



heatilator®

The first name in fireplaces

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

GC200E GC200LE INSTALLATION & OPERATING INSTRUCTIONS

I. LISTINGS AND CODE APPROVALS

These gas appliances with electronic ignition have been tested in accordance with National Safety Standards, and have been CERTIFIED by the American Gas Association and the Canadian 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

IF YOU SMELL GAS:

1. OPEN WINDOWS.
2. DON'T TOUCH ELECTRICAL SWITCHES.
3. EXTINGUISH ANY OPEN FLAMES.
4. IMMEDIATELY CALL YOUR GAS SUPPLIER.

FOR YOUR SAFETY

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

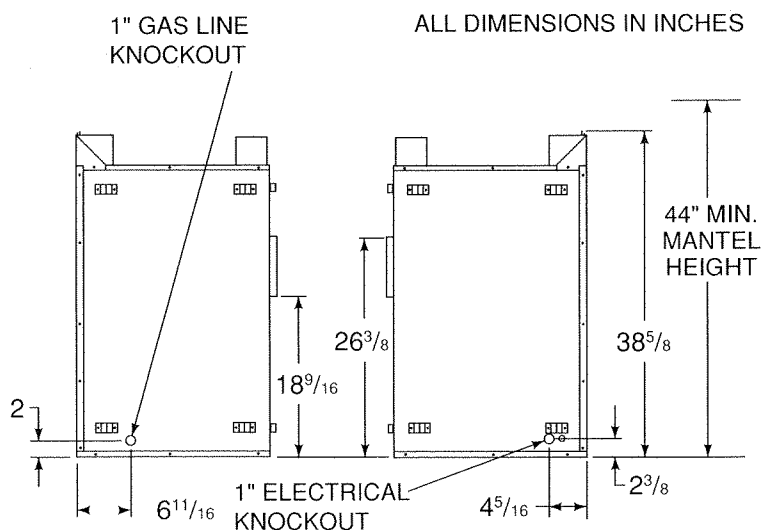
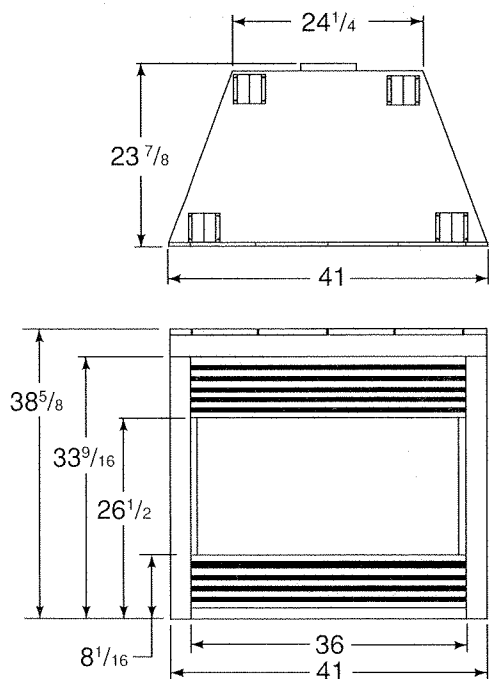


Figure 1

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 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 GC200E or GC200LE 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 (RC5) are to be used, wiring must be done prior to finishing to avoid reconstruction.

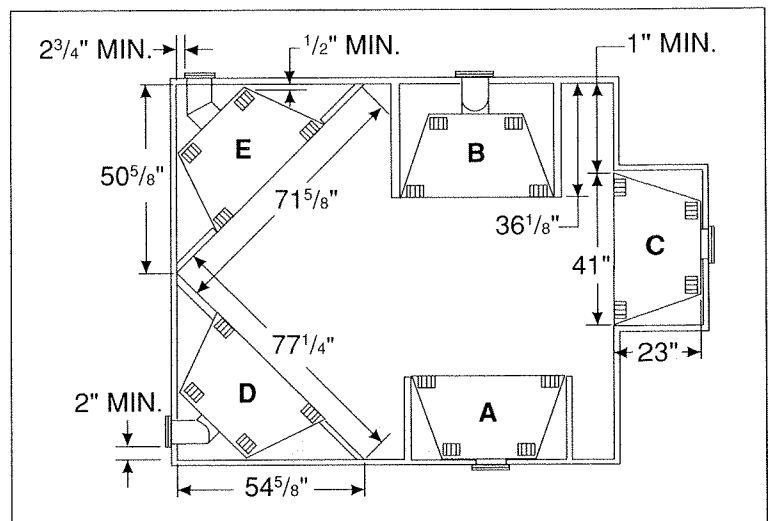


Figure 2

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 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 3/8" NPT gas connection should be positioned 2" above the floor and 6 11/16" 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 corner installations, or STEPS 1C through 5C for elevated installations.

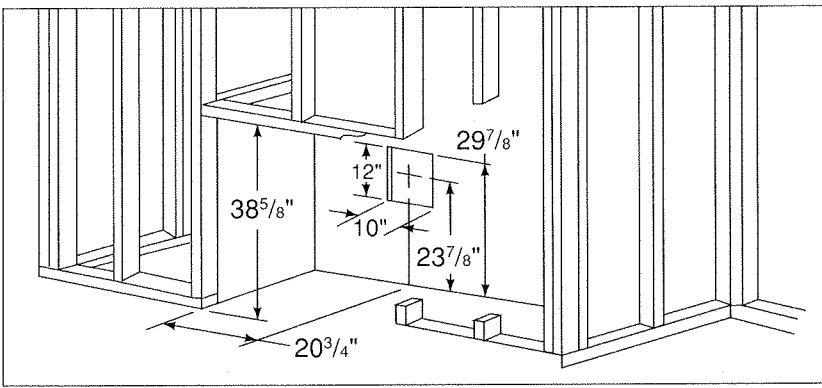


Figure 3

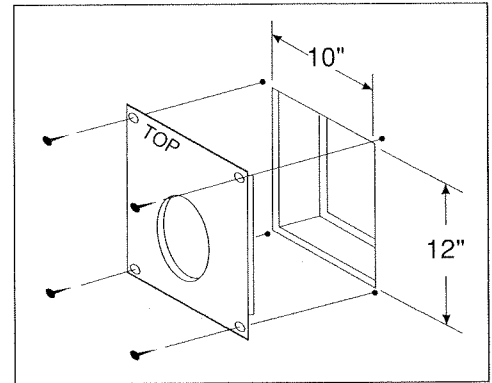


Figure 4

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 13 1/2". Extension Kit (VK1) is required for walls up to 20" thick.

STEP 5A

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

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

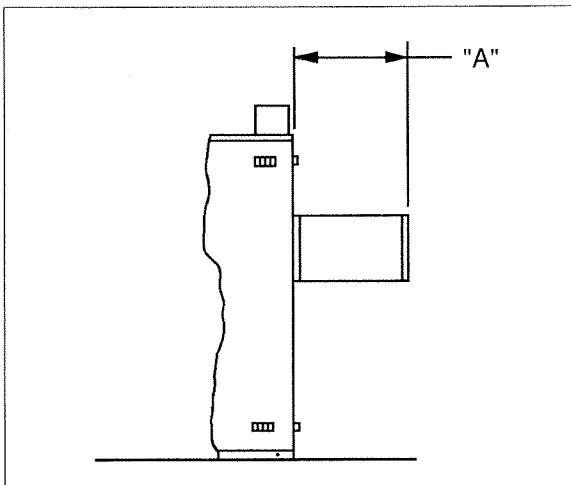


Figure 5

TABLE 1

*Extension Kit (VK1) required

| WALL THICKNESS | EXTENDING FROM UNIT BACK | |
|----------------|--------------------------|-------------|
| | "A" 8" PIPE | "A" 4" PIPE |
| 4 1/2" | 5 3/4" | 7" |
| 5" | 6 1/4" | 7 1/2" |
| 6" | 7 1/4" | 8 1/2" |
| 8" | 9 1/4" | 10 1/2" |
| 10" | 11 1/4" | 12 1/2" |
| 12" | 13 1/4" | 14 1/2" |
| *14" | 15 1/4" | 16 1/2" |
| *16" | 17 1/4" | 18 1/2" |
| *18" | 19 1/4" | 20 1/2" |

If the wall thickness is 4 1/2", no other sections are needed. For thicker walls, slide the next section onto the first section until proper length is attained as shown in Figure 5 and Table 1. A 2" overlap must be maintained, and the outer pipe sections must be drilled and screwed in (3) places. Proceed to STEP 6.

B. INSTALLATION FOR CORNER VENTING

STEP 1B

The fireplace MUST set at a 45° angle. The optional VK2 Vent Kit is required. It consists of (1) 4" dia. 45° elbow and (1) 8" dia. 45° elbow.

STEP 2B

The wall shield opening location and size is shown in Figure 6. Minimum framing dimensions are also shown in Figure 2E.

STEP 3B

The elbows must first be attached for a left or right installation. See Figure 2E. Use (3) screws per attachment.

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".

STEP 5B

Install the smallest 4" diameter pipe over the inner elbow.

Install the smallest 8" diameter pipe over the outer elbow using (3) screws to secure.

If the wall thickness is 4 1/2", no other sections are required. For thicker walls, slide the next section onto the first section until proper length is attained as shown in Figure 7 and Table 2. A 2" overlap must be maintained, and the pipe sections must be drilled and screwed in (3) places. Proceed to STEP 6.

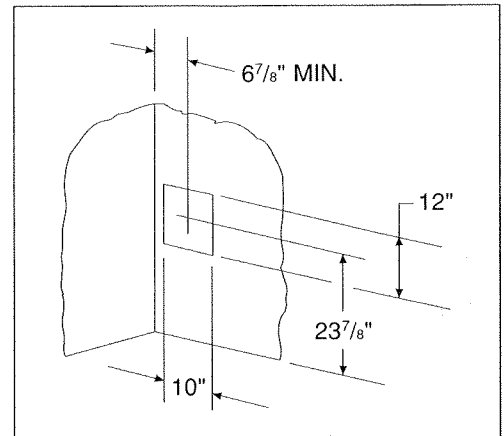


Figure 6

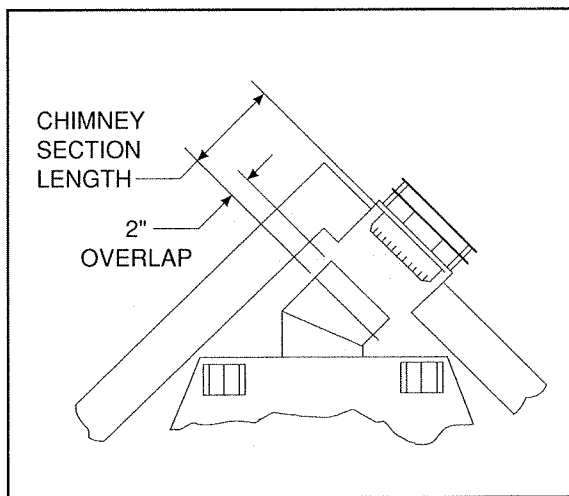


Figure 7

TABLE 2

| WALL THICKNESS | CHIMNEY SECTION LENGTH | |
|----------------|------------------------|---------|
| | 8" PIPE | 4" PIPE |
| 4 1/2" | 9" | 10 1/4" |
| 5" | 9 1/2" | 10 3/4" |
| 6" | 10 1/2" | 11 3/4" |
| 8" | 12 1/2" | 13 3/4" |
| 10" | 14 1/2" | 15 3/4" |
| 12" | 16 1/2" | 17 3/4" |
| 14" | 18 1/2" | 19 3/4" |
| 16" | 20 1/2" | 21 3/4" |
| 18" | 22 1/2" | 23 3/4" |

C. ELEVATED CHIMNEY INSTALLATIONS

STEP 1C

This installation can be done in two configurations, as shown in Figure 2B or 2D. 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 2C

The wall shield opening location and size is shown in Figure 8. The minimum framing dimensions are also shown in Figures 2B, 2D and 9.

STEP 3C

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 9 and Table 3, 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.

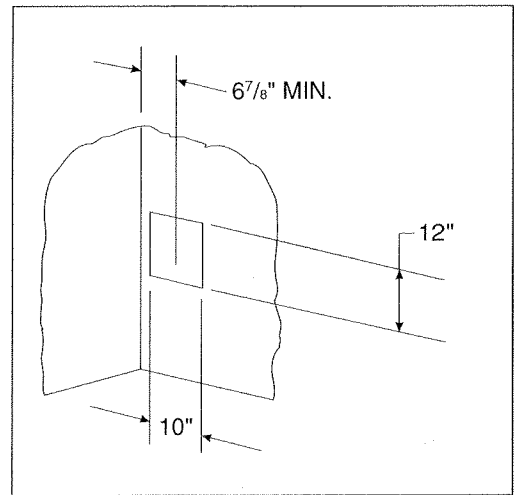


Figure 8

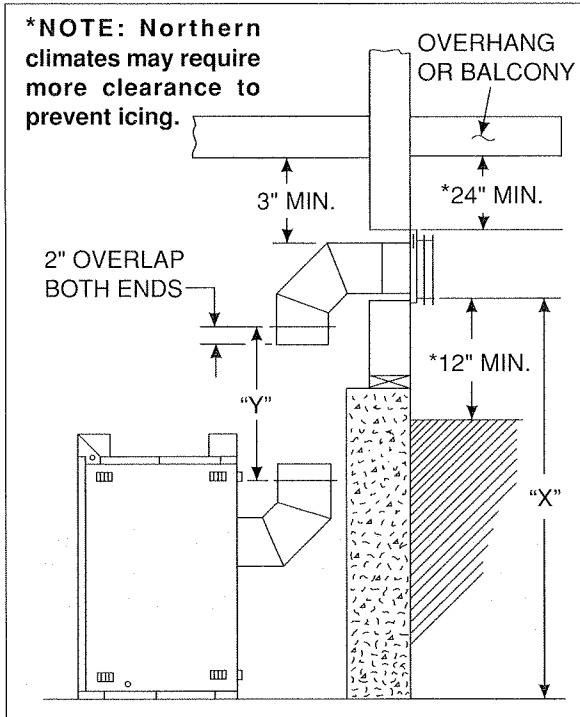


Figure 9

TABLE 3

| "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 4C

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

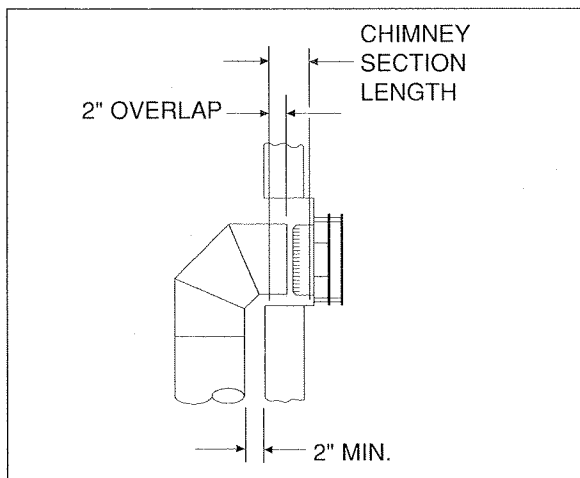


Figure 10

TABLE 4

| "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 10 and Table 4. Proceed to STEP 6.

STEP 6

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

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 11. 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.

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.

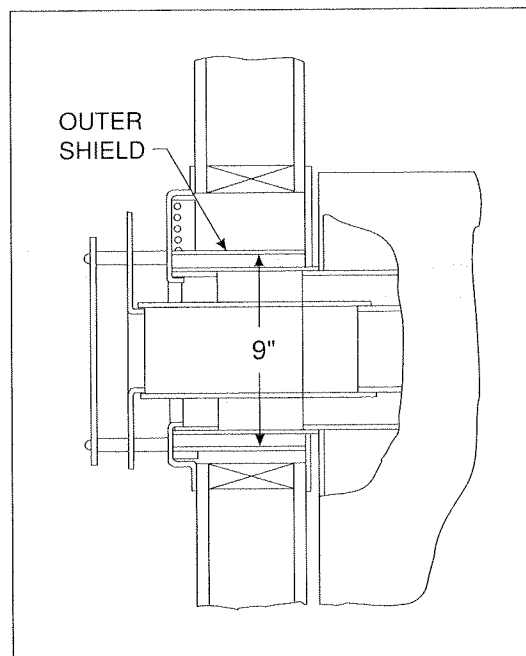


Figure 11

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.

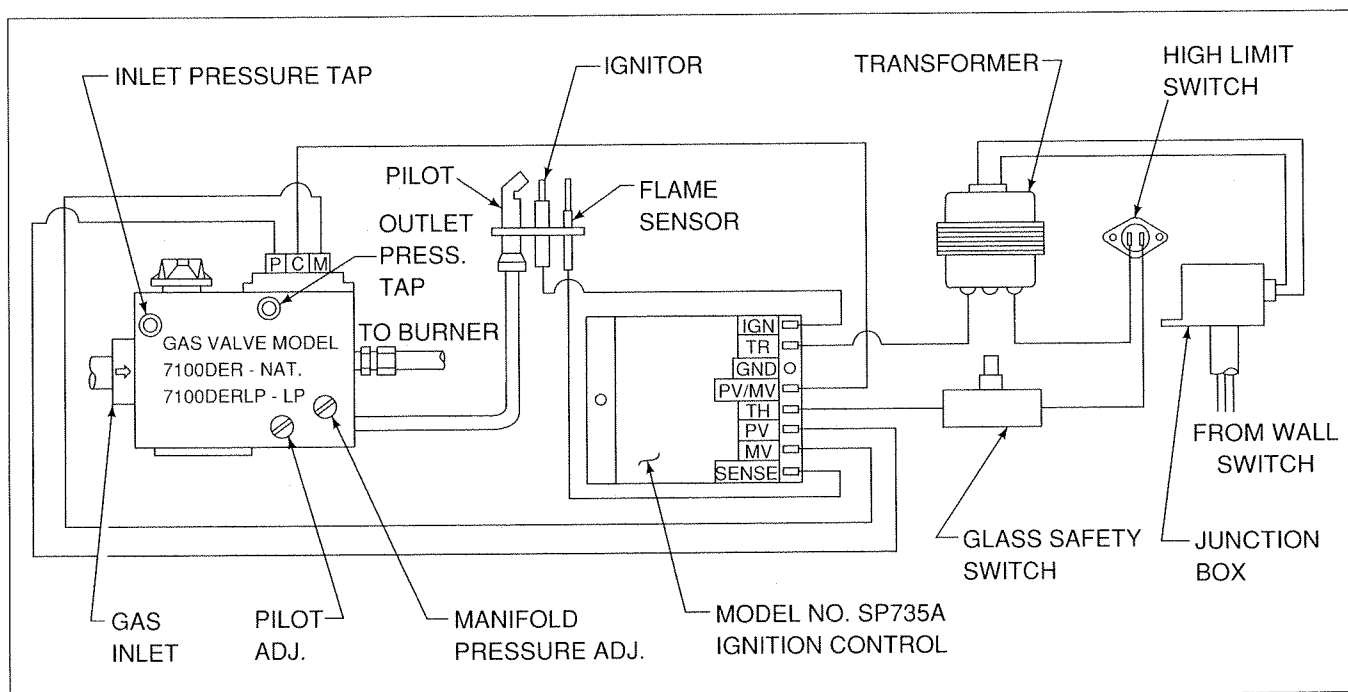


Figure 12

STEP 12

Remote wall switch hook-up should be installed in a convenient location. Follow Figure 12 for wiring diagram. If the optional Remote Control (RC5) is to be used, it should be installed at this time. A separate wiring diagram is included with the RC5.

STEP 13

Supply electrical wiring (110V) to the left side of the appliance. Connect the wall switch in line to operate the appliance. If a FK4 Fan Kit is to be installed, a separate 110V supply must be run at this time to the junction box. Follow the Installation Instructions provided with these accessories. The appliance must be electrically grounded and wired in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-1984 or, in Canada, the current CSA C22.1 Canadian Electrical Code.

STEP 14

Before Operation. The hood (supplied with your unit) 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 from the base of the unit. It is recommended that a non-combustible hearth extension, a minimum of 12" x 48", be used.

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.

LIGHTING PROCEDURE

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 "On" position.
5. 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 valve gas knob to the "Off" position.

PILOT BURNER ADJUSTMENT

1. Remove the pilot adjustment cap. See Figure 12.
2. Adjust the pilot key to provide properly sized flame.
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 flame sensor should be covered with flame. See Figures 13 and 14.

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.

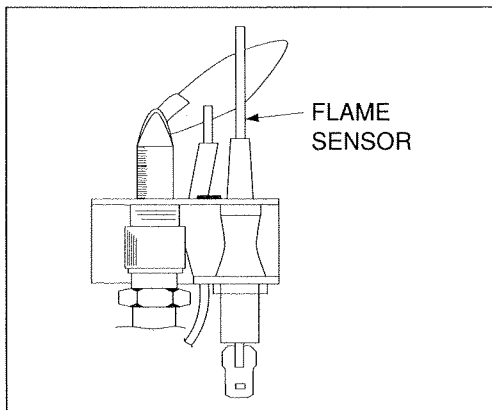


Figure 13

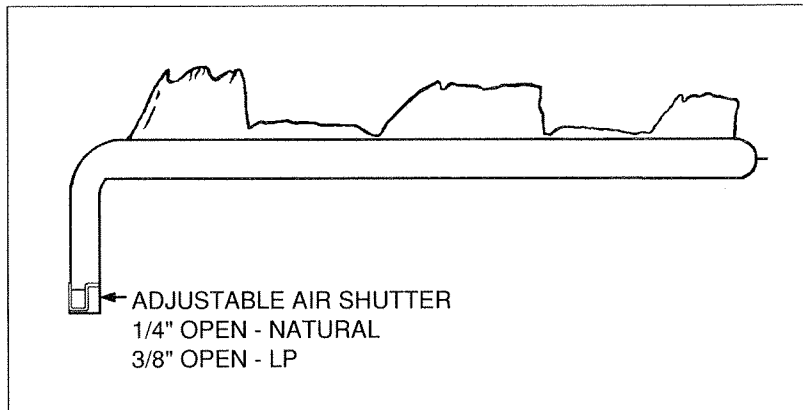


Figure 14

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):**

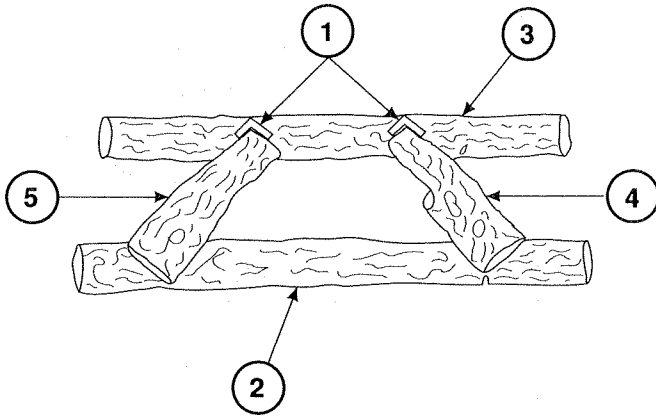
1. Remove top louver set by lifting about 1/4" and sliding it off the keyways.
2. Remove the (5) screws at the top of the glass; hold the glass to ensure it doesn't fall.
3. Remove the top bracket, tilt the glass out and lift it out of the bottom channel.

To replace glass, reverse the process.

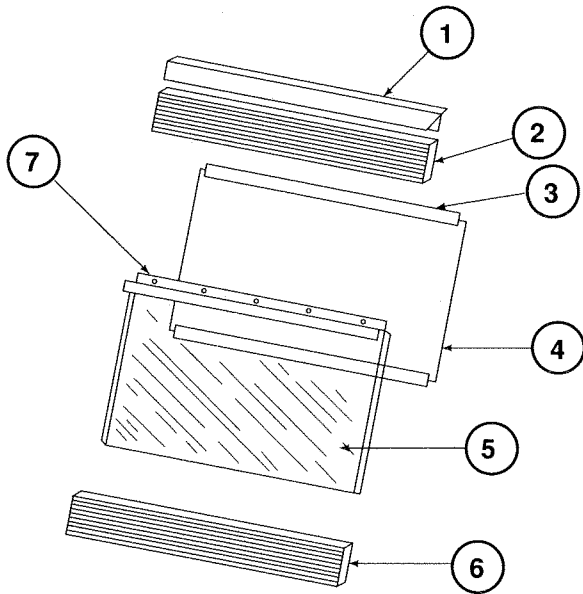
Never operate the appliance without glass properly secured in place.

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.**

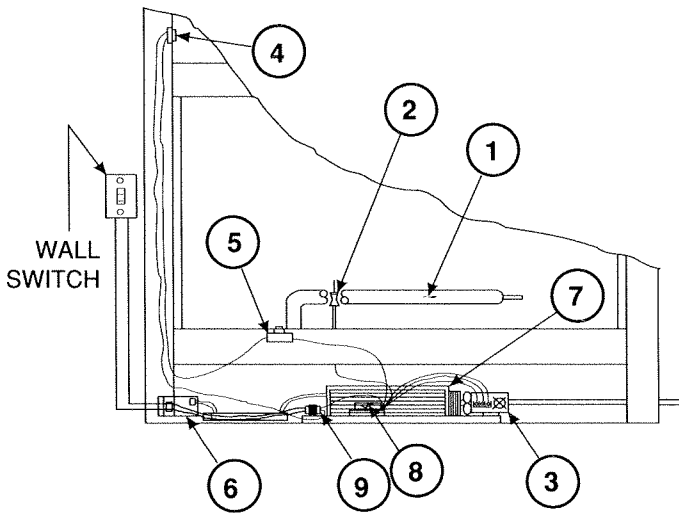
REPLACEMENT PARTS



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

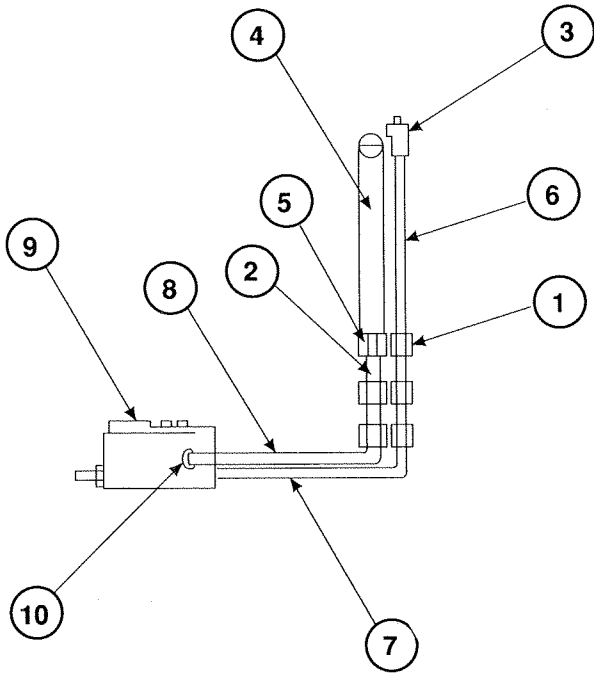


| ITEM | PART NO. | DESCRIPTION |
|------|----------|-----------------------|
| 1 | 13441 | Hood |
| 2 | 13434 | Upper Grille Assembly |
| 3 | 13378 | Seal Bracket |
| 4 | 13377 | Glass Seal |
| 5 | 13379 | Glass Panel |
| 6 | 13438 | Lower Grille Assembly |
| 7 | 13376 | Glass Frame |



| ITEM | PART NO. | DESCRIPTION |
|------|----------------|-------------------------------|
| 1 | 13408 | Burner |
| 2 | 13909 | Flame Sensor |
| 3 | 13885 14161 | Valve - Natural Valve - LP |
| 4 | 13595 | Limit Switch |
| 5 | 13426 | Micro Switch |
| 6 | 13447 | Junction Box Assembly |
| 7 | FK4 | Fan Kit* |
| 8 | 13886 | Electronic Ignitor |
| 9 | 13887 | Transformer |

*Optional Components



| ITEM | PART NO. | DESCRIPTION |
|------|----------------|---|
| 1 | 13404 | Bulkhead Union 1/4" |
| 2 | 13405 | Bulkhead Union 3/8" |
| 3 | 13406 13444 | Pilot W/Bracket - GC200E Pilot W/Bracket - GC200LE |
| 4 | 13408 | Burner |
| 5 | 13410 13445 | Orifice - GC200E Orifice - GC200LE |
| 6 | 13412 | Pilot Tube |
| 7 | 14908 | Pilot Tube |
| 8 | 14907 | Burner Tube |
| 9 | 13885 14161 | 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 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 | 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 Repair/Replace |
| | | | ● | | | Faulty Flame Sensor | Test Sensor, Wiring 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 |



Attention
**Fireplace
Installer:**

*Please return operating
and installation
instructions to the firebox
for consumer use.*

heatilator
The first name in fireplaces