piping system. If test pressures equal to or less than 1/2 psig are used in pressure testing the gas supply piping system, this appliance must be isolated from the piping system by closing its individual manual shut-off valve during the testing.**



#### STEP 8

If optional outside air is used, install it before finishing. The maximum length of the Air Duct, ID4 or UD4, is 12', with a maximum 8' vertical rise.

#### STEP 9

**Finishing the Unit.** When finishing the face of the unit, **combustible** material may be brought up to the sides of the unit, but must never overlap onto the black metal. The black metal may be covered with **non-combustible** material only. **NOTE: You cannot cover any of the air slots in the unit, as this may create a fire hazard.** If a mantel is to be used, a minimum of 42" from the base of the unit must be maintained.

**Fan Installation.** If an optional FK10 Fan Kit or RC5 Remote Burner Control are desired, or may be added at a later date, the integral electrical Junction Box must be connected to a switched (ON/OFF) 120 Volt 60 Hertz supply. Two supplies and switches are required if both are used. Simply remove the front access panel as shown in Section V of the Installation & Operating Instructions. Plug the Fan connector into the Junction Box and secure the fan to the column using two screws as shown in Figure 4.

#### STEP 10

Install the vermiculite and logs as shown in Figure 3 ("A" shows vermiculite, "B" shows logs). Do not pack the vermiculite. Cover only the front portion of the burner and firebox floor.

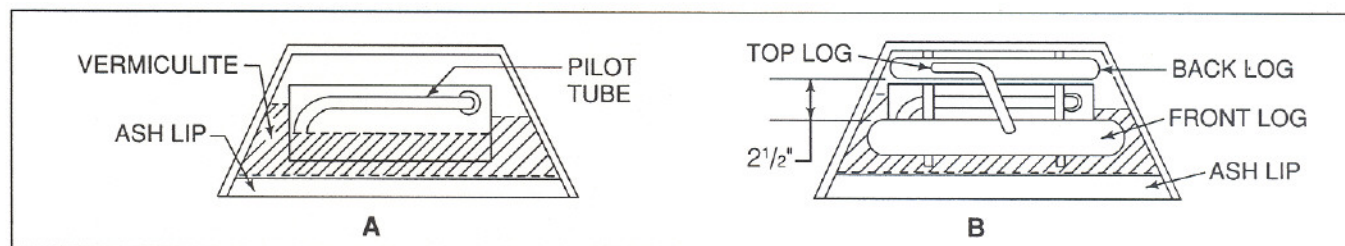


Figure 3

**NOTE: A 2 1/2" spacing must be maintained between the front and rear logs. The grate will maintain this distance.**

### V. OPERATING INSTRUCTIONS

This gas appliance uses a 24 volt control system, consisting of a Pilot Burner, Thermosensor, Gas Control Valve, Limit Switch and an On/Off Switch.

**Removal of Front Access** (See Figure 4). Lift the panel to disengage the pivot pins and pull the panel forward. The glass panel does not require removal for this. To replace the panel, position it over the pivot pins and lower.

#### LIGHTING PROCEDURE

1. Turn the on/off switch (provided on the left column) to the "Off" position.
2. Turn the gas knob to the "Off" position.
3. Wait five minutes to allow gas, that may have accumulated in the main burner compartment, to escape.
4. Turn the gas knob to the "On" position.
5. Turn the on/off switch to the "On" position. This will turn on the main burner.

#### SHUTDOWN PROCEDURE

1. To shut off the main burner, move the on/off switch to the "Off" position.
2. Turn the valve gas knob to the "Off" position.

#### PILOT BURNER ADJUSTMENT (Preset at Factory)

1. Remove the pilot adjustment cap. See Figure 5.
2. Adjust the pilot key to provide properly sized flame.
3. Replace the pilot adjustment cap.

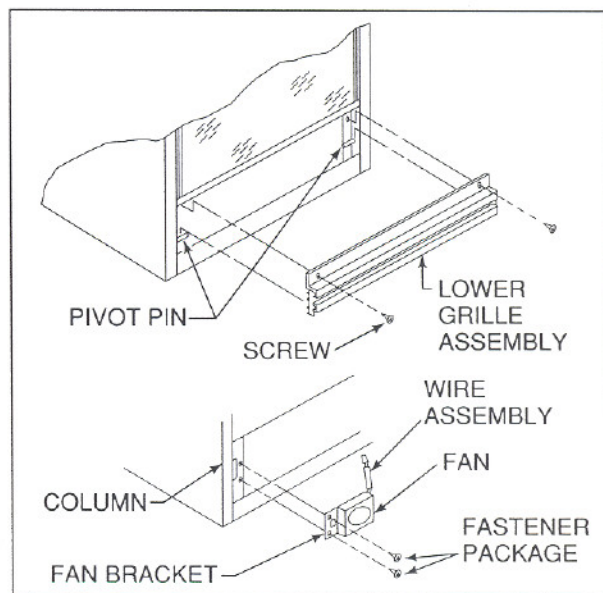


Figure 4

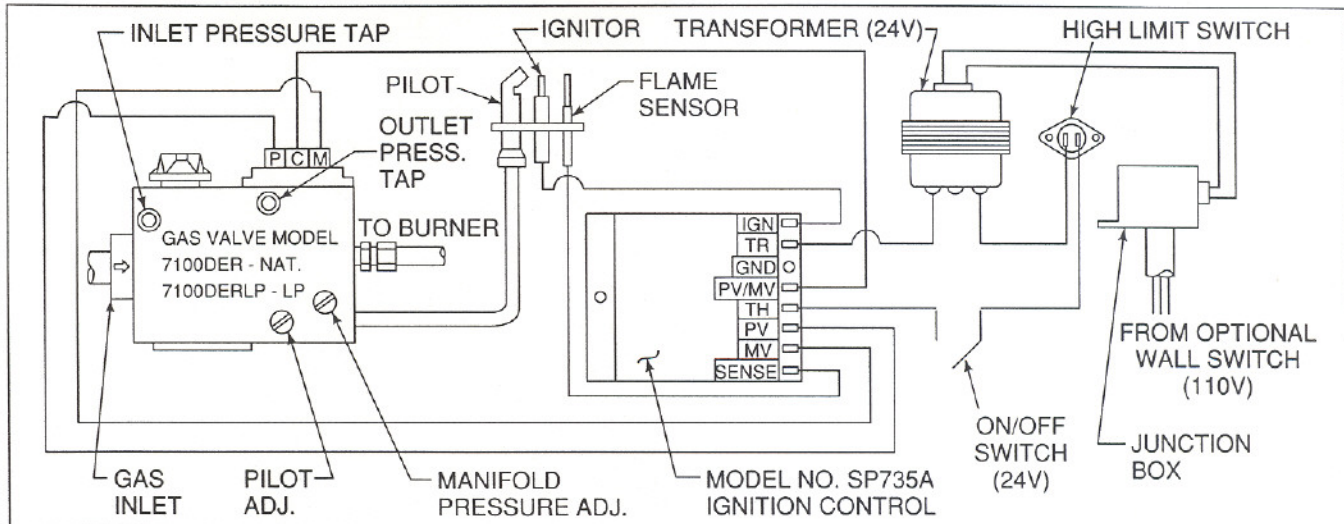


Figure 5

## MAINTENANCE INSTRUCTIONS

Keep the burner and control compartment clean by brushing at least once a year. Always turn off the gas before cleaning.

Periodically visually check the flame of the pilot and burner, making sure the flames are steady; not lifting or floating. The flame color should be blue with yellow tips. The top 3/8" of the pilot sensor should be covered with flame. See Figures 6 and 7.

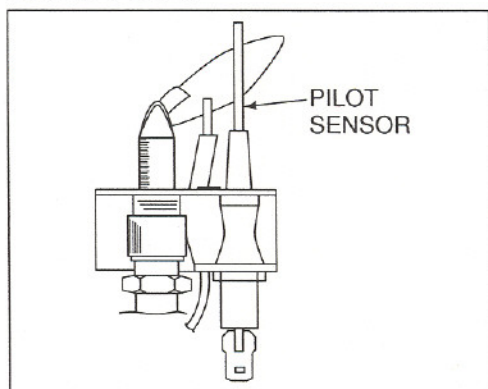


Figure 6

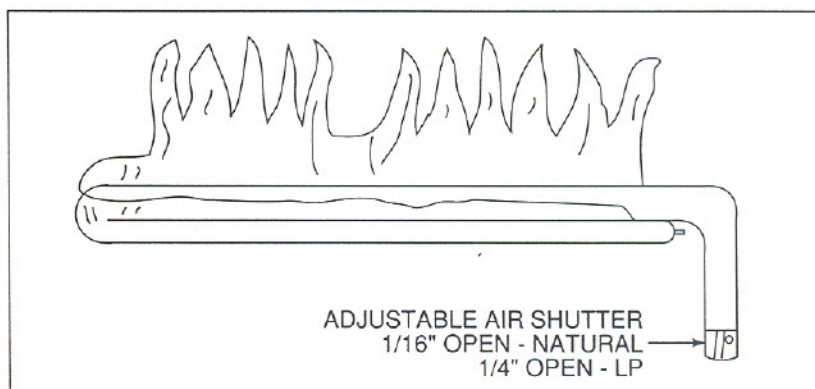


Figure 7

The appliance and venting system should be inspected before use, or at least annually, by a qualified field service person, to ensure that the flow of combustion and ventilation air is not obstructed.

Keep the area near the appliance clear and free from combustible materials, gasoline and other flammable vapors and liquids.

**NOTE:** When first operated, the unit will release an odor for about an hour. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing.

### WARNING

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION. YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

### WARNING

ANY SAFETY SCREEN OR GUARD REMOVED FOR SERVICING AN APPLIANCE MUST BE REPLACED PRIOR TO OPERATING THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

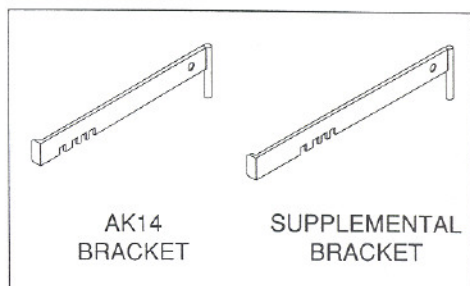


**NOTE: If optional glass doors are used, each time the appliance is lit it may cause condensation and fog the glass. This condition will disappear in a few minutes.**

**Log replacement.** Logs can be lifted out of position. If for any reason one should need replacement, you must use the proper replacement log. The position of these logs must be as shown in the diagram under Replacement Parts. The top log must be in the position as shown.

**NOTE: Improper positioning of logs may create carbon build-up and will alter the unit's performance.**

If an Outside Air Kit (AK14) is to be purchased, substitute the AK14 bracket with the supplemental bracket provided in the Installation bag, and discard the AK14 bracket. See Figure 8.



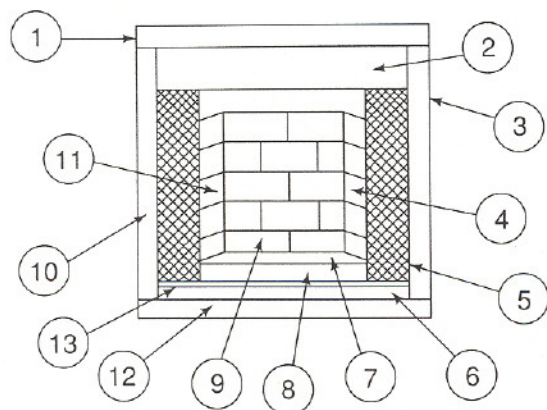
**Figure 8**

## TROUBLE SHOOTING GUIDE

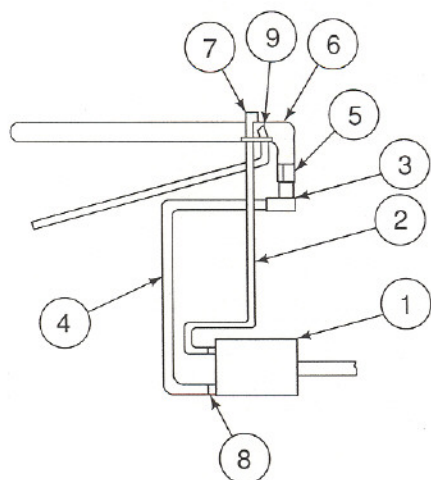
| No Spark - No Pilot Gas | Spark - But No Pilot Gas | Pilot Gas - But No Spark | Pilot Lit - But Main Burner Won't Come On | Pilot Cycles Off and On by itself. | Main Burner Shuts Down before Desired | TROUBLE SHOOTING GUIDE                         |   |
|-------------------------|--------------------------|--------------------------|---|------------------------------------|---------------------------------------|--|---|
|                         |                          |                          |   |                                    |                                       | POSSIBLE CAUSES                                | POSSIBLE CURE   |
| ●                       |                          |                          |   |                                    |                                       | No Main Power                                  | Restore Power   |
| ●                       |                          |                          |   |                                    |                                       | Faulty Transformer                             | Test/Replace  |
| ●                       |                          |                          |   |                                    |                                       | Faulty On/Off                                  | Test/Replace  |
| ●                       |                          |                          |   |                                    |                                       | Faulty Limit Switch                            | Test/Replace  |
| ●                       | ●                        | ●                        | ●   |                                    |                                       | Faulty Ignition Control                        | Test/Replace  |
|                         | ●                        |                          |   |                                    |                                       | No Gas supplied to Pilot Valve                 | Check for Availability of Gas   |
|                         | ●                        |                          |   |                                    |                                       | Manual Valves in "OFF" Positions               | Turn Manual Valve and Gas Cock to full "ON". Check Pilot Key Adjustment |
|                         | ●                        |                          |   | ●                                  |                                       | Faulty Pilot Valve                             | Test Gas Valve  |
| ●                       | ●                        |                          | ●   | ●                                  |                                       | Faulty Wiring                                  | Test Wiring   |
|                         | ●                        |                          |   |                                    |                                       | Restricted Pilot Line or Clogged Pilot Orifice | Clean Pilot Tubing and Orifices   |
|                         |                          | ●                        |   |                                    |                                       | Broken or Shorted Electrode Assembly           | Test/Replace  |
|                         |                          |                          | ●   |                                    | ●                                     | Low Pilot Flame                                | Check Inlet Pressure, Pilot Orifice Position. Adjust w/ Pilot Key       |
|                         |                          |                          | ●   |                                    | ●                                     | Improper Alignment of Sensor in Pilot Flame    | Adjust Alignment-see Sketch page  |
|                         |                          |                          | ●   |                                    |                                       | Faulty Main Gas Operator in Gas Control        | Test Gas Valve<br>Repair/Replace  |
|                         |                          |                          | ●   |                                    |                                       | Faulty Flame Sensor                            | Test Sensor, Wiring<br>Repair/Replace                                   |
|                         |                          |                          |   |                                    | ●                                     | Pilot Flame being drawn away from sensor       | Check Inlet Pressure. Manual Valve must be full "ON"                    |
|                         |                          |                          |   |                                    | ●                                     | Improper Heat Anticipator Setting              | Adjust to specified setting or 0.4 AMPS                                 |
|                         |                          |                          |   |                                    | ●                                     | Faulty Limit Switch                            | Test/Replace  |

Replacement parts are available from your distributor/dealer, or through Heatilator Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.

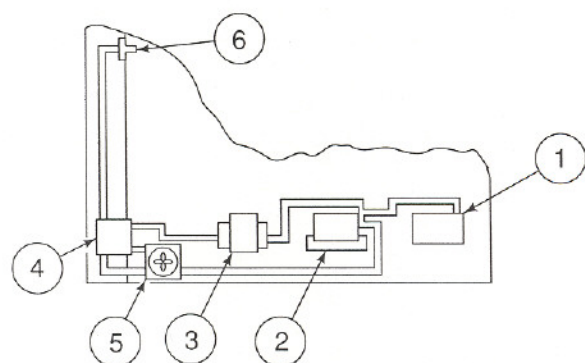
## REPLACEMENT PARTS



| ITEM | PART NO.       | DESCRIPTION                                       |
|------|----------------|---|
| 1    | 14027          | Top Front   |
| 2    | 14073<br>14010 | Upper Front - G340E/LE<br>Upper Front - GC340E/LE |
| 3    | 16305          | Right Column                                      |
| 4    | 13958          | Right Refractory                                  |
| 5    | 14014          | Screen  |
| 6    | 16726<br>16753 | Lower Face - G340E/LE<br>Lower Grille - GC340E/LE |
| 7    | 14065          | Vermiculite                                       |
| 8    | 13957          | Ash Lip   |
| 9    | 12329          | Back Refractory                                   |
| 10   | 16304          | Left Column                                       |
| 11   | 13959          | Left Refractory                                   |
| 12   | 16632          | Lower Face  |
| 13   | 16720          | Grille Bar  |

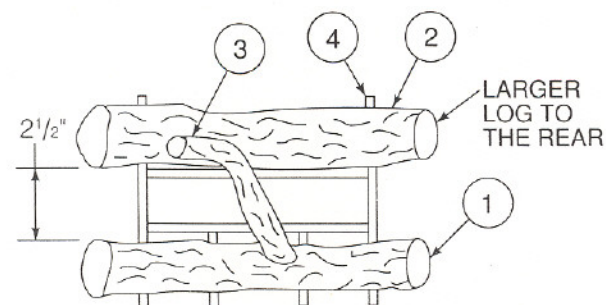


| ITEM | PART NO.       | DESCRIPTION                                 |
|------|----------------|---|
| 1    | 13885<br>14161 | Gas Valve - Natural<br>Gas Valve - LP       |
| 2    | 16812          | 1/4" Pilot Tubing                           |
| 3    | 13908          | 3/8" 90° Elbow                              |
| 4    | 16813          | 3/8" Burner Tubing                          |
| 5    | 14046<br>14047 | Orifice - Natural<br>Orifice - LP           |
| 6    | 13858          | Burner                                      |
| 7    | 13406<br>13444 | Pilot Ass'y. - Natural<br>Pilot Ass'y. - LP |
| 8    | 13425          | Male Connector                              |
| 9    | 13909          | Sensor                                      |



| ITEM | PART NO.       | DESCRIPTION                           |
|------|----------------|---------------------------------------|
| 1    | 13855<br>14161 | Gas Valve - Natural<br>Gas Valve - LP |
| 2    | 13886          | Electronic Ignitor                    |
| 3    | 13887          | Transformer                           |
| 4    | 16286          | Junction Box                          |
| 5    | FK10           | Fan Kit                               |
| 6    | 13594          | Limit Switch                          |
| 7*   | RC5            | Remote Burner Control                 |

\*Not Shown



| ITEM | PART NO. | DESCRIPTION |
|------|----------|-------------|
| 1    | 14068    | Front Log   |
| 2    | 14069    | Back Log    |
| 3    | 14070    | Top Log     |
| 4    | 14063    | Grate       |



## 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 OPERATING 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

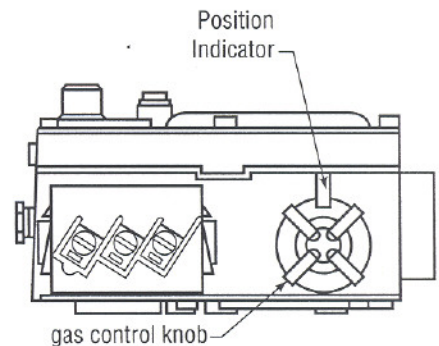
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.  
Follow the supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.


C. Use only your hand to push in or turn 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.

## LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn wall switch to the "OFF" position.
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".
7. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "A" in the safety information above on this label. If you don't smell gas, go to next step.
8. Turn gas control knob counterclockwise  to "ON" position.
9. Replace control access panel.
10. To turn on burner, turn on all electric power to the appliance.
11. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



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