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The first name in fireplaces

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

GC100E GC100LE INSTALLATION & OPERATING INSTRUCTIONS

I. LISTINGS AND CODE APPROVALS

These gas appliances with electronic direct spark ignition 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.

GC100E & GC100LE GAS APPLIANCES

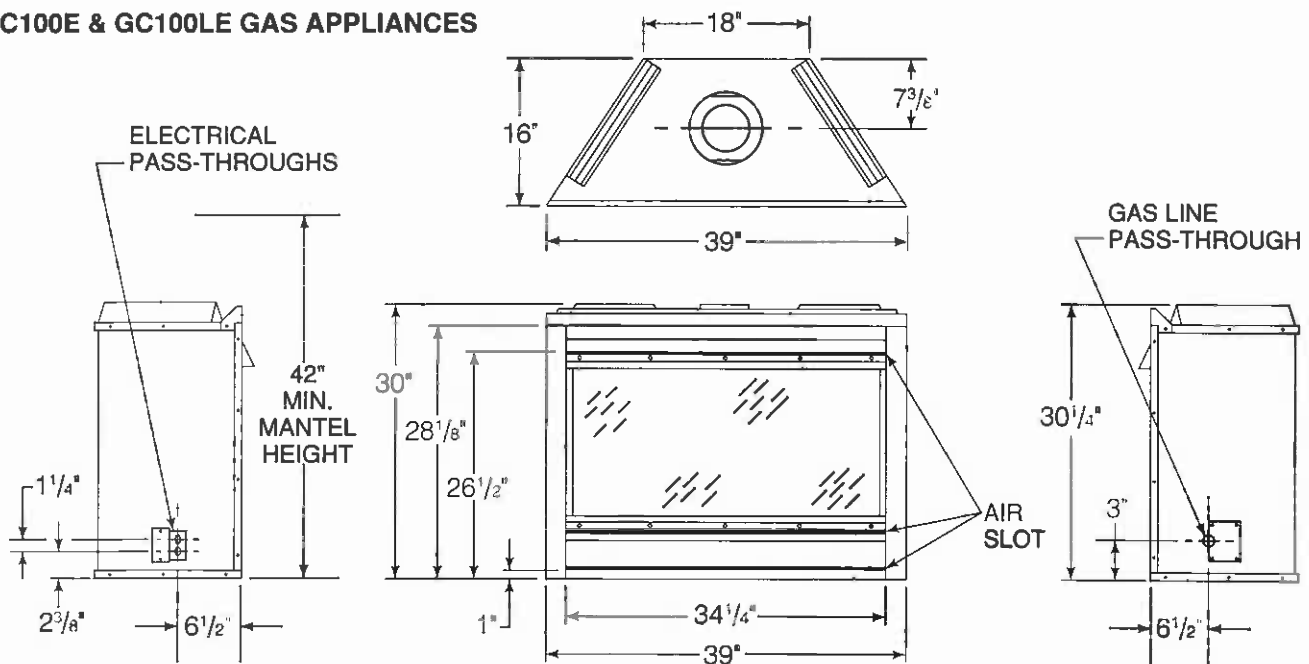


Figure 1

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 or, in Canada, current CAN/CGA-B149.1 and B149.2 installation codes.

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 clearances to venting are: Top 3", Sides 1", Bottom 1".

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 4.5 inches water column, and the maximum inlet gas pressure is 11.0 inches water column, for the purpose of input adjustment. Input rate is 22,500 BTU/Hr. For LP Gas, the inlet gas supply pressure must be at least 11.0 inches water column minimum to 14.0 water column 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. In Canada, certified to 0-4500 feet above sea level.

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 SUPPLIED WITH THE UNIT AND MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVING A SEPARATE SOLID FUEL OR GAS FUEL BURNING APPLIANCE.

III. FIREPLACE LOCATIONS, SPACE AND CONSTRUCTION REQUIREMENTS

The GC100E or GC100LE 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. The Natural Gas unit is also certified for installation in a bed room or bed/sitting room.

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

NOTE: If optional Fan (FK4) or Hand Held Remote Control (RC5) are to be used, wiring must be done prior to finishing to avoid reconstruction.

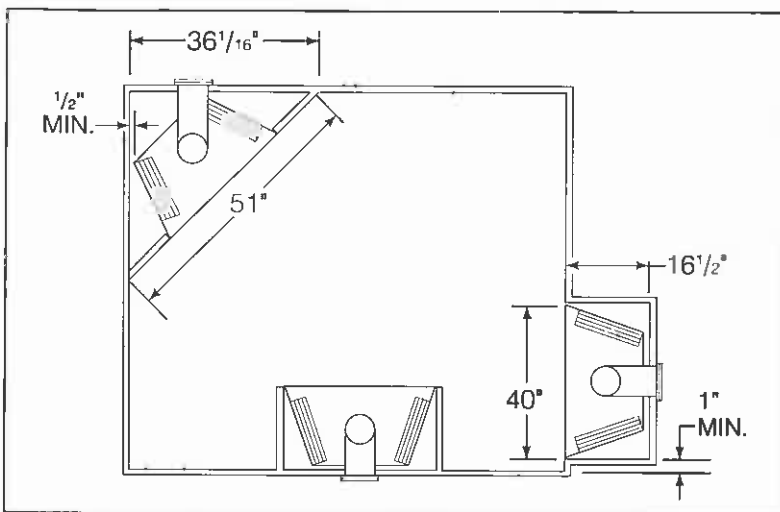


Figure 2

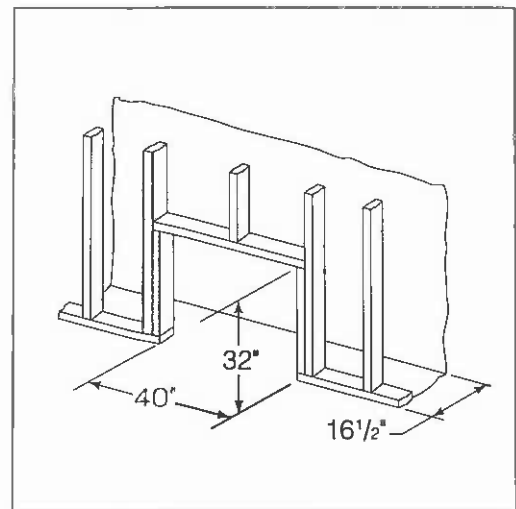


Figure 3

IV. STEP-BY-STEP INSTALLATION

STEP 1

The appliance will fit a framed opening of 40" wide x 32" tall. The cavity depth must be no less than 16 1/2". See Figure 3.

STEP 2

Install the gas line piping up to the right side of the appliance. A separate shut-off gas valve (supplied) should always be used. See Figure 4.

STEP 3

Above the back of the cavity a 10" x 12" hole must be cut and framed in. Follow Table 1 to find and locate the hole in the correct position. If the wall is non-combustible, such as masonry block or concrete, a 9" diameter round is acceptable. Minimum combustible clearance to the vent on a horizontal run is 3" top, 1" bottom and sides; on a vertical rise, clearances are 1" to sides.

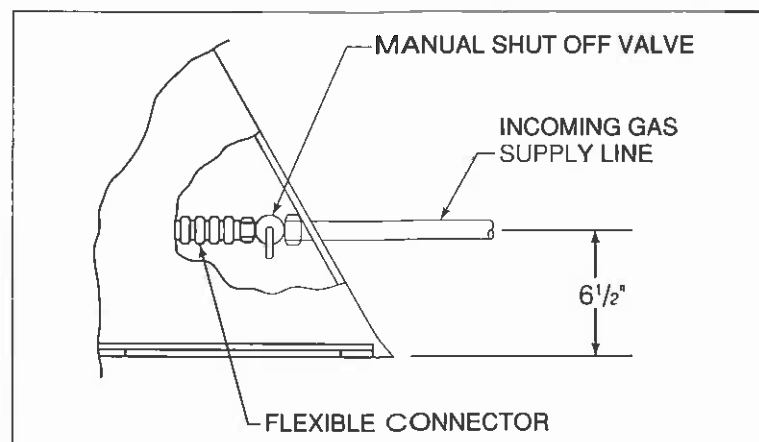


Figure 4

NOTE: The horizontal run of vent must be level or have a 1/4" rise in 2 ft. of run towards the termination. Never allow the vent to run down. This will cause high temperatures and may present the possibility of a fire hazard.

The 10" x 12" hole must be located so the pipe will run level and also perpendicular to the wall. The height of the hole must be situated to meet all local and national codes and not be easily blocked or obstructed. The termination cannot be within 9" of an opening (window/door) into the living area and must be 12" or more above ground level. This venting system is not designed to pass through a floor. After selecting the termination height, follow Table 1 to determine the proper length to cut the vent section. In Canada, refer to current CAN/CGA-B149.1 and B149.2 for venting codes.

STEP 4

Slide the unit into position and secure in place.

STEP 5

Mount the elbow or vertical pipe section (depending upon your installation) to the top of the appliance. Use only pipe supplied with the appliance and the appropriate number of VK4 sections. **MAINTAIN MINIMUM CLEARANCES OR GREATER.** Do not pack air spaces with insulation or other material.

STEP 6

Each pipe section must be secured in position with a minimum of 1 1/4" overlap and (3) screws (supplied) per joint. VK4 is the only pipe section to be used with this appliance.

STEP 7

The last section of vent will require cutting, depending on the wall thickness and appliance location. The end of the vent must penetrate the exterior wall. Cut the inner and outer sections so the pipe extends past the wall by 1" on the outer pipe and 2 1/2" on the inner pipe. See Figure 7. Horizontal runs will require the use of (1) Vent Support (VS4) for every 3' of vent.

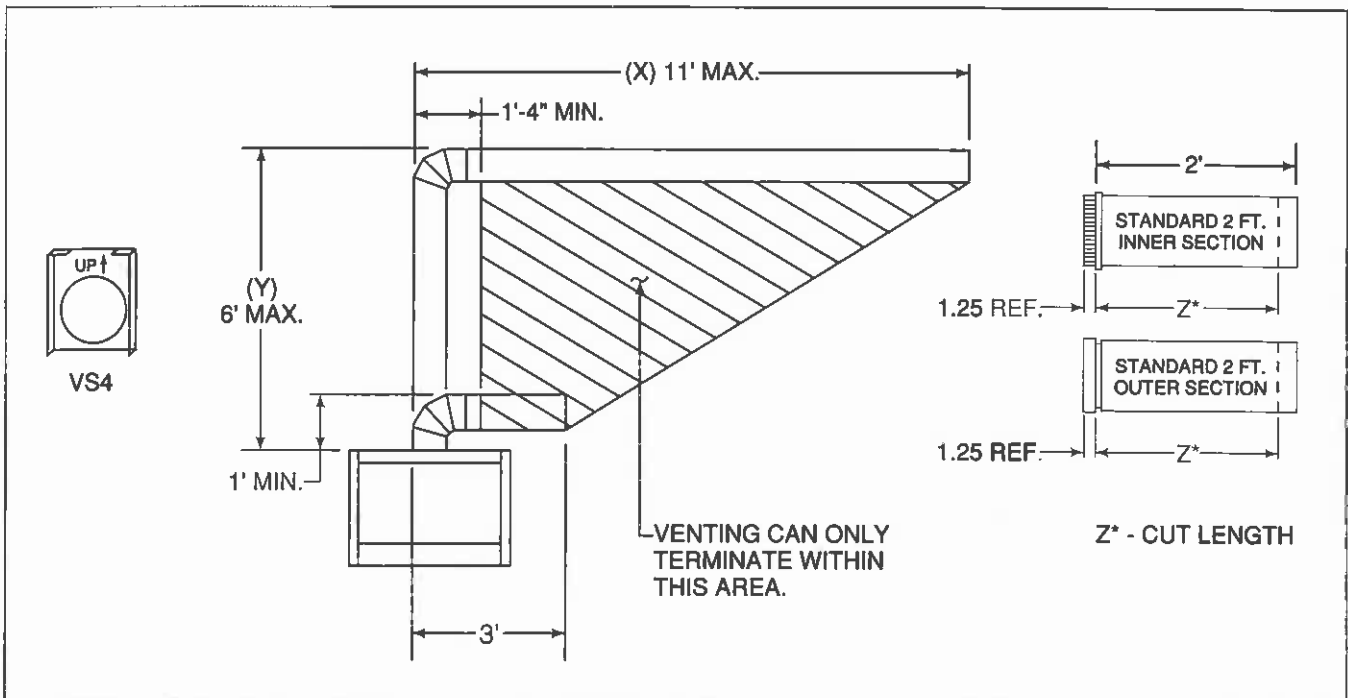


Figure 5

Table 1

(Y) VERTICAL RISE FROM APPLIANCE TOP	NO. OF OPTIONAL VK4's REQUIRED	LENGTH TO CUT TOP SECTION
1'	0	N/A
2'	0	12"
3'	0	No Cutting
4'	1	12"
5'	1	No Cutting
6'	2	12"

NOTE: Every 1' of vertical rise will allow for 2' of horizontal run.

Table 2

(X) HORIZONTAL RUN TO TERMINATION (1" BEYOND EXTERIOR WALL)	NO. OF VK4's REQUIRED	(Z) LENGTH TO CUT LAST SECTION	NO. OF VS4's REQUIRED
1' 4"	1	4"	0
3'	1	No Cutting	0
5'	2	No Cutting	1
7'	3	No Cutting	2
9'	4	No Cutting	2
10'	5	12"	3
11'	5	No Cutting	3

NOTE: Every 3' of run will require the use of (1) Vent Support (VS4).

STEP 8

Place the interior wall shield into position and secure with (4) 1" fasteners, (1) in each corner. Bend the tab and use a 1/2" screw to secure the pipe to the wall shield. See Figure 6. Wall thickness must be 4" minimum to 23 1/2" maximum.

STEP 9

To install the cap, slide the cap pipe sections into the vent pipe. Secure the cap flush to the wall using (8) 1" fasteners provided. Seal the cap to the wall with a mastic such as silicone caulking. Fasten the inner vent with (3) 1/2" screws to secure the vent. (An optional CS200 Cap Shield is required if the cap is located in an area of easy accessibility.) See Figure 7. Vent termination must not be released into wall or siding.

Figure 8 shows vent cap location minimum dimensions, or follow ANSI Z223.1-latest edition or, in Canada, CAN/CGA-B149.1 and B149.2.

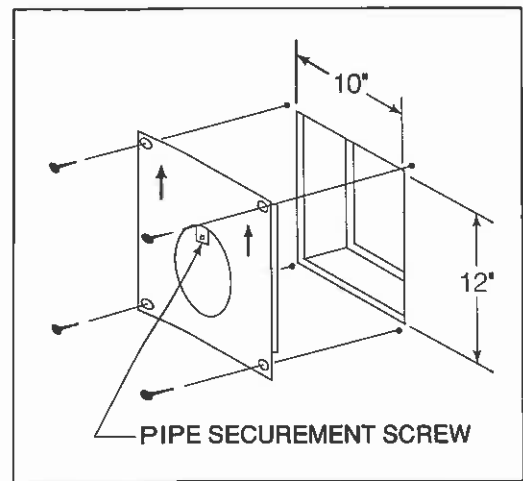


Figure 6
Inner Wall Shield

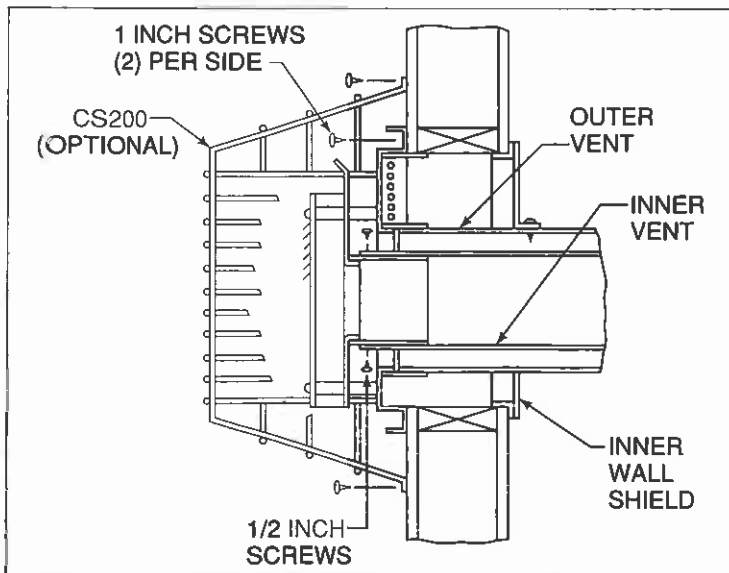


Figure 7
Termination Cap

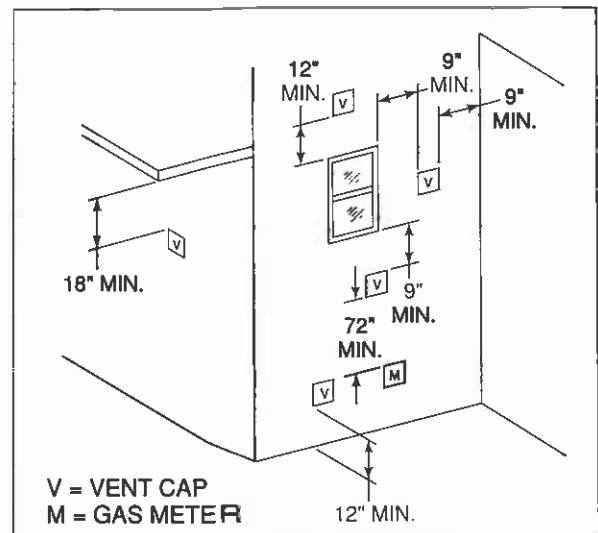


Figure 8
Vent Cap Locations

□ STEP 10

Connect the gas line to the appliance manual valve inlet, using 1/2" pipe. To ease in installation, a listed flexible connector and manual shut-off valve are supplied and connected. Gas connections can be made from outside of the appliance by removing the access panel on the right side. All connections must be checked for leaks with a soap and water solution.

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 11

Remote wall switch hook-up should be installed in a convenient location. Follow Figure 8 for wiring diagram. This appliance requires a 110V power supply. If an optional FK4 Fan Kit or RC5 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 or, in Canada, the current CSA C22.1 Canadian Electrical Code. Wiring diagrams are provided with these accessories and in Figure 9. This appliance is not intended for use with a thermostat.

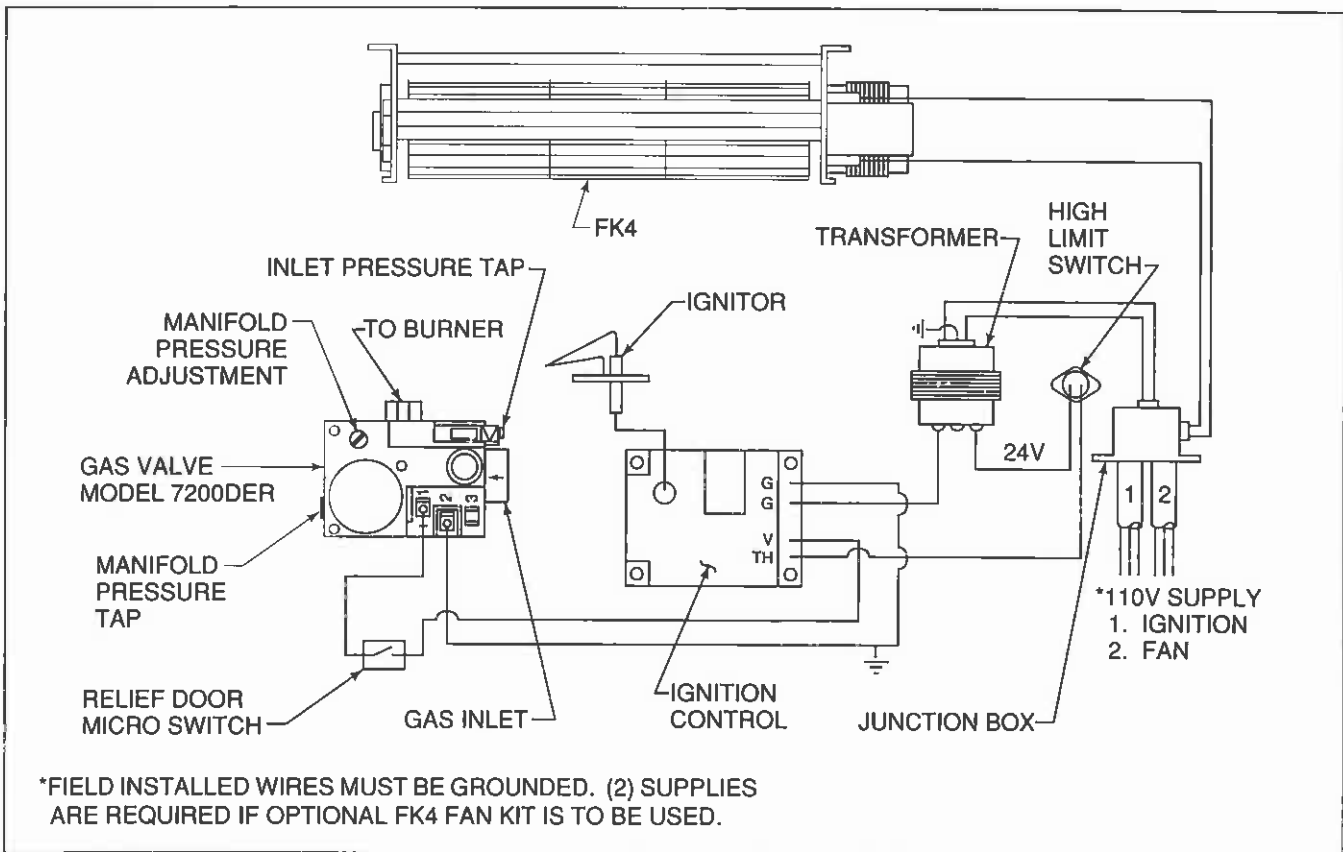


Figure 9

□ STEP 12

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.** See Figure 1 for air slot location. A combustible mantel may be installed at a minimum of 42 inches above the base of the unit.

V. OPERATING INSTRUCTIONS

Before operating this appliance, proceed through the following check list:

1. Verify log placement. The logs are shipped in a separate package and must be positioned as shown on page 9.
2. Check to see that all wiring is correct and enclosed to prevent possible shock.
3. Check to ensure there are no gas leaks using a soap and water solution.
4. Make sure front glass is sealed and in its proper position. Never operate the appliance with the front glass removed or not sealed.
5. Verify all venting and cap is unobstructed. Exhaust gases are extremely hot. Make sure there are no possible future obstructions from trees/bushes, snow drifts, etc. A Cap Shield (CS200) can be purchased to help prevent possible contact.
6. Read and understand these Instructions before operating this appliance.

LIGHTING PROCEDURE (See Figure 9).

1. Turn the remote 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. Push the gas valve knob to the "On" position.
5. Turn wall switch to the "On" position. This will turn on the ignitor and light the main burner.

SHUTDOWN PROCEDURE

1. To shut off the main burner, move the wall switch to the "Off" position.
2. Depress and push the gas knob to "Off" to shut off the system.

MAINTENANCE INSTRUCTIONS

CAUTION

IN THE EVENT THE RELIEF DOOR MICRO SWITCH HAS BEEN ACTIVATED, CONTACT YOUR GAS APPLIANCE DEALER IMMEDIATELY, OR CONTACT HEATILATOR CUSTOMER SERVICE. DO NOT ATTEMPT TO OVERRIDE OR REPAIR THE SAFETY SYSTEM.

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

Visually check the flame of the burner periodically, making sure the flames are steady; not lifting or floating. The flame color should be blue with yellow tips. The ignitor tips should be covered with flame. See Figures 10 and 11.

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.

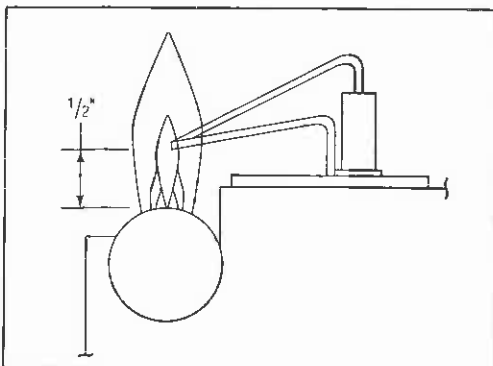


Figure 10

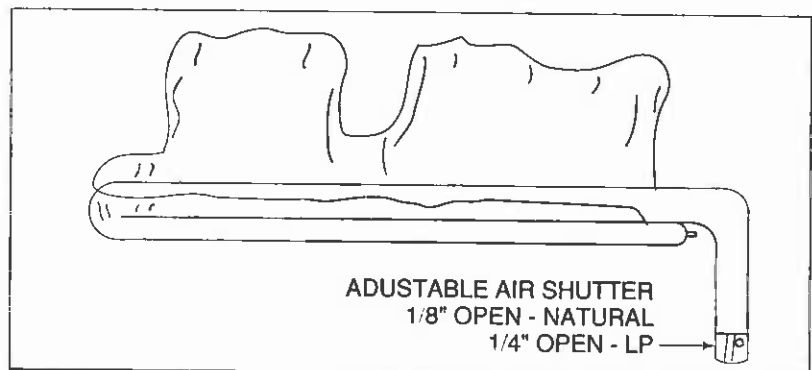


Figure 11

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. 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.

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 the optional top trim, revealing the glass mounting strip, by snapping it off at one end.
2. Hold the glass to ensure it doesn't fall and remove the (5) bolts in the glass support channel at the top of the glass.
3. Remove the top channel, tilt the glass out and lift it out of the bottom channel.

NOTE: NEVER use abrasive materials to clean glass. NEVER clean glass when HOT.

To replace glass, reverse the process.

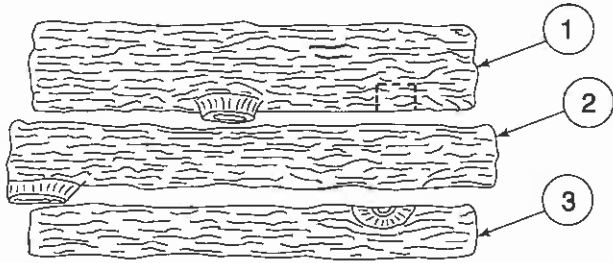
CAUTION: Handle glass assembly with care to avoid striking or scratching of glass on hard objects.

Never operate the appliance without glass properly secured in place or if glass is broken.

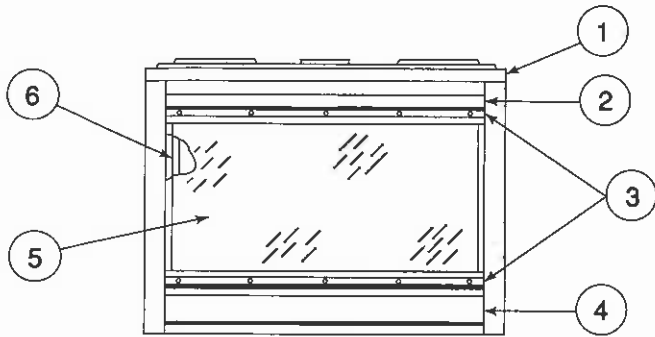
Log Replacement. After removing glass, logs can be lifted out of position. If for any reason one should need replacement, you must use the proper replacement log. The position of these logs must be as shown in the diagram under Replacement Parts. **NOTE: Improper positioning of logs may create carbon build-up and will alter the unit's performance.**

In the event of glass breakage, follow glass removal instructions above to remove the top retaining strip. Remove lower retaining strip in the same manner. This will allow the removal of all glass fragments and sheet metal edge protection strips. Vacuum all remaining glass pieces with a shop vac. **(DO NOT VACUUM IF PIECES ARE HOT.)** Replace glass only with Heatilator assembly number 15937 replacement parts ordered direct or through your local distributor. Never use substitute material. Only 1/4" x 33 3/4" x 18" fully tempered soda lime safety glass may be used on this appliance.

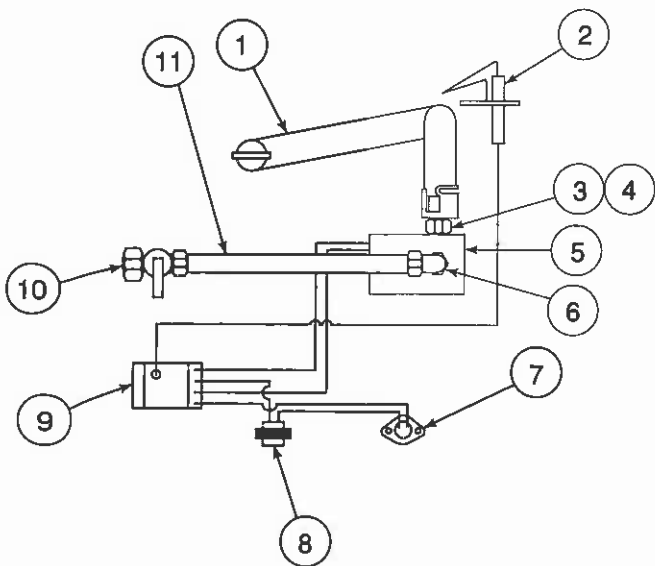
REPLACEMENT PARTS



ITEM	PART NO.	DESCRIPTION
1	15691	Rear Log
2	15693	Middle Log
3	15690	Front Log



ITEM	PART NO.	DESCRIPTION
1	15674	Top Front Face
2	15675	Hood
3	15687	Glass Support Channel
4	15676	Lower Front Face
5	15937	Glass Assembly
6	15574	Gasket



ITEM	PART NO.	DESCRIPTION
1	13858	Burner
2	15689	Ignitor
3	15818 15819 15820	Orifice - Nat./High Altitude Orifice - Natural Orifice - LP
4	15694	9/16" Hex. Nut
5	15659 15660	Valve - Natural Valve - LP
6	15821	90° Elbow - Brass
7	13420	High Limit Switch
8	13887	Transformer
9	15695	Ignition Control
10	15697	On/Off Valve
11	15696	Flexible Line

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 burner after repeated attempts.	A. Defective ignitor.	Check for loose connections on electrode and ignitor. Check for spark. If electrode connection is correct and no spark, replace ignitor.
	B. Misaligned electrode at pilot.	Spark should be extending approx. 1/8" to ground wire. Adjust gap to give proper spark. Remove hands from electrode before attempting.
2. Burner will not stay lit.	A. Defective flame sensor.	Check burner flame. See Figure 9. Adjust sensor if necessary. Be sure sensor is secured tight into bracket. Be sure wiring connections are tight throughout system, including high limit switch.
	B. No ground.	Check that wiring is grounded as shown in Figure 7.
3. With valve and wall switch in "ON" position, no gas to burner.	A. Wall switch defective.	Check power source (fuses). Check wall switch for proper connections. Check for 24 volt power off secondary on the transformer.
	B. Plugged burner orifice.	Check burner orifice; remove blockage.
	C. Gas valve(s) shut off.	Check all gas valves leading to appliance. Turn to the "ON" position.

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.

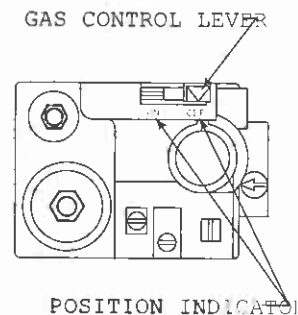
- A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and 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 and move the gas control lever. Never use tools. If the lever will not push in or move 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.

OPERATING 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 burner. Do not try to light burner by hand.
5. Push gas control lever in and move to the "OFF" position.
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 the next step.
7. Move lever to the "ON" position.
8. Replace control access panel.
9. To turn on burner, turn on all electric power to this appliance.
10. 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

1. Turn off the wall switch.
2. Turn off all electric power to the appliance if service is to be performed.
3. Push gas control lever in and move to the "OFF" position. Do not force.
4. Replace control access panel.

Due to high surface temperatures, keep children, clothing and furniture away.

Keep burner and control compartment clean. See Installation and Operating Instructions accompanying the appliance.

Attention

APPLIANCE INSTALLER

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

heatilator®
The first name in fireplaces

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