



# heatilator®

*The first name in fireplaces*

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

## GC200 GC200L INSTALLATION & OPERATING INSTRUCTIONS

### I. LISTINGS AND CODE APPROVALS

These gas appliances with standing safety pilot have been tested in accordance with National Safety Standards, and have been CERTIFIED by the American Gas Association for installation and operation as described in these Installation & Operating Instructions.

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.

## GC200 & GC200L GAS APPLIANCES

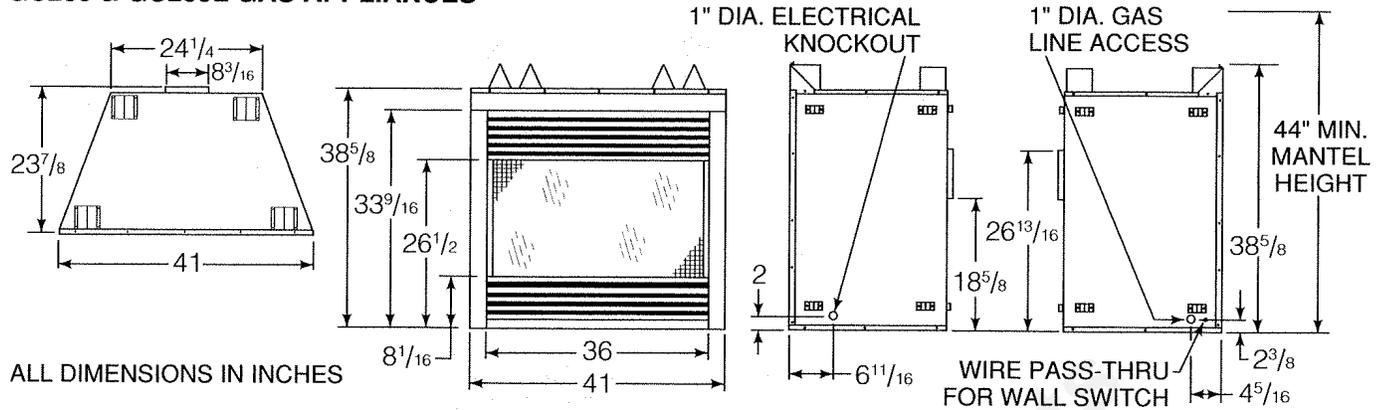


Figure 1

## 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 0", Sides 0", Ceiling 30".  
Minimum clearances to venting are: Top 3", Sides 1", Bottom 1".

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 4.5 inches water column, and the maximum inlet gas pressure is 11.0 inches water column, for the purpose of input adjustment. Input rate is 28,000 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 valve, near the outlet to the Main Burner immediately upstream of the gas supply connection to the appliance, accessible for a test gage connection.

For high elevation, refer to ANSI Z223.1-1988, Appendix F, for resizing orifice. A derated orifice is supplied with your unit.

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

**WARNING: THIS APPLIANCE MAY ONLY USE THE DIRECT VENT CHIMNEY SYSTEM AND MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVICING A SEPARATE SOLID FUEL BURNING APPLIANCE.**

### III. FIREPLACE LOCATIONS, SPACE AND CONSTRUCTION REQUIREMENTS

The GC200 or GC200L gas appliance 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 combustible sidewalls, as illustrated in Figure 2, must be maintained.

**NOTE: If optional Fan (FK4) or Hand Held Remote Control (RC4) are to be used, wiring must be done prior to finishing to avoid reconstruction.**

### IV. STEP-BY-STEP INSTALLATION

#### A. FOR STRAIGHT OUT VENTING

##### STEP 1A

The appliance will fit a framed opening of 41 1/2" wide x 38 5/8" tall. The cavity depth must be no less than 23 1/2".

##### STEP 2A

Install the gas line piping up to the left 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 3/8" NPT gas connection should be positioned 2 3/8" above the floor and 4 5/16" from the front of the unit. A separate shut-off gas valve (not supplied) should always be installed. Plan ahead for easy access.

##### STEP 3A

At the back of the cavity a 10" x 12" hole must be cut and framed in. If the wall is non-combustible, such as masonry block or concrete, a 9" diameter round is acceptable. See Figure 3 for hole location. Proceed to STEPS 1B through 5B for elevated installations.

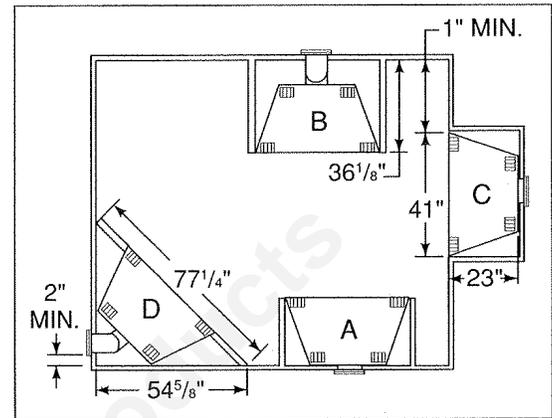


Figure 2

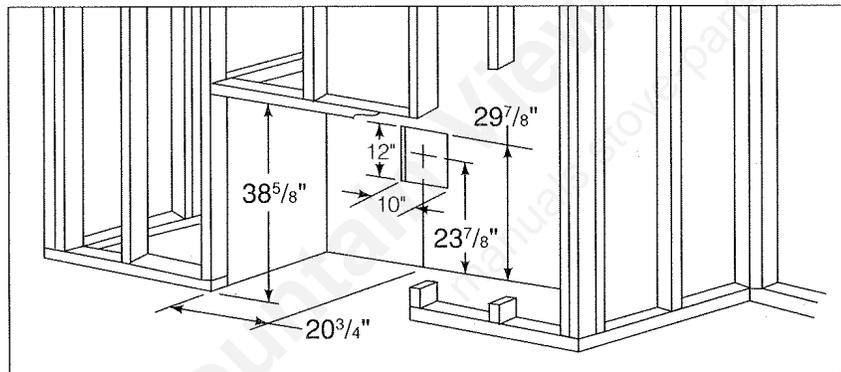


Figure 3

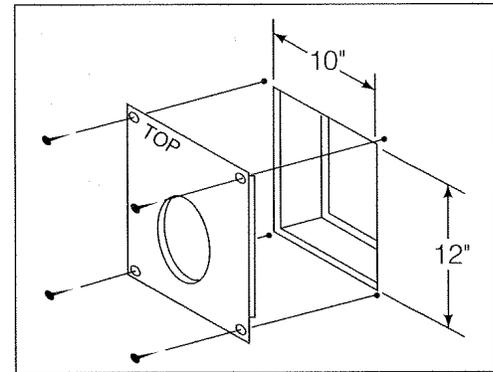


Figure 4

##### STEP 4A

Mount the Vent Kit to the back of the unit. This kit will allow installation for a wall thickness from 4 1/2" to 15 1/2". Extension Kit (VK1) is required for walls up to 20" thick.

##### STEP 5A

Install the 4" diameter pipe. Slide it all the way over the internal exhaust pipe.

Install the 8" diameter pipe. Slide it over the 8" intake pipe on the unit using (3) screws to secure.

**NOTE: Pipes must slide in as far as possible.**

Follow Table 1 for exact cutting length. Proceed to STEP 6.

TABLE 1

\*Extension Kit (VK) 1 required

WALL THICKNESS	"A" 8" PIPE	"A" 4" PIPE
4 1/2"	12 5/8"	8 1/4"
5"	13 3/16"	8 3/4"
6"	14 3/16"	9 3/4"
8"	16 3/16"	11 3/4"
10"	18 3/16"	13 3/4"
12"	20 3/16"	15 3/4"
14"	22 3/16"	17 3/4"
*16"	24 3/16"	19 3/4"
*18"	26 3/16"	21 3/4"

## B. ELEVATED CHIMNEY INSTALLATIONS

### □ STEP 1B

This installation can be done in two configurations, as shown in Figure 2, position B or D. These installations require the use of Vent Kit VK3. This Kit contains (2) 4" dia. 90° elbows, (2) 8" dia. 90° elbows, (1) 4" dia. 3' pipe and (1) 8" dia. 3' pipe.

### □ STEP 2B

The wall shield opening location and size is shown in Figure 5. The minimum framing dimensions are also shown in Figures 2B, 2D and 6.

### □ STEP 3B

Attach the lower set of elbows, using (3) screws per attachment. The elbow must be positioned in a vertical position only. Next, determine the length of the vertical pipe section using Figure 6 and Table 2, and attach to the lower elbow using (3) screws. Secure the top two elbows to the vertical pipe section, either at a 45° angle or straight out, depending on the installation.

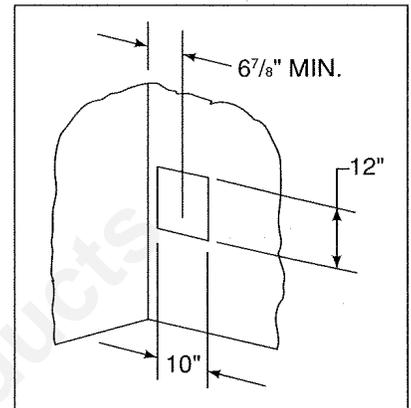


Figure 5

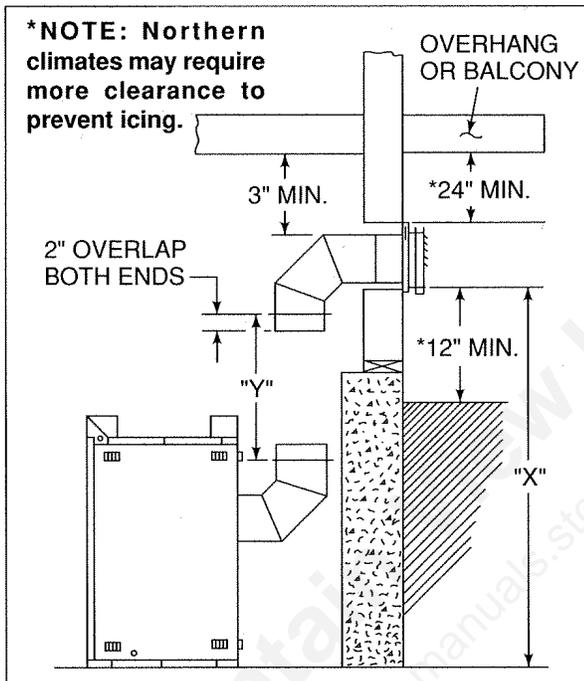


Figure 6

TABLE 2

"X"—WALL SHIELD OPENING LOCATION	"Y"—CHIMNEY LOCATION LENGTH	
	8" PIPE	4" PIPE
35 1/2"	4"	4"
39 1/2"	8"	8"
43 1/2"	12"	12"
47 1/2"	16"	16"
51 1/2"	20"	20"
55 1/2"	24"	24"
59 1/2"	28"	28"
63 1/2"	32"	32"
67 1/2"	36"	36"

### □ STEP 4B

Mount the Vent Kit to the elbows. This will allow installation for a wall thickness from 4 1/2" to 13 1/2".

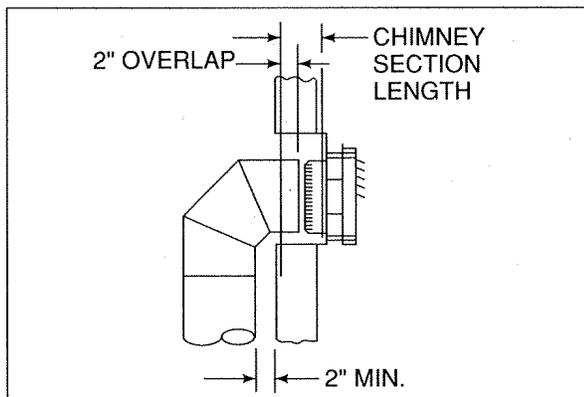


Figure 7

TABLE 3

"A" WALL THICKNESS	CHIMNEY SECTION LENGTH	
	8" PIPE	4" PIPE
4 1/2"	4 1/2"	5 3/4"
5"	5"	6 1/4"
6"	6"	7 1/4"
8"	8"	9 1/4"
10"	10"	11 1/4"
12"	12"	13 1/4"
14"	14"	15 1/4"
16"	16"	17 1/4"
18"	18"	19 1/4"

Add the last two sections of pipe to go through the wall. The length can be obtained from Figure 7 and Table 3. Proceed to STEP 6.

**STEP 6**

Position the interior wall shield into position and secure with (4) fasteners, (1) in each corner. See Figure 3.

**STEP 7**

Slide the unit into position. The pipe sections should slide through the interior wall shield and extend past the outside wall 3/4" for the 8" pipe and 2" for the 4" pipe.

**STEP 8**

Secure the unit to the floor using a minimum of (2) fasteners.

**STEP 9**

Slide the outer shield into position as shown in Figure 8. Continue until the outer shield is even with the 8" diameter pipe.

**STEP 10**

To install the cap, slide the cap pipe sections into the vent pipe. Secure the cap flush to the wall using (8) fasteners provided. Seal the cap to the wall with a mastic such as silicone caulking. Vinyl siding will require the use of a vinyl shield. If the vent termination is located within 7 feet of the ground, or less than 7 feet above a suspended deck, a CS200 Cap Shield must be installed to prevent contact with the hot surfaces of the vent termination.

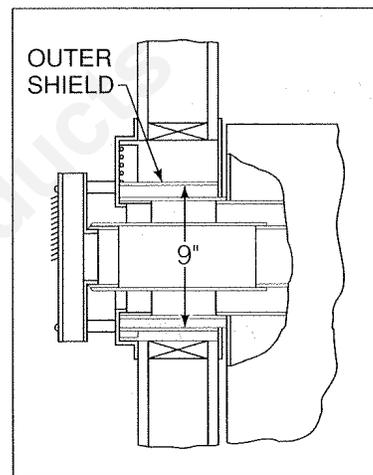


Figure 8

**STEP 11**

Connect the gas line to the appliance valve inlet, using 3/8" pipe. Check for gas leaks with a soap and water solution. To ease in installation, the use of a listed flexible connector and manual shut-off valve 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.**

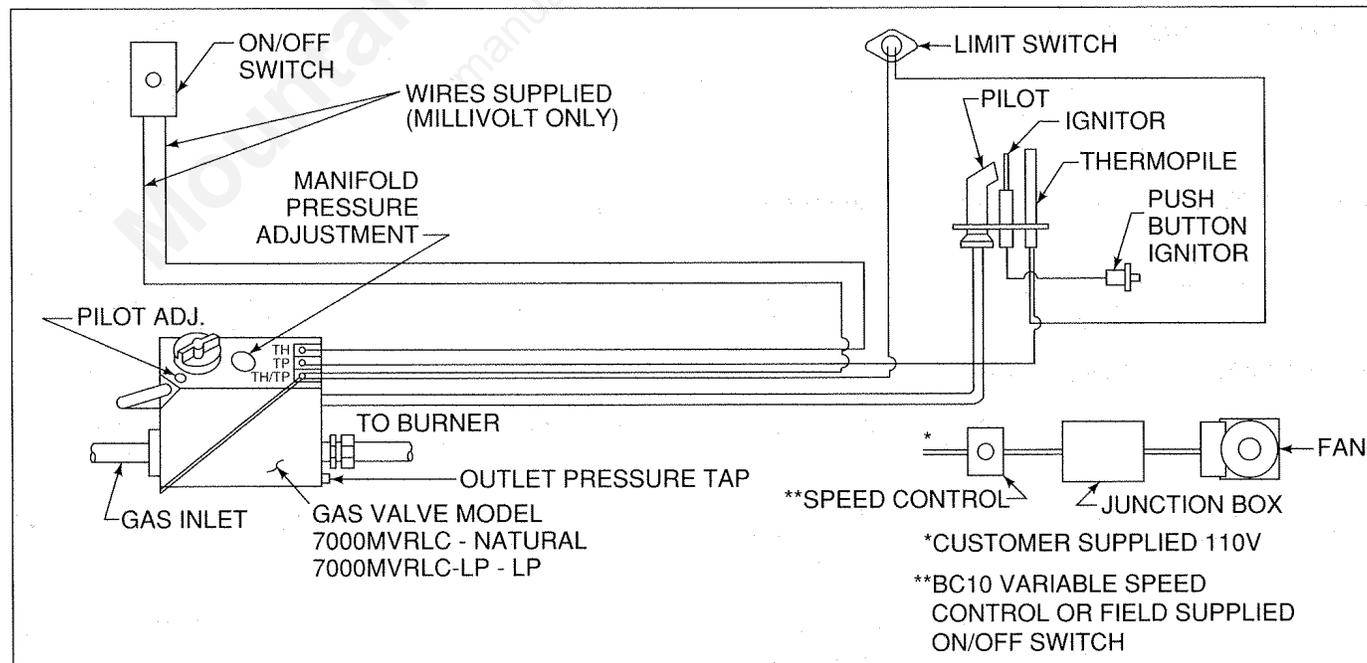


Figure 9

## □ STEP 12

Remote wall switch hook-up should be installed in a convenient location. Follow Figure 9 for wiring diagram.

## □ STEP 13

If an optional FK4 Fan Kit or RC4 Remote Control Kit 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 70-1987.

## □ STEP 14

**Before Operation.** The hood must be installed by removing the upper grille and securing it with the fasteners supplied with the unit.

## □ STEP 15

**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.** A combustible mantel may be installed at a minimum of 44 inches above the base of the unit. It is recommended that a non-combustible heart extension, a minimum of 12" x 48", be used.

## V. OPERATING INSTRUCTIONS

This gas appliance uses a low voltage (millivolt) control system, consisting of a Pilot Burner, Thermopile, Gas Control Valve, Limit Switch and an On/Off Switch.

### LIGHTING PROCEDURE (See Figure 10).

1. Turn the wall switch 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 "Pilot" position.
5. Depress and hold the gas knob while pressing the ignitor button. Allow pilot to burn for 1 1/2 minutes before releasing gas knob.
6. Turn gas knob to the "On" position.
7. Turn wall switch to the "ON" position. This will turn on the main burner.

### SHUTDOWN PROCEDURE

1. To shut off the main burner, move the wall switch to the "Off" position.
2. Turn the gas knob to "Pilot" to turn off the gas to the main burner.
3. Depress and turn the gas knob to "Off" to shut off the pilot.

### PILOT BURNER ADJUSTMENT (Preset at factory)

1. Remove the pilot adjustment cap.
2. Adjust the pilot key to provide properly sized flame. See Figure 11.
3. Replace the pilot adjustment cap.

### MAINTENANCE INSTRUCTIONS

Keep the burner and control compartment clean by brushing and vacuuming at least once a year. Always turn off the pilot 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 thermopile should be covered with flame. See Figures 11 and 12.

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

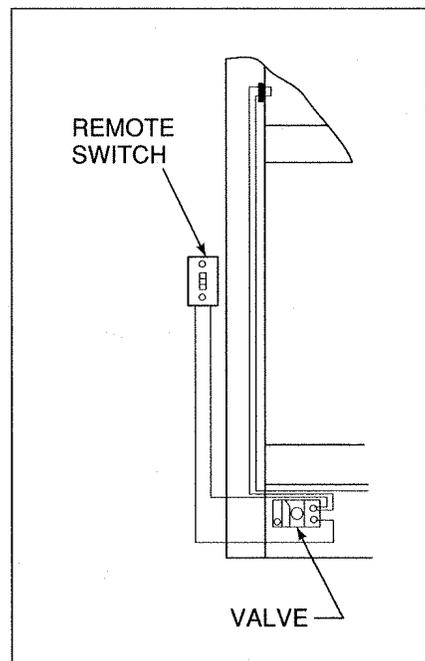


Figure 10

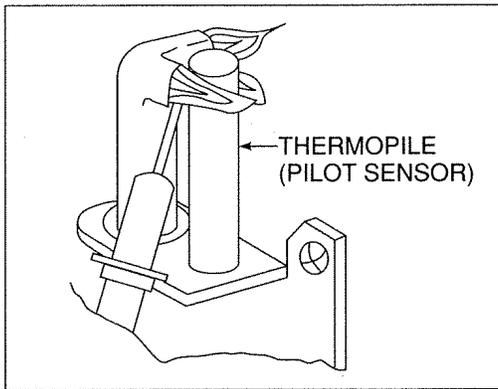


Figure 11

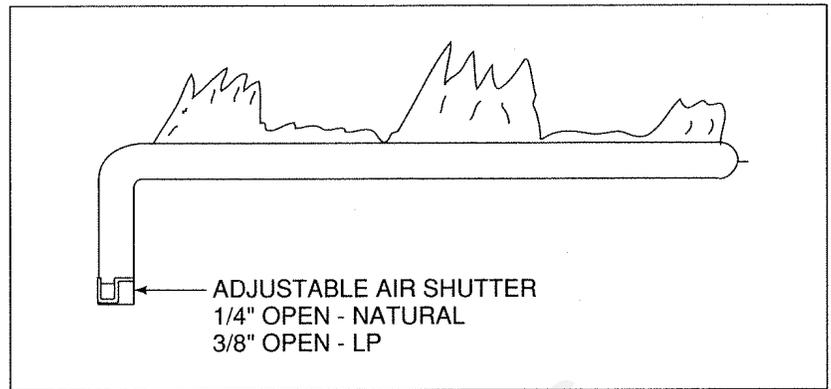


Figure 12

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 a small amount of smoke and odor for about an hour. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. The glass panel will require removal and cleaning after the unit has cooled down. **DO NOT ATTEMPT TO REMOVE THE GLASS WHILE IT IS HOT.**

**NOTE:** This appliance has been AGA Certified as a decorative gas appliance and is not designed to be operated as a primary heat source. During extreme or gusting wind conditions, intermittent operation of the burner may occur. Follow all relighting instructions before attempting to relight the unit.

#### 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.**

#### CAUTION

**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:** Each time the appliance is lit, it may cause condensation and fog the glass. This condensation and fog will disappear in a few minutes.

To remove glass for cleaning of burner area - **(DO NOT REMOVE WHEN HOT):**

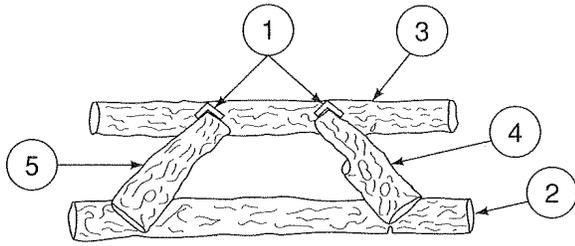
1. Remove top and lower louver sets by lifting about 1/4" and sliding them off the keyways.
2. Remove (4) screws on the top and (2) screws on the bottom of the firescreen. Lift the screen out of position.
3. Remove the (5) screws at the top of the glass; hold the glass to ensure it doesn't fall.
4. Remove the top bracket, tilt the glass out and lift it out of the bottom channel.

To replace glass, reverse the process.

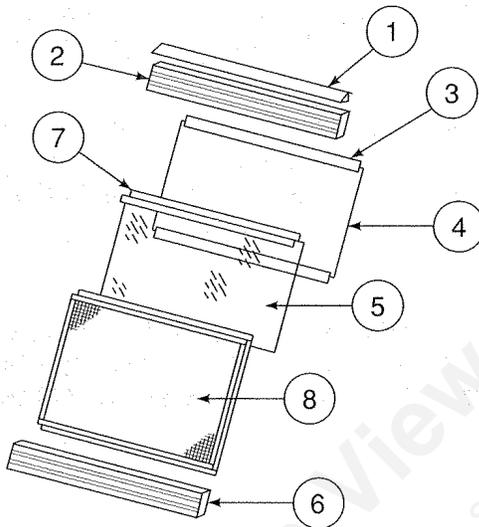
Never operate the appliance without glass properly secured in place, or the firescreen in place.

**Log Replacement.** After removing glass, 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 two logs must be locked into position by the rods and support brackets built into the unit. **NOTE: Improper positioning of logs may create carbon build-up and will alter the unit's performance.**

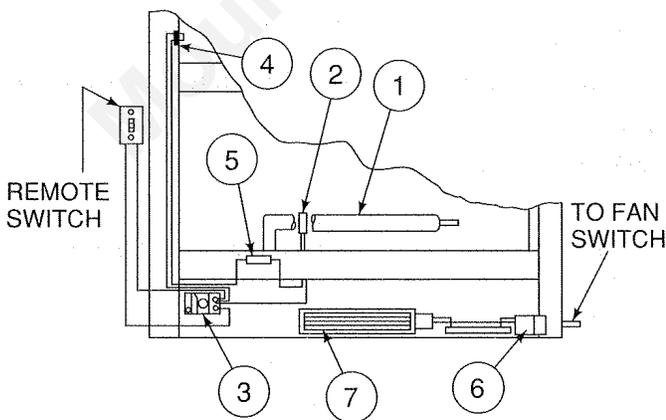
## REPLACEMENT PARTS



ITEM	PART NO.	DESCRIPTION
1	13392	Log Bracket
2	13421	Front Log
3	13422	Back Log
4	13423	Right Log
5	13424	Left Log

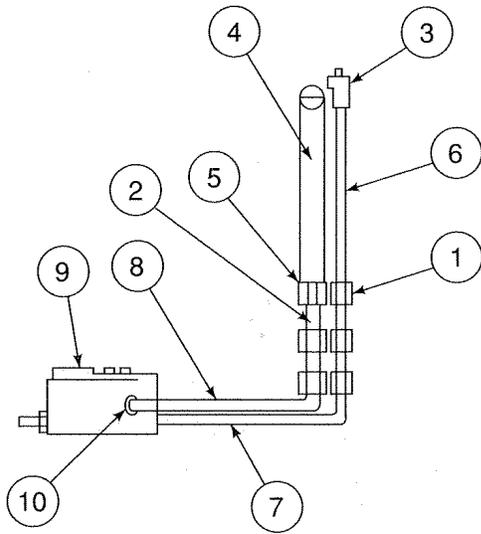


ITEM	PART NO.	DESCRIPTION
1	13441	Hood
2	13434	Upper Grille Assembly
3	13378	Seal Bracket
4	13377	Glass Seal
5	13379	Glass Panel
6	13438	Lower Grille Assembly
7	13376	Glass Frame
8	16472	Screen Assembly



ITEM	PART NO.	DESCRIPTION
1	13408	Burner
2	13411	Thermopile
3	12191 14160	Valve - Natural Valve - LP
4	13420	Limit Switch
5	13426	Micro Switch
6	JK4	Junction Box Assembly*
7	FK4	Fan Kit*

\*Optional Components



ITEM	PART NO.	DESCRIPTION
1	13404	Bulkhead Union 1/4"
2	13405	Bulkhead Union 3/8"
3	13406 13444	Orifice W/Bracket - GC200 Orifice W/Bracket - GC200L
4	13407	Burner Assembly
5	13844 13845	Orifice - GC200 Orifice - GC200L
6	13412	Pilot Tube
7	13413	Pilot Tube
8	13414	Burner Tube
9	12191 14160	Valve - Natural Valve - LP
10	13425	Male Connector

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

## TROUBLE SHOOTING

<u>Problem</u>	<u>Cause</u>	<u>Corrective Action</u>
1. Spark ignitor will not light the pilot after repeat pressing of Red Button.	A. Defective ignitor.  B. Misaligned electrode at pilot.	Check for loose connections on electrode and ignitor.  Check for spark. If electrode connection is correct and no spark, replace ignitor.  Spark should be extending approx. 1/8" to thermopile. Adjust gap to give proper spark. Remove hands from electrode before pressing Red Button.
2. Pilot light will not stay lit.	A. Defective pilot thermopile.	Check pilot flame. See Figure 6. Adjust flame if necessary.  Be sure thermopile is secured tight into pilot bracket.  Be sure wiring connections are tight throughout system, including high limit switch.  Check thermopile voltage with millivolt meter. Depress valve knob and light pilot. Meter should read min. of 325 millivolt. If not, replace thermopile.
3. With pilot lit, valve and wall switch in "ON" position, no gas to burner.	A. Wall switch defective.  B. Plugged burner orifice.	Check wall switch for proper connections. Connect wires across terminal at wall switch. If burner comes on, replace wall switch. If burner does not come on, connect to wall switch junctions at valve. If burner comes on, replace wires.  Check burner orifice; remove blockage.
4. Operates approximately 10 minutes and shuts down.	A. Flue blockage.  B. Pilot appears to have extinguished. Burner lifting.  C. Extreme winds or gusting winds.	Check flue passages for foreign objects. Depress and remove.  Check flue section and cap for proper connections.  Check flue passages and assembly.  Turn off gas. Wait 5 minutes. Follow relighting instructions. If conditions persist, allow for change in wind conditions and relight according to instructions.

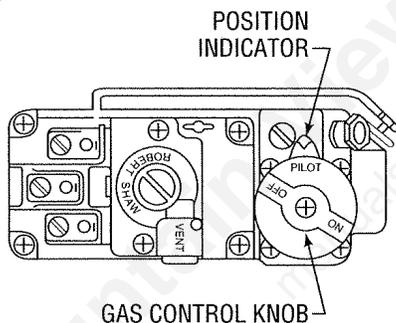
## FOR YOUR SAFETY READ BEFORE LIGHTING

**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 has a pilot which must be lighted by hand. 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 supplier's instructions.
- 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. Remove control access panel.
5. Turn gas control knob clockwise  to "OFF".



6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to next step.

7. Find pilot-follow metal tube from gas control. The pilot is behind the burner tube.



8. Turn knob on control counterclockwise  to "PILOT".
9. Push in the knob all the way and hold in. Immediately light the pilot by pressing the red ignitor button. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release button and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
  - If button does not pop up when released, stop and immediately call your service technician or gas supplier.
  - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise  to "ON". Knob can be turned to "ON" only if the control knob is popped out.
11. Replace control access panel.
12. Turn on all electric power to the appliance.

## TO TURN OFF GAS TO APPLIANCE

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. Turn gas control clockwise  to "OFF". Do not force.
5. Replace control access panel.

# *Attention*

## **APPLIANCE INSTALLER**

***Please return these  
Operating & Installation  
Instructions to the  
Appliance  
for Consumer Use***

**heatilator<sup>®</sup>**  
*The first name in fireplaces*

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