

This appliance may be constructed with a vertical or horizontal direct vent termination system.



heatilator®
The first name in fireplaces

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

GC500CL/CR HEAT CIRCULATING SERIES GAS APPLIANCE **OWNERS MANUAL**

AND INSTALLATION INSTRUCTIONS

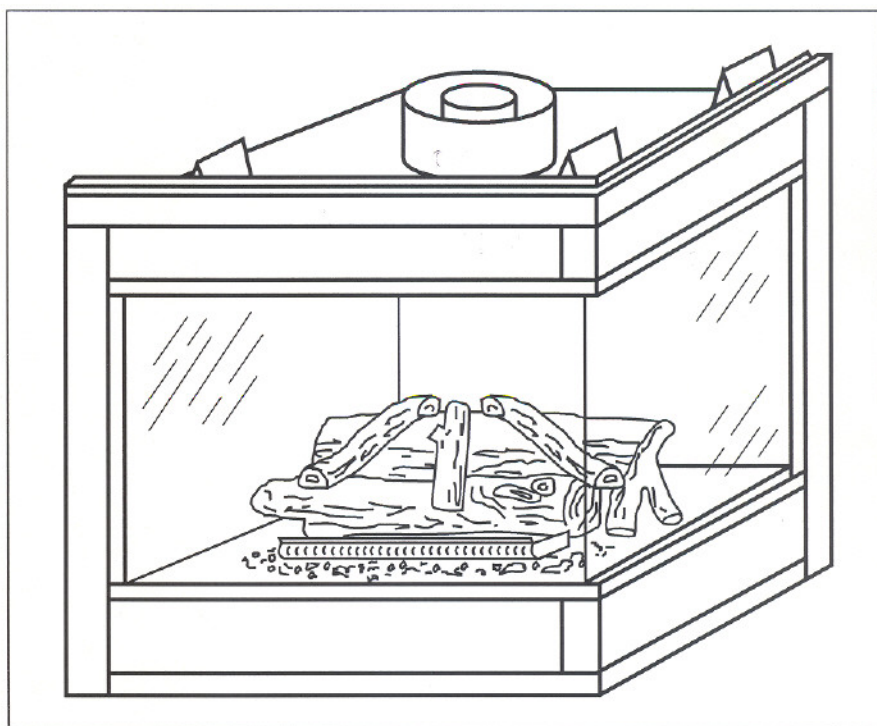
MODELS: GC500CL, GC500CLE, GC500CLL, GC500CLLE
GC500CR, GC500CRE, GC500CRL, GC500CRLE

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.

This manual must be used for installation of the GC500CL/CR Series Gas Appliance and retained by the homeowner for operating and maintenance instructions.



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.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.



Electrician: Please refer to page 15 for wiring instructions.

Plumber: Please refer to page 6 and 13 for gas connection information.

Framer: Please refer to page 7 for framing specifications.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

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Safety Precautions

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause a fireplace malfunction resulting in serious injury and/or property damage.
2. Always check your local building codes prior to installation. This installation must comply with all local, regional, state and national codes and regulations.
3. Installation and repair should be done by a qualified service person. This appliance should also be inspected annually by a qualified service person. More frequent inspections/cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burners and circulating air passage ways of the appliance be kept clean.
4. The GC500CL/CR fireplace is a vented decorative gas appliance. Do not burn wood or other material in this appliance.
5. NEVER leave children unattended when there is a fire burning in the fireplace.
6. This fireplace may be vented horizontally through an outside wall or vertically above the roof line and must not be connected to a chimney flue servicing a solid fuel burning appliance.
7. NEVER use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this fireplace. Keep any flammable liquids a safe distance from the fireplace.
8. While servicing this fireplace, always shut off all electricity and gas to the fireplace. This will prevent possible electrical shock or burns. Also, make sure the unit is completely cooled before servicing.
9. 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 testing.
10. 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.
11. Be sure to provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.



I. LISTINGS AND CODE APPROVALS

U.S. Certification

The GC500CL/CR Series Gas Appliance has been tested in accordance with the ANSI standard Z21.50b-1990, Z21.44-1991 and has been listed by Warnock Hersey for installation and operation as described in these Installation and Operating Instructions. All components are A.G.A. or UL safety certified.

Canada Certification

The GC500CL/CR Series Gas Appliance has been tested in accordance with the CAN/CGA-2.22-M86, CAN/CGA-2.17-M91 and IR41 and has been listed by Warnock Hersey for installation and operation as described in these Installation and Operating Instructions. All components are C.G.A. or C.S.A. safety certified.

Local codes

Check with your local building code agency prior to installing this fireplace to ensure compliance with local codes, including the need for permits and follow-up inspections. This installation must conform with local

codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-latest edition, in the U.S.A. and the CANI-B149-latest edition, in Canada.

Optional components

This gas appliance has been tested and listed for use with the optional components listed on page 4. Many optional components may be purchased separately and installed at a later date. However, installation of a remote control or fan kit will require electrical power. To avoid costly reconstruction, electrical power should be connected to the unit at the time of the initial fireplace installation for possible addition of these accessories at a later date.

If any assistance is required during installation please contact your local dealer or contact Heatilator Customer Relations Department, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.

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II. DESCRIPTION OF THE FIREPLACE SYSTEM

The GC500CL/CR is a direct vent decorative gas appliance. Combustion air is supplied from outside, not from inside the house as with other types of fireplaces. While a significant amount of heat is created by the GC500CL/CR, it is not intended to be and, therefore, should not be used as a heater.

This HEATILATOR fireplace system consists of the following:

1. Fireplace
2. Chimney System
3. Termination

Optional components include:

1. Trim kits
2. Remote control

Tools and building supplies normally required for installation.

Tools	Building Supplies
Saw	Wall-finishing materials
Pliers	Framing material
Hammer	Fireplace surround
Phillips screwdriver	Caulking material
Tape measure	
Plumb line	
Leveler	
Electrical drills/bits	
Square	

Note: Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installation may vary slightly due to individual design preferences. However, minimum and maximum clearances must be maintained at all times.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

Note: Operation of a direct vent fireplace may be sporadic in high wind situations.

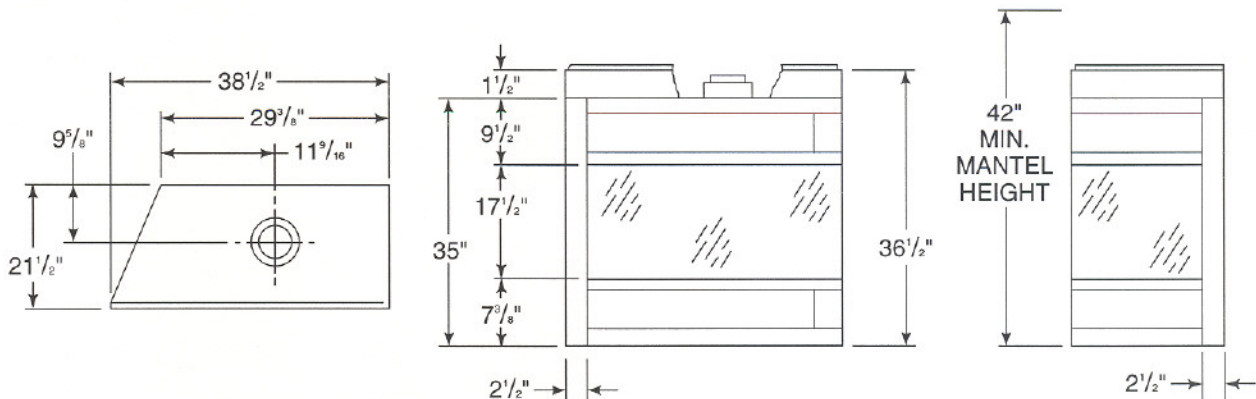


III. FIREPLACE SYSTEM COMPONENTS

The table below is a list of only those components which may be safely used with this fireplace. An

illustration of each component can be found on page five.

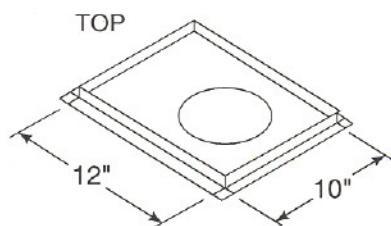
Catalog Number	Description
GC500CL	Left corner natural gas, standing pilot, heat circulating fireplace
GC500CLE	Left corner natural gas, electronic ignition, heat circulating fireplace
GC500CLL	Left corner propane gas, standing pilot, heat circulating fireplace
GC500CLLE	Left corner propane gas, electronic ignition, heat circulating fireplace
GC500CR	Right corner natural gas, standing pilot, heat circulating fireplace
GC500CRE	Right corner natural gas, electronic ignition, heat circulating fireplace
GC500CRL	Right corner propane gas, standing pilot, heat circulating fireplace
GC500CRLE	Right corner propane gas, electronic ignition, heat circulating fireplace
CS200	Direct vent cap shield (for horizontal termination)
CV6	Vertical termination cap
EL45	45 degree elbow
FS6	Firestop spacer (for vertical termination)
RC4	Remote control (standing pilot)
RC5	Remote control (electronic ignition)
RF6	Roof Flashing (for vertical termination)
TA1	Horizontal termination kit including one termination cap, one 15942B (starter elbow) and one VK24 (chimney section)
TK500A	Trim kit, antique brass finish (horizontal bars and columns)
TK500B	Trim kit, polished brass finish (horizontal bars and columns)
VK5	90 degree elbow
VK12	12" length vent pipe
VK24	24" length vent pipe
VK36	36" length vent pipe
VK48	48" length vent pipe
VS4	Vertical vent support
WS6	Wall shield to ensure horizontal clearances
15942B	Starter elbow



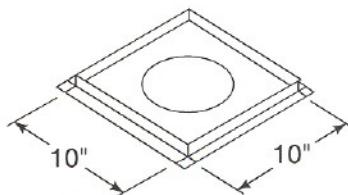
Fireplace Dimensions

Please refer to page 7 for framing dimensions.

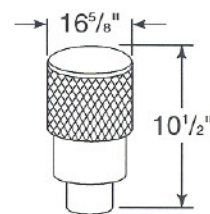




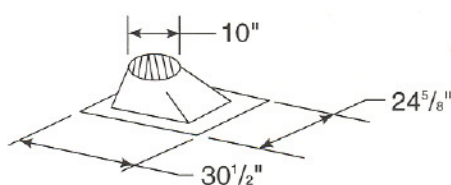
WS6
Wall Shield



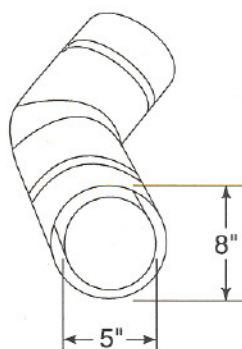
FS6
Firestop Spacer



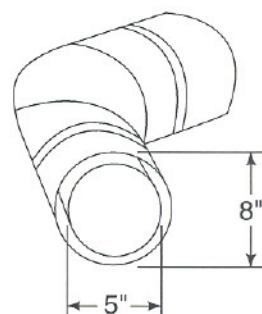
CV6
Vertical Termination Cap



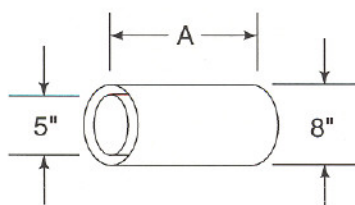
RF6
Roof Flashing



EL45
45° Elbow



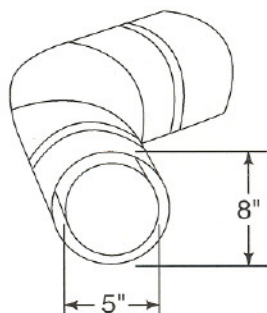
VK5
90° Elbow



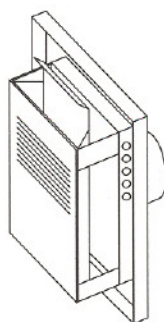
Chimney Section	A	
	Actual length	Useable length
VK12	12"	10 3/4"
VK24	24"	22 3/4"
VK36	36"	34 3/4"
VK48	48"	46 3/4"

Chimney Sections

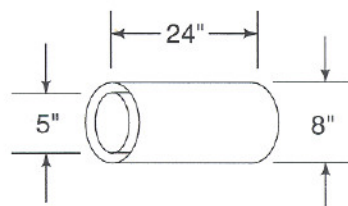
TA1
Horizontal Termination Kit



15942B, Starter Elbow
(Must be the elbow closest to unit when horizontal venting begins.)



Termination Cap



VK24
Chimney Sections



IV. PRE-INSTALLATION PREPARATION

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.

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 SERVICING A SEPARATE SOLID FUEL OR GAS FUEL BURNING APPLIANCE.



A. GAS PRESSURE

For natural gas, the minimum inlet gas supply pressure is 4.5 inches water column, and the maximum inlet gas pressure is 7.0 inches water column, for the purpose of input adjustment. Input rate is 29,000 Btu/hr. For propane gas, the inlet gas supply pressure must be at least 11.0 inches water column and a maximum 14.0 inches water column.

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.

Optimum manifold pressure is 3.5 inches water column for natural gas and 10.5 inches water column for propane gas.

B. HIGH ALTITUDE INSTALLATION

For U.S. installation, units are tested and approved for elevations from 0-2000 feet.

When installing this unit at an elevation above 2000 feet, United States codes require a decrease of the input rating by changing the existing burner orifice to a smaller size. Input should be reduced 4 percent for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification. This unit is shipped with a .101 in./2.57 mm. orifice size on natural gas versions and a .059 in./1.50 mm. orifice size on propane gas versions.

For Canadian installation, units are certified for elevations from 0-4500 feet. When installing this unit at an elevation between 2000-4500 feet in Canada, the orifice sizes are .098 in./2.49 mm. on natural gas and 0.56 in./1.42 mm. on propane gas versions.

When installing this unit at an elevation above 4500 feet in Canada, check with local authorities.

Consult your local gas company for assistance in determining the proper orifice for your location or refer to ANSI Z223.1-latest edition, Appendix F.



C. FIREPLACE LOCATIONS AND SPACE REQUIREMENTS

This appliance may be installed along a wall, across a corner or use an exterior chase. The GC500CL/CR Series 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 1 illustrates a variety of ways the appliance may be located in a room. These appliances are also certified for installation in a bedroom or bed/sitting room in the U.S. and Canada.

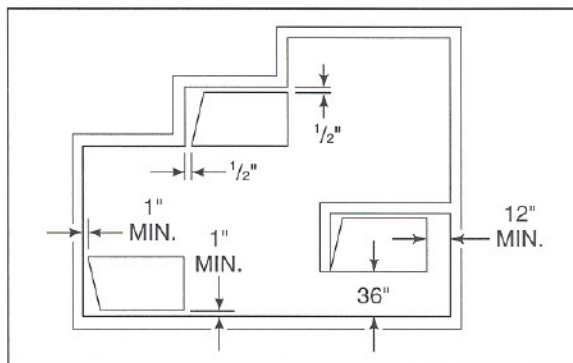


Figure 1
Fireplace Locations and Clearances

D. CLEARANCES

The following clearances to combustibles must be maintained: Minimum clearances to the top standoffs of the unit - 0", floor - 0", back - 1/2", sides - 1/2", face of the unit to ceiling - 30". Minimum clearances to venting are as follows: Horizontal runs require a 3" minimum air space on the top and a 1" minimum air space on the sides and bottom of the chimney section. Vertical rise sections require a 1" minimum air space completely around the chimney section.

E. FRAMING THE FIREPLACE

Note: If an optional hand held remote control (RC4 or RC5) are to be used, wiring must be done prior to finishing to avoid reconstruction.

Note: The remote wall switch must be wired prior to applying the finishing material in order to avoid reconstruction.

The GC500CL/CR Series Gas Appliance will fit a framed opening as shown in Figure 2.

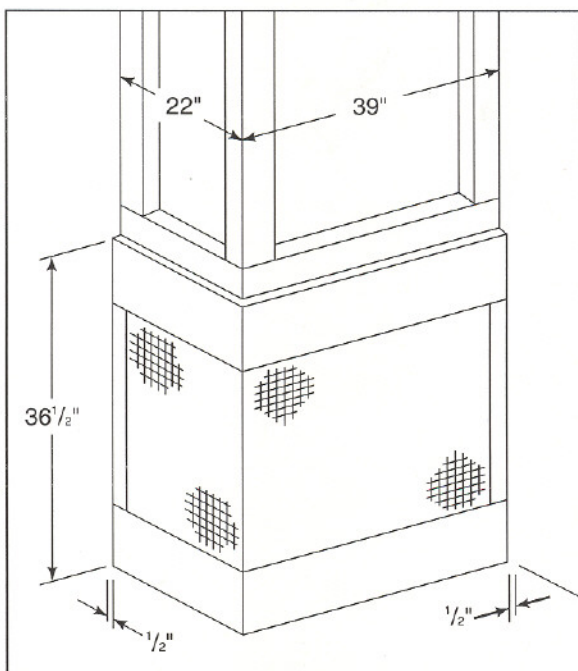


Figure 2
Framing the Fireplace

Figure 2 shows a typical framing of this fireplace assuming combustible materials are used. All required clearances to combustibles around the fireplace must be adhered to. A 1/2" air clearance must be maintained at the back and sides of the firebox assembly. Any framing on top of the fireplace must be above the top standoffs. Chimney sections for a horizontal run require a 3" minimum air space on top and a 1" minimum air space on the sides and bottom. Vertical rise sections require a 1" minimum air space completely around the chimney section.

Flue outside diameter: 8"

Minimum firestop framing: 10" X10"

Face of header to the center of the firestop framing: 11 5/8"

F. FINISHING MATERIALS

Only non-combustible materials may be used to cover the black fireplace front.

Combustible Finishing Material. Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame proofed or not, plastered or unplastered.

Non-combustible Finishing Material. Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or combination thereof.

High Temperature Sealant Material. Sealants that will withstand high temperatures; General Electric RTV103 (Black), or equivalent. Rutland, Inc. Fireplace Mortar #63, or equivalent.

After completing the framing and applying the finishing material (dry wall) over the framing, a non-combustible sealant, one-half inch wide maximum, must be used to close off any gaps at the top and sides between the fireplace and facing to prevent cold air leaks. See Figure 3.

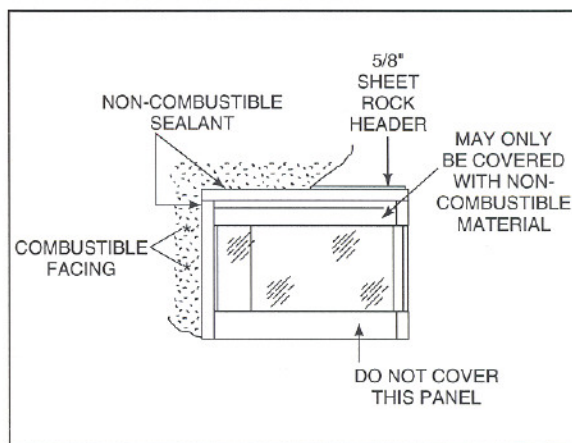


Figure 3
Finishing Materials

WARNING

PANELS ON THIS APPLIANCE CANNOT, IN ANY WAY, BE COVERED AS IT MAY CREATE A FIRE HAZARD.



V. STEP-BY-STEP INSTALLATION OF THE FIREPLACE SYSTEM

WARNING

BEFORE STARTING, DO THE FOLLOWING:

1. **WEAR GLOVES AND SAFETY GLASSES FOR PROTECTION.**
2. **KEEP HAND TOOLS IN GOOD CONDITION. SHARPEN CUTTING EDGES AND MAKE SURE TOOL HANDLES ARE SECURE.**
3. **ALWAYS MAINTAIN THE MINIMUM AIR SPACE REQUIRED TO THE ENCLOSURE TO PREVENT FIRE.**

STEP 1 - Positioning the Firebox

This fireplace may be placed on a combustible or non-combustible continuous, flat surface. Slide the unit into position and level the fireplace from side-to-side and front-to-back. Shim with non-combustible material, such as sheet metal, as necessary.

Secure the fireplace by bending out the nailing flanges located on each side of the fireplace and nailing the unit to the framing. See Figure 4.

STEP 2 - Termination

Two types of termination are available for this appliance, horizontal and vertical. For vertical termination, skip section A and advance to section B on page 11.

A. Horizontal Termination

Minimum combustible clearances to the vent on a horizontal run is 3" on top and 1" on the bottom and sides. These clearances must be maintained at all times. The maximum horizontal run allowed for venting is 26 feet. The maximum vertical rise allowed for horizontal termination is 25 feet. See Figure 5.

1. Assembling chimney sections. Attach either a 15942B (starter elbow) or straight pipe section (depending upon your specific installation) to the top of the appliance. Secure with the three screws supplied. Use only pipe supplied and listed for use with this appliance and the appropriate number of direct vent sections. **MAINTAIN MINIMUM CLEARANCES OR GREATER AROUND THE CHIMNEY SYSTEM.** Do not pack air spaces with insulation or other material.

a. Using elbows. The maximum horizontal distance this chimney may reach is 26 feet. A single vertical-to-horizontal elbow is already calculated into the allowable 26 foot run. Each additional elbow reduces the maximum horizontal distance by three feet. Example, by using three total elbows, the maximum horizontal distance has been reduced to twenty feet ($3 - 1 = 2$ elbows $\times 3' = 6'$; $26' \text{ max.} - 6' \text{ of elbows} = 20' \text{ of horizontal run}$).

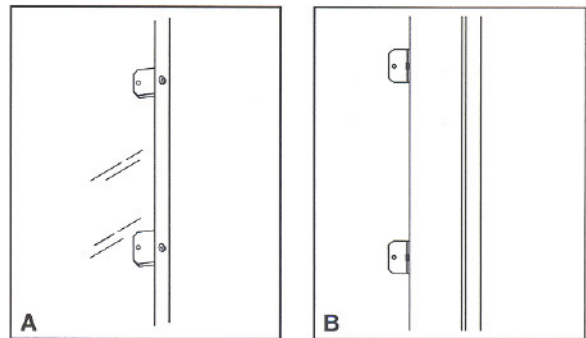


Figure 4
Nailing Flanges

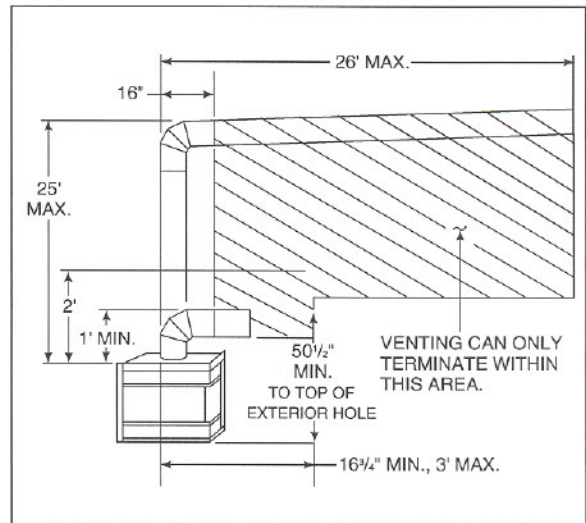


Figure 5
Horizontal Length

Note: The horizontal run of vent must have a 1/4" rise for every 1 ft. of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and may present the possibility of a fire.



b. Amount of venting required. Due to the many different combinations that can be used when constructing venting, the number of chimney sections required can only be determined by the installer.

Note: Horizontal runs will require the use of one Vent Support (VS4) for every 3' of vent.

2. Preparing the wall for interior wall shield. A hole measuring 10" wide x 12" high must be cut and framed in the exterior wall where venting will be terminated. If the wall being penetrated is constructed of non-combustible material, i.e. masonry block or concrete, a 9" diameter port is acceptable.

The hole must be positioned so the chimney system will have a 1/4" rise AND be perpendicular to the wall. See Figure 6. The height of the hole must be located to meet all local and national codes and not be easily blocked or obstructed. The minimum height to the top of the exterior wall hole is 50 1/2" from the base of the unit. This figure will increase by the length of each vertically positioned chimney section added to the venting system.

3. Interior Wall Shield. An interior wall shield must be installed each time the venting system penetrates a wall. This shield has been designed to maintain the minimum clearances needed for the venting system and prevent cold air infiltration. After the venting hole has been cut and framed, secure an interior wall shield into position with four 1" fasteners, one in each corner. Bend out the tabs located on the inner portion of the wall shield and use a 1/2" screw to secure each tab to the penetrating pipe. See Figure 7. (1/2" screws are used to avoid penetrating the inner pipe.)

Note: Exterior wall thickness must be a minimum of 4" to a maximum of 23 1/2".

4. Venting through the wall. Horizontal venting must terminate within the shaded area shown in Figure 5 on the previous page. For example, if your vertical rise is the minimum one foot, venting can terminate anywhere between 16 inches and 3 feet.

The last section of vent may require cutting, depending upon wall thickness and appliance location. The end of the vent must penetrate the exterior wall. Cut the pipe so the outer vent section extends past the exterior wall by 1" and the inner vent section extends past the exterior wall by 2 1/2". See Figure 8.

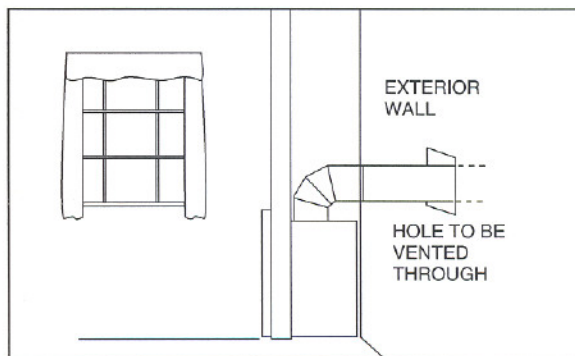


Figure 6
Exterior Wall Hole

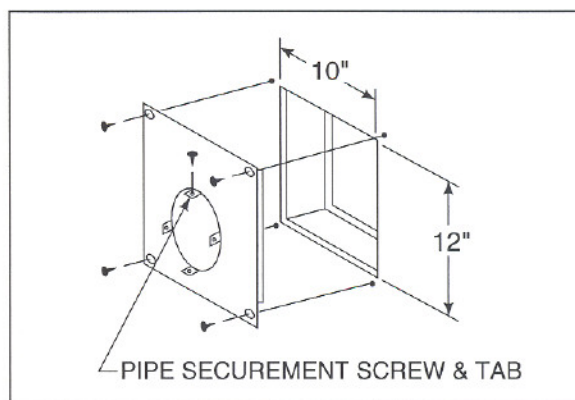


Figure 7
Interior Wall Shield

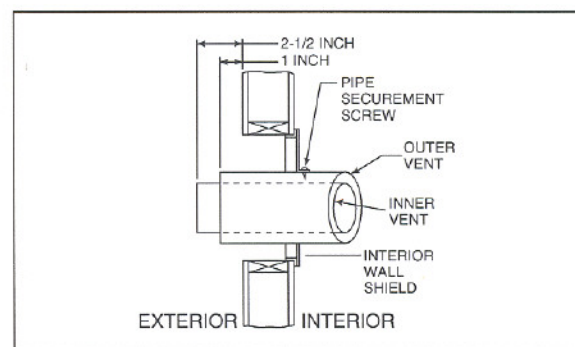


Figure 8
Venting Through the Wall

Note: If the termination cap is surrounded by vinyl siding or is located below a vinyl soffit, a vinyl siding shield must be used to prevent damage to the vinyl.



5. Termination Cap. Vent termination must not be recessed into the wall or siding. Figure 9 illustrates termination cap locations and minimum

dimensions for each termination application. Or, follow ANSI Z223.1, latest edition.

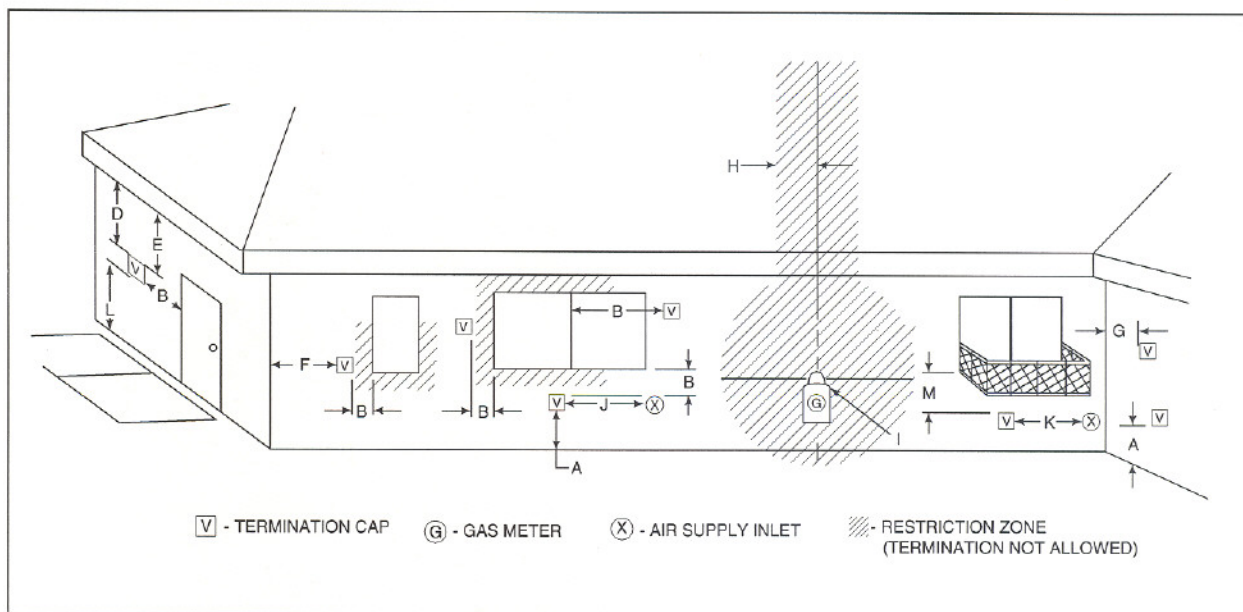


Figure 9
Termination Cap Locations

Dimension Descriptions

- | | |
|---|--|
| <p>A = Clearance above the ground, a veranda, porch, deck, or balcony - 12 inches (30 cm) minimum.</p> <p>B = Clearance to window or door that may be opened - 9 inches (30 cm) minimum.</p> <p>D* = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center-line of the terminal - 18 inches (46 cm) minimum.</p> <p>E* = Clearance to unventilated soffit - 12 inches (30 cm) minimum.</p> <p>F = Clearance to outside corner - 9 inches as tested.</p> <p>G = Clearance to inside corner - 9 inches as tested.</p> <p>H* = Not to be installed above a meter/regulator assembly within 3 feet (90 cm) horizontally from the center-line of the regulator.</p> <p>I* = Clearance to service regulator vent outlet - 6 feet (1.8 m) minimum.</p> <p>J = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance - 12 inches (30 cm) minimum.</p> | <p>K* = Clearance to mechanical air supply inlet - 6 feet (1.8 m) minimum.</p> <p>L+ = Clearance above a paved sidewalk or paved driveway located on public property - 7 feet (2.1 m) minimum. Use of a CS200 will reduce this dimension to as low as 12 inches (30 cm).</p> <p>M# = Clearance under veranda, porch deck, or balcony - 12 inches (30 cm) minimum.</p> <p>+ A vent must not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.</p> <p># Only permitted if veranda, porch deck, or balcony is fully open on a minimum of 2 sides beneath the floor.</p> <p>• As specified in Installation Codes. Note: Local codes or regulations may require different clearances.</p> <p>* Increased distance required for vinyl soffit materials.</p> <p>□ As specified in CGA B149 Installation Codes (1991). Note: Local Codes or Regulations may require different clearances.</p> |
|---|--|



To install the termination cap, slide the cap pipe sections into the vent pipe as shown in Figures 10A and 10B. Secure the cap flush to the wall using the eight 1" fasteners provided. Seal the cap to the wall with a mastic such as silicone caulking. Fasten the inner vent with three 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 11.) Vent termination must not be recessed into the wall or siding.

Be sure to follow all termination cap location minimum dimensions that have been discussed on the previous page.

Skip section B below and continue with Step 4 on page 13.

B. Vertical Termination

When planning your fireplace location, the chimney construction and necessary clearances must be considered. The following figures are the maximum distances from the base of the unit, as well as the minimum air space clearances that must be maintained: Maximum straight unsupported rise - 25 feet; maximum horizontal unsupported run - 3 feet; air space clearances around vertical venting - 1" on all sides; air space clearances around horizontal venting - 3" on top and 1" on sides and bottom; maximum height - 40' from the base of the unit. Every 1' of horizontal run requires at least 2' of vertical rise. (Example: a 12' overall installation height may be offset as much as 6' horizontally.) The maximum is 20 feet.

1. Assembling chimney sections. Attach either a 15942B (starter elbow) or straight pipe section (depending upon your specific installation) to the top of the appliance. Secure with the three screws supplied. Use only pipe supplied with this appliance and the appropriate number of direct vent sections. **MAINTAIN MINIMUM CLEARANCES OR GREATER AROUND THE CHIMNEY SYSTEM.** Do not pack air spaces with insulation or other material.

a. Using elbows. To bypass any overhead obstructions, the chimney may be offset using a 90° elbow (VK5). Vent stabilizers (VS4) have straps for securing these parts to joists or rafters. Plumbers tape may be purchased locally and used in conjunction with vent stabilizers. See Figure 12.

WARNING

WHEN VENT SECTIONS EXCEEDING 3 FEET IN LENGTH ARE INSTALLED BETWEEN AN OFFSET/RETURN, STRUCTURAL SUPPORT (VS4) MUST BE PROVIDED TO REDUCE OFF-CENTER LOADING AND PREVENT VENT SECTIONS FROM SEPARATING AT THE VENT JOINTS.

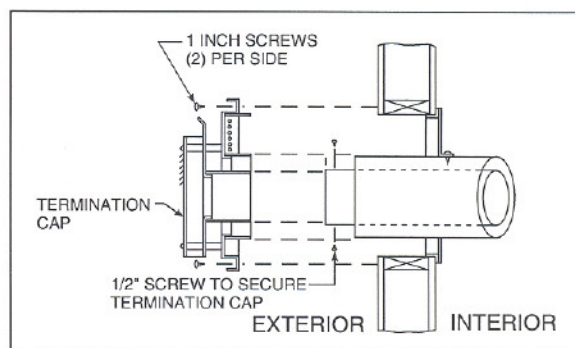


Figure 10A
Termination Cap

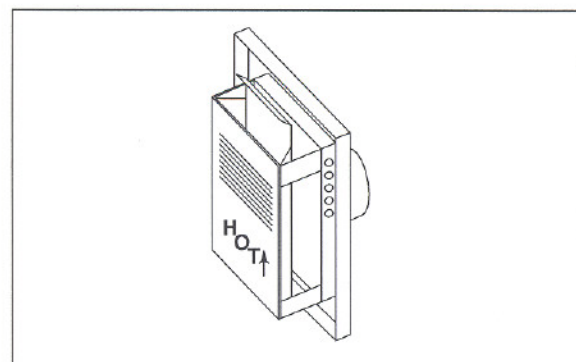


Figure 10B
Proper Positioning of Termination Cap & Shield

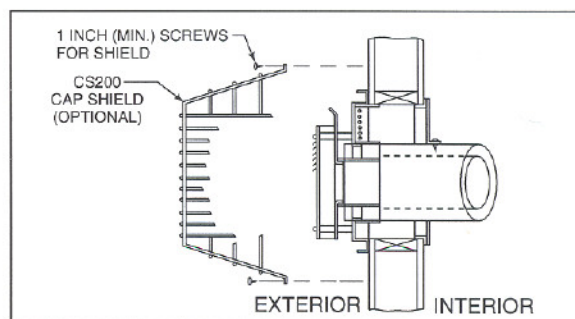


Figure 11
Cap Shield

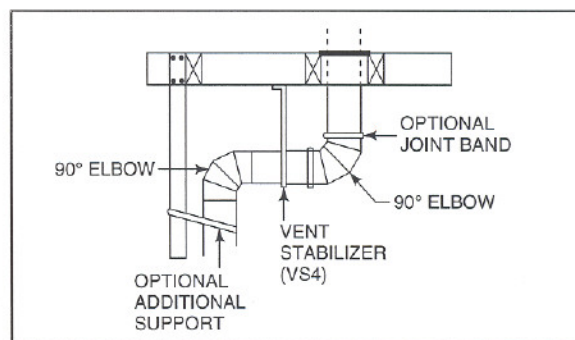


Figure 12
Elbows with Stabilizer



2. Preparing the ceiling for firestop spacers.

Mark and cut out an opening in the ceiling for the firestop spacer. Frame the opening with the same size lumber used in the ceiling joists. Unless the flue is offset, frame the 10" x 10" opening directly over the firebox.

3. Installing the firestop spacers. Firestop spacers must be used whenever the chimney penetrates a ceiling/floor area.

In all situations, firestop spacers are to be nailed to the ceiling joists from the bottom or fireplace side, EXCEPT when the space above is an insulated ceiling or attic space. In this situation, the firestop spacer must be nailed from the top side to prevent loose insulation from falling into the required one inch air space around the chimney. See Figure 13.

Install the firestop spacer (FS6) by positioning and nailing the four sides of the firestop spacer to the joists using a minimum of three nails per side.

4. Securing chimney system. Continue assembling the chimney sections up through the firestop spacers as needed. Pipe sections must be locked into position with the screws provided, using the predrilled holes. The 15942B starter elbow and the chimney stabilizers have straps for securing these parts to joists or rafters.

Note: Be sure to provide intermediate support for the vent during construction and check to be sure inadvertent loading has not dislodged the vent from the appliance or any vent joint.

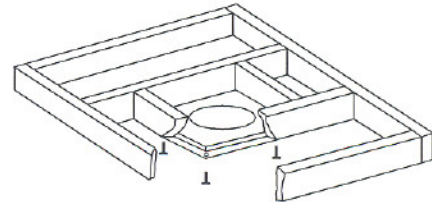
6. Marking the exit point in the roof. Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Drive a nail up through the roof to mark the center. See Figure 14.

7. Cutting out the hole in the roof. Measure to either side of the nail and mark the 10" x 10" opening required. This is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening. See chapter 25 of the Uniform Building Code for Roof Framing details. A one inch minimum air space clearance must be maintained between the chimney section and the roof.

8. Install roof flashing or site-produced chase top. Position a roof flashing or a site-produced chase top and secure in place with nails.

9. Assembling chimney sections. Continue to add chimney sections through the roof opening, maintaining at least a one inch air space clearance.

IF ROOM ABOVE, FIRESTOP PLACED BELOW



IF ATTIC ABOVE, FIRESTOP PLACED ABOVE

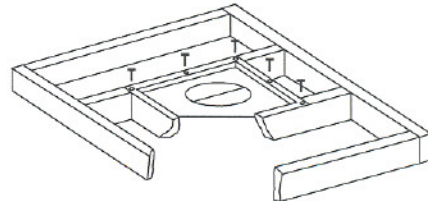


Figure 13
Installing the Firestop Spacer

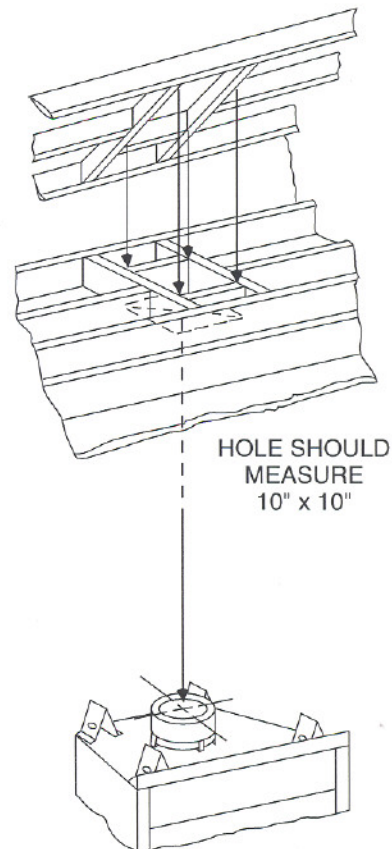


Figure 14
Ceiling and Attic Construction



10. Termination cap. Major building codes specify a minimum chimney height above the roof top depending on roof pitch. See Figures 15 and 16.

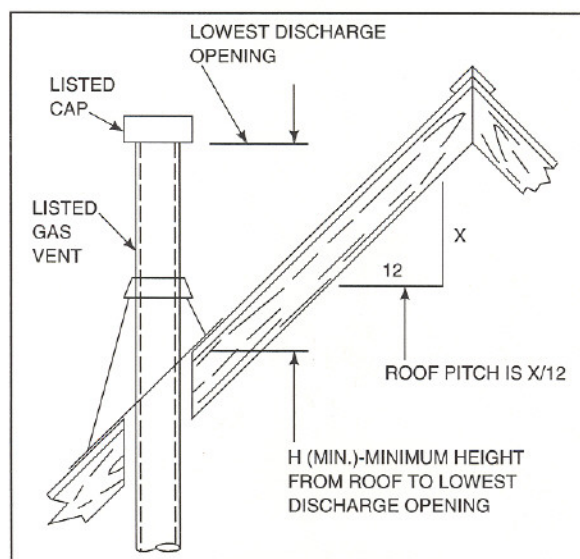


Figure 15

Chimney Height if Termination Location is at Least 8' From a Vertical Wall

Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0
6/12 to 7/12	1.25
Over 7/12 to 8/12.....	1.5
Over 8/12 to 9/12.....	2.0
Over 9/12 to 10/12.....	2.5
Over 10/12 to 11/12.....	3.25
Over 11/12 to 12/12.....	4.0
Over 12/12 to 14/12.....	5.0
Over 14/12 to 16/12.....	6.0
Over 16/12 to 18/12.....	7.0
Over 18/12 to 20/12.....	7.5
Over 20/12 to 21/12.....	8.0

Figure 16

Chimney Height

These chimney heights are necessary in the interest of safety and do not ensure draft-free operation. Trees, buildings, adjoining roof lines, adverse wind conditions, etc., may create a need for a taller chimney should down drafting occur.

STEP 3 - Double Checking

When construction of the entire chimney system has been completed, double check to make sure all venting pipes and termination caps are unobstructed. Exhaust gases are extremely hot. When you have chosen a horizontal termination, be sure there are no possible future obstructions from trees, bushes, snow drifts, etc. A cap shield can be purchased to help prevent possible contact.

STEP 4 - Gas line installation

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 17.

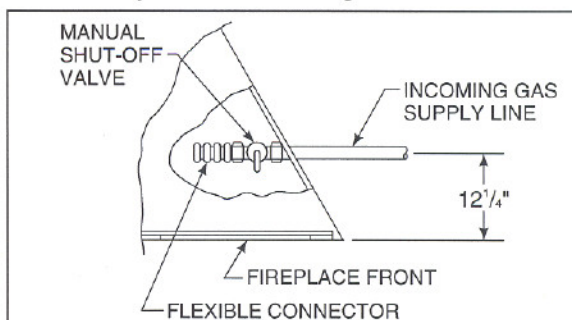


Figure 17
Gas Line

STEP 5 - Gas Line Connection

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

Bleed the gas line to extract any air that may have been trapped inside the pipe.

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.

NOTE

ALTHOUGH EACH UNIT IS LEAK TESTED IN THE FACTORY, IT IS MANDATORY DURING THE FIRST BURN FOR YOU TO CHECK FOR LEAKS. THESE MAY OCCUR DUE TO HANDLING, SHIPPING, INSTALLATION AND THE LIKE AND ARE BEYOND THE CONTROL OF HEATILATOR. EVERY JOINT, INCLUDING THE VALVE, PILOT, FITTINGS, ETC., MUST BE CHECKED.



STEP 6 - Lower Panel Removal

To remove the lower panel, gently lift and pull on the outside edges of the panel as shown in Figure 18, Step A. The top part of the panel will rotate downward.

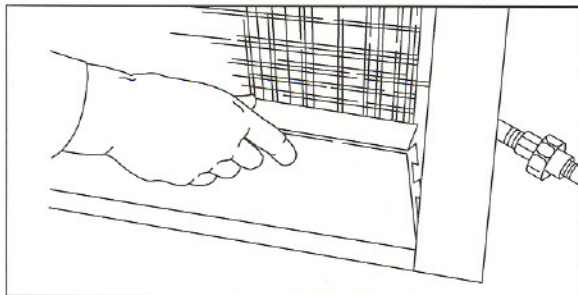


Figure 18, Step A
Lower Panel Removal

Two spring hinges secure the lower portion of the panel into place. See Figure 18, Step B. Simply pull the hinges toward the center of the panel and then pull out the entire panel (Figure 18, Step C). To replace the panel, reverse this action.

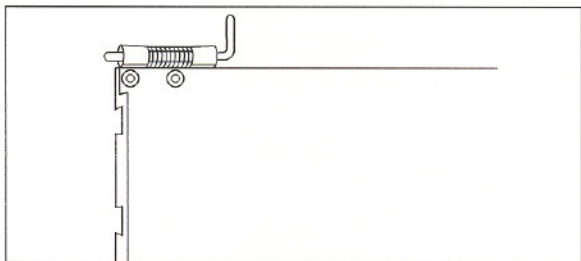


Figure 18, Step B
Lower Panel Removal

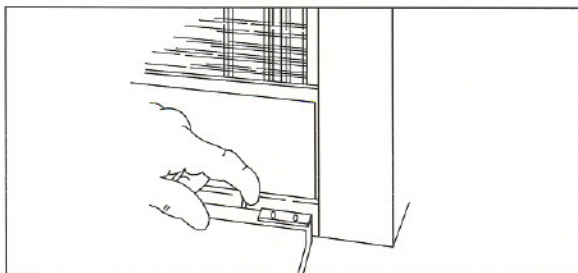


Figure 18, Step C
Lower Panel Removal

STEP 7 - Wiring

Note: This 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-latest edition or in Canada Current CSA C22.1 Canadian Electrical Code. This appliance is not intended for use with a thermostat. The addition of a thermostat will void the warranty and may create a fire hazard.



A. ELECTRONIC IGNITION

1. Appliance Requirements. This appliance requires a 110V power supply from a remote wall switch to the appliance junction box for operation. A wiring diagram is shown in Figure 19.

2. Remote Wall Switch. Position the junction box (not provided) in the desired place on the wall. Run the wire to the junction box, connect it to the provided wall switch and mount inside the junction box. In line with this junction box, you must have an on/off switch or a BC10.

3. Optional Accessories Requirements. Optional accessories may be added now or at a later date, however, wiring should be done now to avoid significant wall reconstruction. No additional power supplies are required for the remote control (RC5). Wiring diagrams are provided with all accessories.



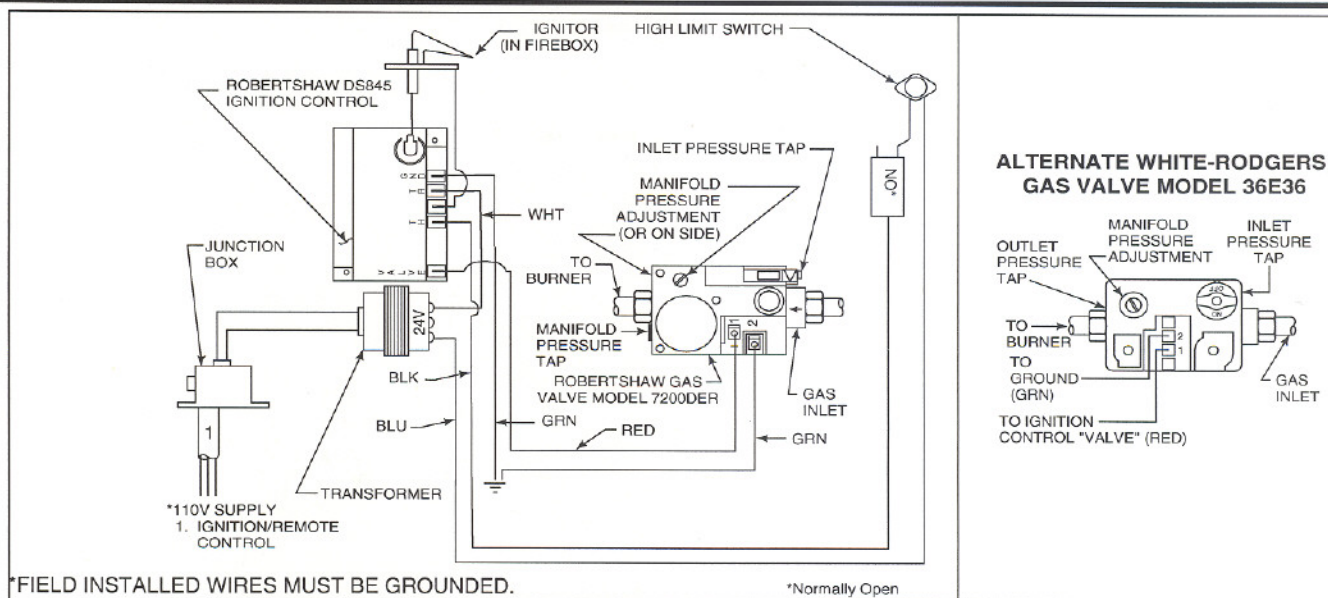


Figure 19
Electronic Ignition Wiring Diagram

B. STANDING PILOT IGNITION

Note: This appliance **DOES NOT** require a 110V power supply for operation. Connecting the wall switch to a 110V power supply will cause the unit to malfunction and destroy the valve and thermopile.

1. Remote Wall Switch. Position the junction box (not provided) in the desired place on the wall. Wiring located for the the wall switch will be found protruding from the left side of the fireplace. Run the wire to the junction box, connect to the provided wall switch and mount inside the junction box. A wiring

diagram is shown in Figure 20. If you extend beyond the wall switch wires provided, you must not wire on extension nuts, but replace the existing wires with desired length. **NOTE:** extended lengths of wire will reduce millivolt reading and may cause unit shutdowns.

2. Optional Accessories Requirements. Optional accessories may be added now or at a later date, however, wiring should be done now to avoid significant wall reconstruction later if accessories are added. The remote control (RC4) requires a separate 110V power supply directly to the appliance junction box, as shown in Figure 20. In line with this junction box, you must have an on/off switch or a BC10. Wiring diagrams are provided with all accessories.

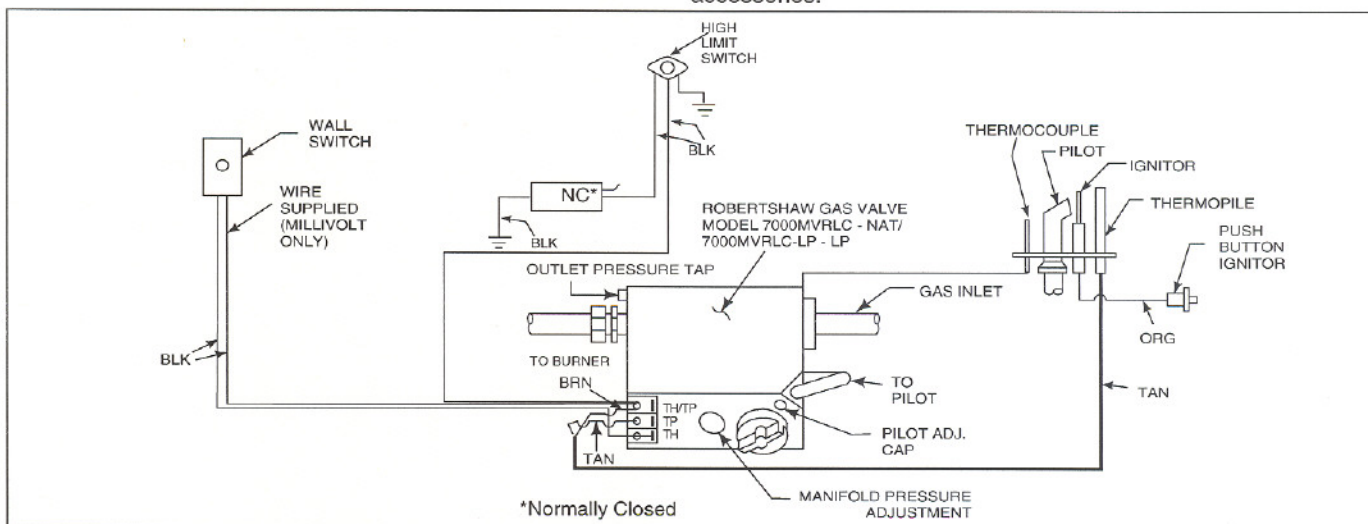


Figure 20
Standing Pilot Ignition Wiring Diagram



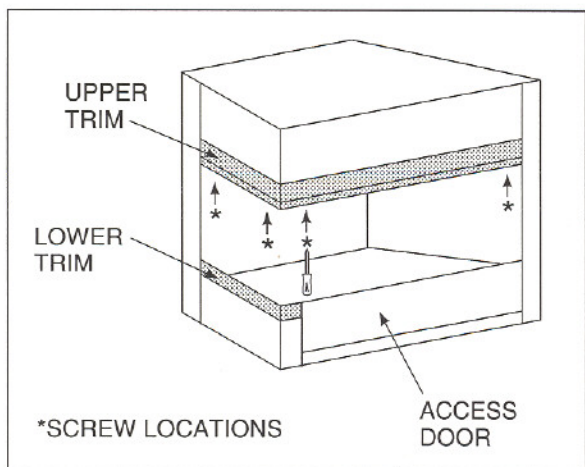


Figure 21
Upper Trim

STEP 8 - Upper Trim Removal

The upper trim is constructed with notches. To remove the upper trim, use a phillips screwdriver to loosen the screws as shown in Figure 21. The trim should disengage easily.

STEP 9 - Lower Trim Removal

The lower side trim is constructed with notches. To remove the trim, use a phillips screwdriver as shown in Figure 22 to loosen the screws. The trim should disengage easily.

STEP 10 - Finishing

When finishing the face of the appliance, combustible material may be brought up to the sides of the appliance, but must never overlap onto the black metal. The black metal may be covered with non-combustible material only.

After applying the finishing material, a non-combustible sealant, one-half inch wide maximum, must be used to close off any gaps at the top and sides between the fireplace and finishing to prevent cold air leaks. See Figure 23.

A combustible mantel may be installed at a minimum of 42 inches above the base of the appliance.

Step 11 - Front Glass/Screen Removal

To remove the glass and screen assembly, first loosen the five (5) screws located on the top portion of the glass as shown in Figure 24. Be sure to hold the glass to prevent it from falling out once the screws have been loosened and removed. Remove the metal retaining strip which is positioned along the upper edge of the glass. See Figure 25. Gently tilt the glass towards yourself and lift it out of the bottom track. See Figure 25a.

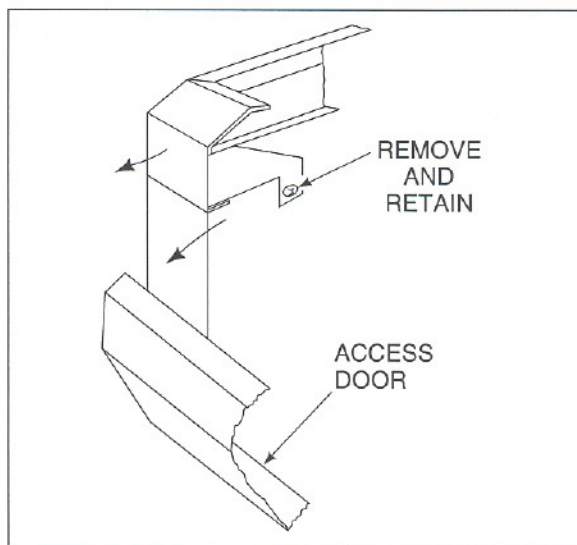


Figure 22
Lower Trim

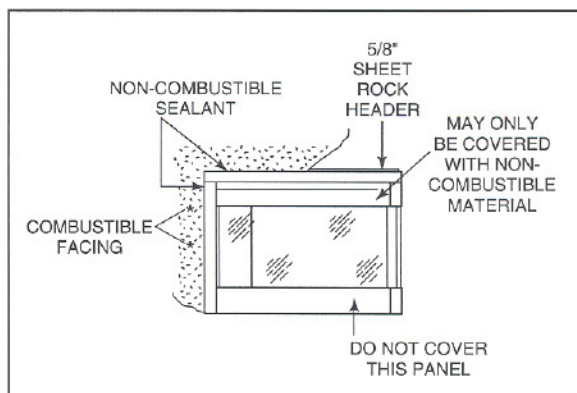


Figure 23
Location of Trim

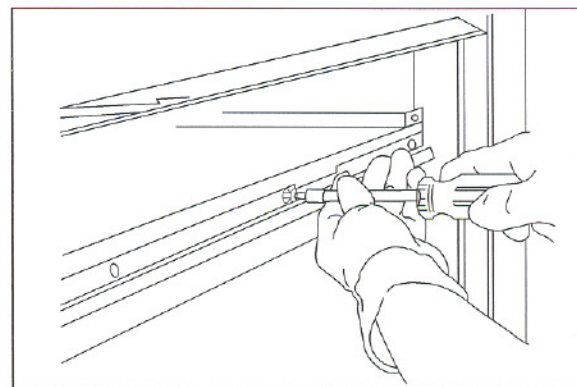


Figure 24
Front Glass Removal



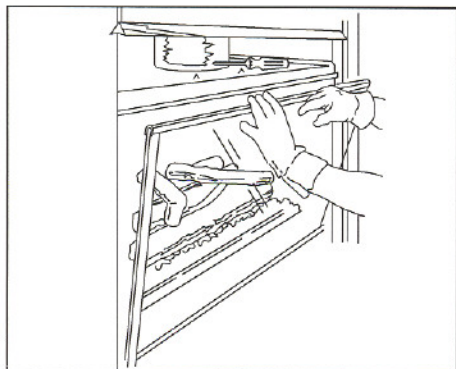


Figure 25
Front Glass Removal - Front View

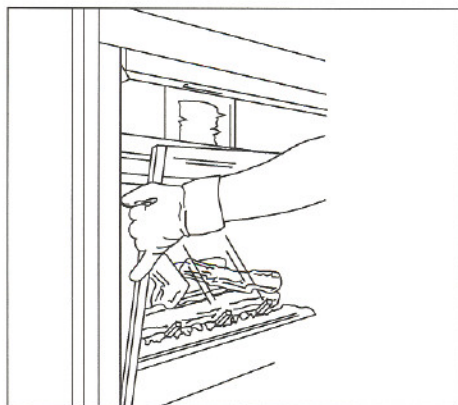


Figure 25a
Front Glass Removal - Front View Shown

Step 11A - Side Glass/Screen Removal

Now you are able to remove side glass. The glass/screen are held in a single assembly. See Figure 26. The front assembly can be removed with the use of a 1/2" wrench. **DO NOT ATTEMPT WHILE HOT.** Loosen the bottom screws with a phillips screwdriver. **DO NOT REMOVE THEM.** Remove the bolt and spring assembly as shown in Figure 26a. After removal, tilt the glass/screen assembly back and lift it from position. Safety gloves must be worn at this time to prevent injury. See Figures 27 and 27a.

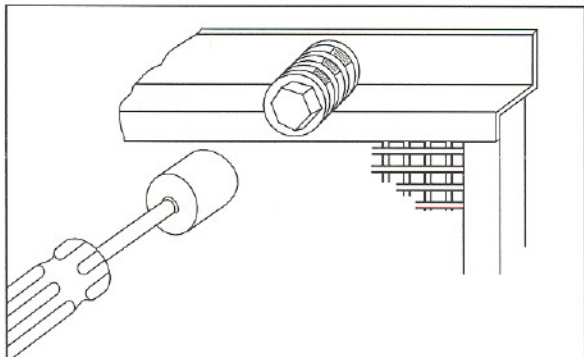


Figure 26
Glass/Screen Removal

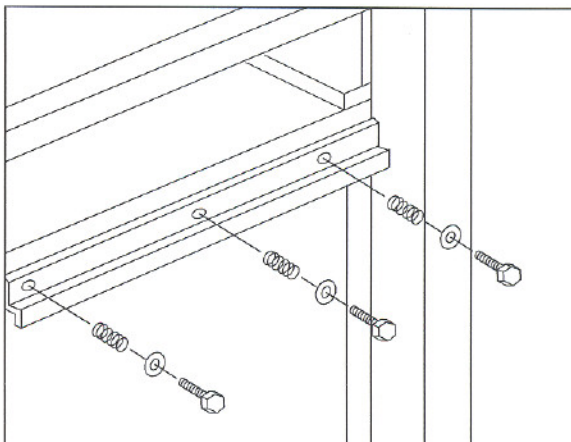


Figure 26a
Glass Removal

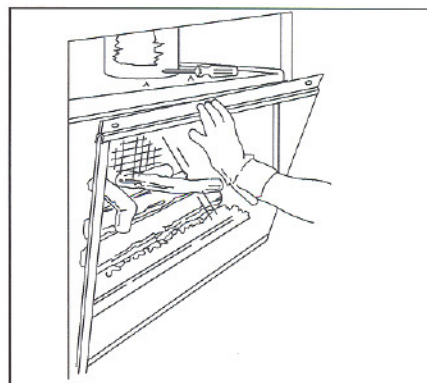


Figure 27
Glass/Screen Removal

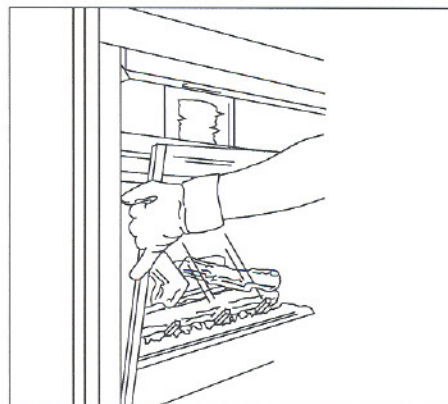


Figure 27a
Glass Removal



STEP 12 - Positioning the Logs

Place the logs as shown in Figure 28. Place the larger log in front.

Make sure the smaller logs with holes are positioned over the pins on the large logs.

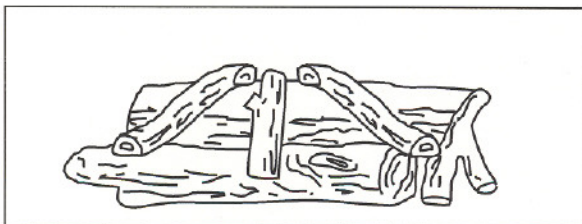


Figure 28
Positioning the Logs

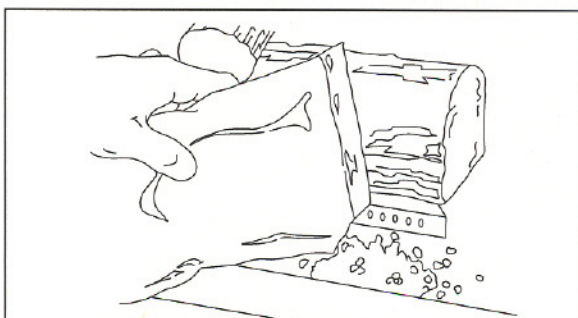


Figure 29
Placing the Lava Rock

STEP 13 - Placing the Lava Rock and Rock Wool

Spread the lava rock over the area in front of the burner. Do not cover the front gas ports with the lava rock. See Figure 29.

Break the rock wool into pieces, no bigger than 1/2" diameter, and place them close to the front gas ports so that the flame can touch the rock wool. This creates the glowing ember look. Be sure not to pack the rock wool against the gas ports. See Figure 30.

STEP 14 - Glass/Screen Replacement

After arranging the log set in the unit, replace the fixed pane of glass. Be sure the rubber gasket material is on the top and bottom edges of the glass. Carefully lower the glass into the screen frame. Next, position the screen/glass assembly over the loosened screws at the bottom of the unit. Position the spring bolt assembly as shown. Do not over-tighten. Bring the bolts in until they hit the last thread. Do not force as it will damage the unit. See Figure 31.

WARNING

NEVER OPERATE THIS APPLIANCE WITH THE GLASS REMOVED OR NOT SEALED.

STEP 15 - Replacing the Trim and Lower Panel

Simply replace each trim by positioning the notches in place over the screws on either trim. The trim should snap into place easily. Tighten with a phillips screwdriver.

Align the lower hinges on the panel with the holes provided in the appliance. Place them in those holes and pivot the panel upward and snap into place. See Figure 32.

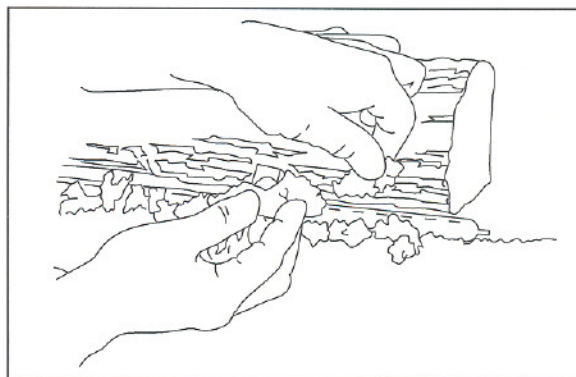


Figure 30
Placing the Rock Wool

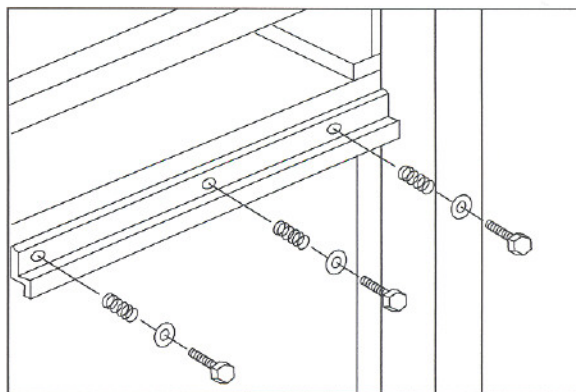


Figure 31
Glass/Screen Replacement

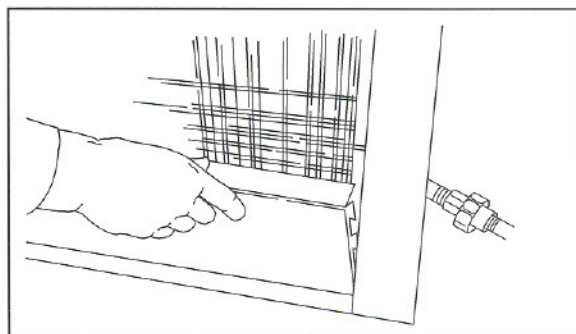


Figure 32
Trim and Lower Panel Replacement



VI. OPERATING INSTRUCTIONS

TO THE CONSUMER: To determine whether your appliance is an electronic ignition or a standing pilot ignition, remove the lower panel to examine the wiring system. If your system has a red push button (as shown in Figure 33 below), you own a standing pilot ignition fireplace. If no red button is present, you own an electronic ignition appliance.

You may also check the rating label located on the inside of the lower panel to determine ignition type.

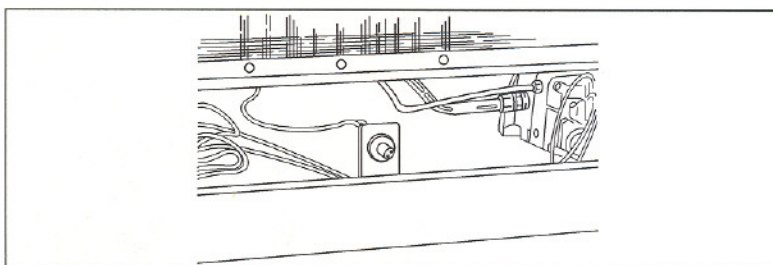


Figure 33
Standing Pilot Ignition

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.

STANDING PILOT (GC500CL, GC500CLL, GC500CR, GC500CRL)

- A. This appliance (standing pilot version) 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.
 - 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. Forced 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.

ELECTRONIC IGNITION (GC500CLE, GC500CLLE, GC500CRE, GC500CRLE)

- A. This appliance (electronic ignition version) 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.
 - 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, do not 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.



WARNING

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES 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 THIS APPLIANCE.

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

Before operating this appliance, please review the safety precautions given on page 2 as well as the items listed below:

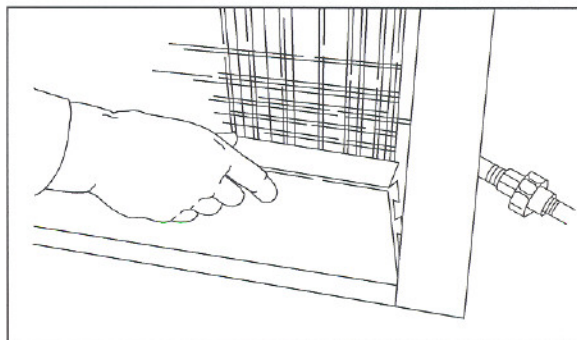
1. Check to make sure the logs, rock wool and lava rock have all been placed correctly. (Refer to Steps 13 and 14 on page 18). The top of the burner and the holes in the sides of the burner should not be covered with rock wool. If these items are not visible, please adjust before continuing.
2. Check to see that all wiring is correct and enclosed to prevent possible shock. This is done by removing the lower panel (see Step 1 following) to access the control area.
3. Check to ensure there are no gas leaks. This may be done with a soap and water solution.
4. Make sure the front glass is sealed and in its proper position. Never operate this appliance with the glass removed or not sealed.
5. Verify that all venting and caps are unobstructed. Exhaust gases are extremely hot. Be sure there are no possible future obstructions from trees, bushes, snow drifts, etc. A CS200 cap shield can be purchased to help prevent possible contact.
6. Read and understand these Instructions thoroughly before attempting to operate this appliance.

STEP 1- Lower Panel Removal

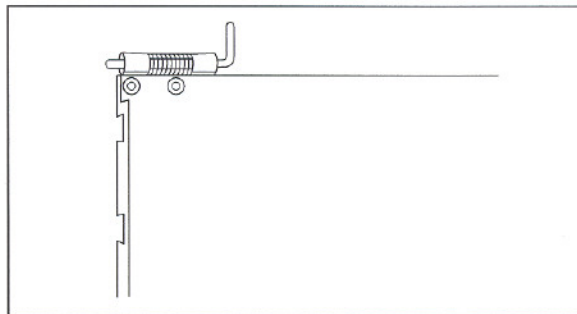
To remove the lower panel, gently lift and pull on the outside top edges of the panel as shown in Figure 34, Step A. The top of the panel will rotate downward.

Two spring hinges secure the lower portion of the panel into place. See Figure 34, Step B. Simply pull the hinges toward the center of the panel and then pull out the entire panel (Figure 34, Step C). To replace the panel, reverse this action.

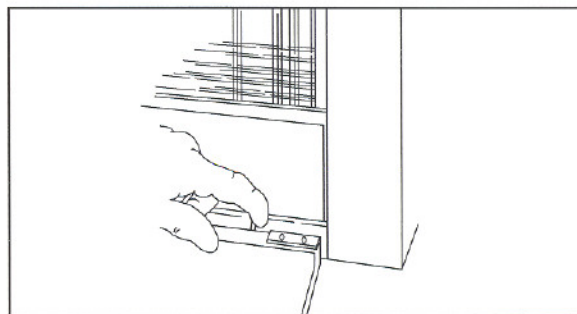
If you own an electronic ignition, at this point skip section A on the following page and continue with section B on page 22.



**Figure 34, Step A
Lower Panel Removal**



**Figure 34, Step B
Lower Panel Removal**



**Figure 34, Step C
Lower Panel Removal**



A. STANDING PILOT OPERATION

1. Initial and Seasonal Lighting Procedure. Initial lighting constitutes the first time the appliance has been lit after installation. Seasonal lighting refers to lighting the appliance after it has been unused and the gas valve has been turned to OFF.

Be sure the remote wall switch and the gas knob (located inside the lower panel) have been turned to the OFF position. See Figure 35. Also, your unit may have a rocker ON/OFF switch installed inside the lower panel; if it does, this also needs to be turned to the OFF position. If they are not, do so and allow the appliance to sit for five minutes so any gas that may have accumulated in the main burner compartment escapes.

Turn the gas knob to PILOT, as shown in Figure 36, and press in. While holding it in, light the pilot by pressing the red ignitor button several times until the gas ignites. Continue to hold in the gas knob for about one minute after the pilot is lit. Release the gas knob. The pilot should remain lit. If it goes out, turn everything to the OFF position, let it sit for five minutes and repeat this step again.

When the pilot remains lit, turn the gas knob to the ON position. See Figure 37. You may now turn the remote wall switch to the ON position which will turn on the main burner. Watch your appliance display beautiful, dancing flames. Initially, the flames may resemble more of a blue color but after the first 20 minutes of operation, they will become more yellow.

2. Seasonal Shutdown. When the burning season comes to an end, the entire system should be shut down. This way, no gas will be running to the appliance while it is not in use.

To shut down the appliance for a long period of time, you must first shut off the main burner by moving the remote wall switch (and rocker ON/OFF switch, if applicable) to the OFF position.

The next step is to remove the lower panel to expose the wiring system. (Follow Step 1 on page 20.) Locate the gas knob and turn it to the PILOT position. Press in slightly and continue turning to the OFF position. Your entire system is now shut down.

3. Lighting Procedure During Regular Use. Simply turn the wall switch to the ON position. This will ignite the main burner.

4. Shutdown During Regular Use. Simply turn the remote wall switch to OFF. This will disengage the burner and the flames will extinguish.

When first operated, this unit may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Glass will also require cleaning after the initial burn. (Instructions for cleaning the glass are given on page 23.)

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

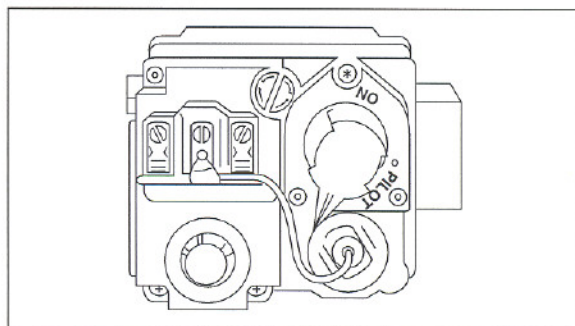


Figure 35
Standing Pilot Ignition Valve "OFF"

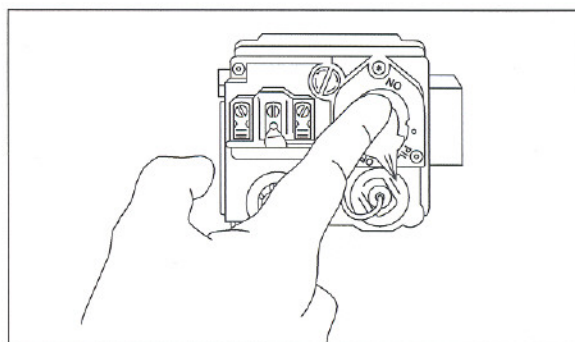


Figure 36
Standing Pilot Ignition Valve to "PILOT"

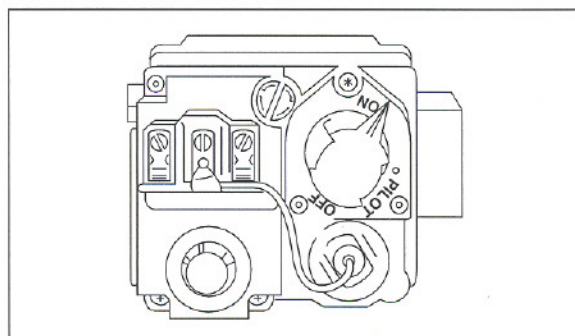


Figure 37
Standing Pilot Ignition to "ON"

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

Skip section B and continue with Step 2.



B. ELECTRONIC IGNITION OPERATION

1. Initial and Seasonal Lighting Procedure. Initial lighting constitutes the very first time the appliance has been lit after installation. Seasonal lighting refers to lighting the unit after it has been unused and the gas valve has been turned to OFF.

Be sure the remote wall switch and the gas knob (located inside the lower panel) have been turned to the OFF position. See Figure 38. Also, your unit may have a rocker ON/OFF switch installed inside the lower panel; if so, this also needs to be turned to the OFF position. If they are not, do so and allow the appliance to sit for five minutes so any gas that may have accumulated in the main burner compartment escapes.

Locate the gas valve knob inside the lower panel and turn it to the ON position. See Figure 39. Then, turn the remote wall switch to ON. This will activate an electronic spark. Watch your appliance display beautiful dancing flames. Initially, the flames may resemble more of a blue color but after the first 20 minutes of operation, they will become more yellow.

2. Seasonal Shutdown. When the burning season comes to an end, the entire system should be shut down. In this way, no gas will be running to the appliance while it is not in use.

To shut down the appliance for an extended period of time, you must first shut off the main burner by moving the remote wall switch (and the rocker ON/OFF switch, if applicable) to the OFF position.

The next step is to remove the lower panel (Step 1 on page 20) to expose the wiring system. Locate the gas valve knob and turn it to the OFF position. Your entire system is now shut down.

3. Lighting Procedure During Regular Use. Simply turn the wall switch to the ON position. This will activate the ignitor and the main burner will light.

4. Shutdown During Regular Use. Simply turn the remote wall switch to the OFF position. This will disengage the ignitor and the main burner will extinguish.

When first operated, this unit may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Glass will also require cleaning after the initial burn. (Instructions for cleaning the glass are given on page 23.)

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

STEP 2 - Replacing the Lower Panel

To replace the lower panel, align the lower hinges on the panel with the holes provided in the appliance. Place them in those holes and pivot the panel upward as shown in Figure 40. The panel should connect smoothly back into place.

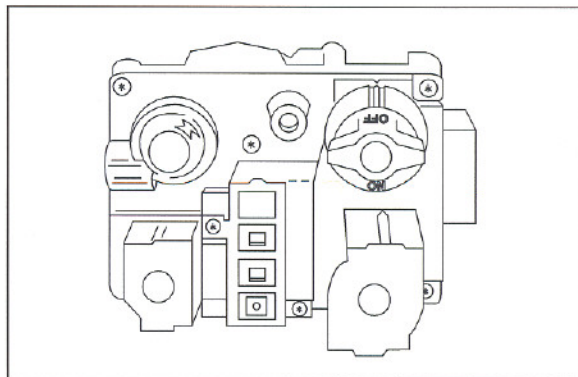


Figure 38
Electronic Ignition Valve to "OFF"

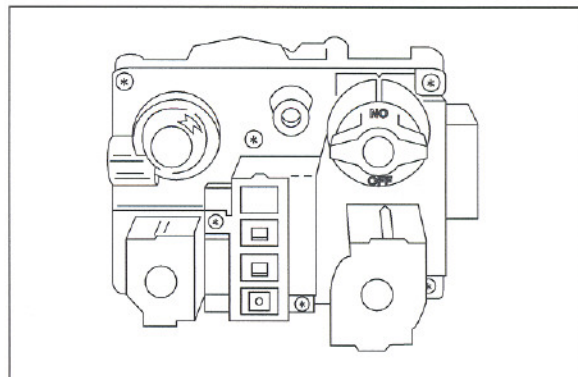


Figure 39
Electronic Ignition Valve to "ON"

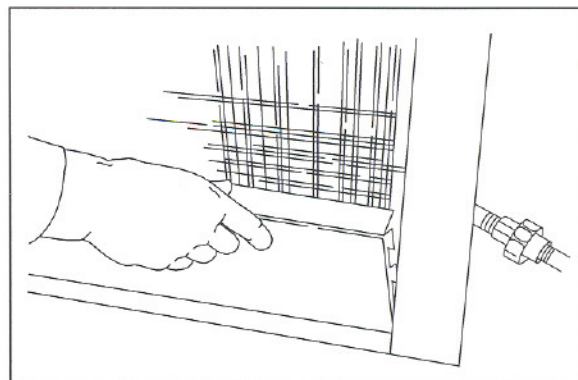


Figure 40
Lower Panel Replacement

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



VII. MAINTENANCE INSTRUCTIONS

Cleaning the burner and control compartment

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

Checking flame patterns

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 (electronic) or thermopile (standing pilot) tips should be covered with flame. See Figures 41 through 43.

Venting system inspection

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.

Cleaning the glass

It is recommended to wear gloves while handling or removing glass. **DO NOT REMOVE GLASS WHEN HOT.**

To remove the glass for cleaning, follow Step 11 on page 16. Handle glass panel with care to avoid striking or scratching it on hard objects.

To clean the glass, use a non-abrasive, mild cleaning solution. (For example, POLISH PLUS by KEL KEM.) Simply apply an adequate amount to the glass and wipe off with a damp cloth.

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

In the event of glass breakage, follow glass removal instructions 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 part number 15573 ordered direct or through your local distributor. Never use substitute material. Only fully tempered soda lime safety glass or optional ceramic glass may be used on this appliance.

Log cleaning

Logs can be easily lifted out of position. Carbon build-up can be removed with a vacuum cleaner. To prevent the possibility of soot, we have provided your fireplace with an adjustable air shutter. Your air shutter is provided in an open position to ensure clean operation under normal situations. In the event that soot is accumulating in your appliance, the air shutter should be opened to 1/4" for natural gas or fully open for propane gas. This can be done with a screwdriver or a 1/4" wrench. Also, ensure logs are positioned correctly to minimize flame contact with the logs.

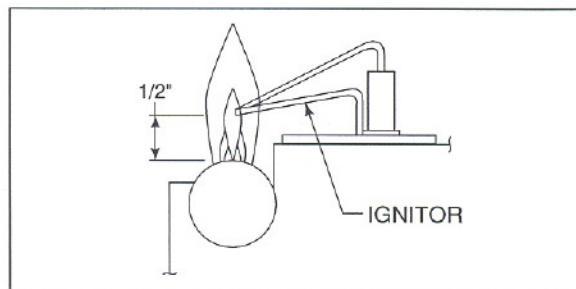


Figure 41
Electronic Ignition

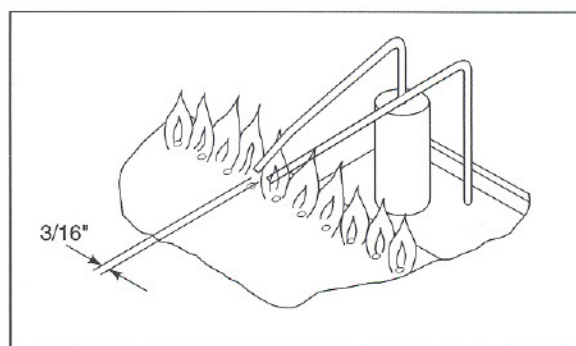


Figure 42
Electronic Ignition

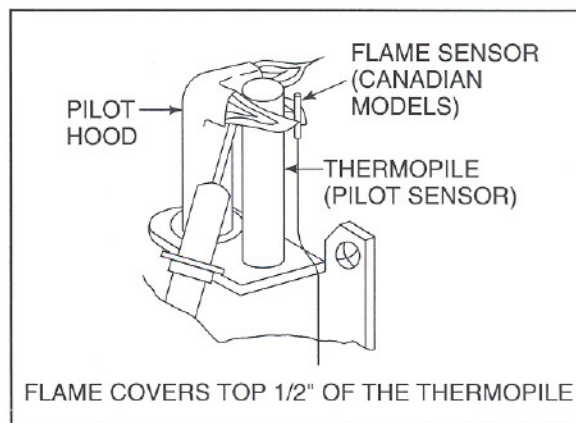


Figure 43
Standing Pilot

Note: When cleaning the glass, **NEVER** use abrasive materials. **NEVER** clean glass when hot. Always wear hand and eye protection and keep children and pets a safe distance away.



VIII. TROUBLE SHOOTING

ELECTRONIC IGNITION (GC500CLE, GC500CLLE, GC500CRE, GC500CRLE)

Problem	Cause	Corrective Action
1. Spark ignitor will not light burner after repeated attempts.	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 there is no spark, replace ignitor. Spark should be extending approx. 3/16" to ground wire. See Figure 42. Adjust gap to give proper spark. Remove hands from electrode before attempting.
2. Burner will not stay lit.	A. Defective flame sensor. B. No ground.	Check burner flame. See Figure 41. Adjust sensor if necessary. Be sure sensor is secured tight into bracket. Be sure wiring connections are tight throughout system, including high limit switch. Check that wiring is grounded as shown in Figure 19.
3. With valve and wall switch in "ON" position, no gas to burner.	A. Gas valve(s) shut off. B. Plugged burner orifice. C. Wall switch defective.	Check all gas valves leading to appliance. Turn to the "ON" position. Check wall switch for proper connections. Check for 24 volt power off secondary on the transformer. Check burner orifice; remove blockage. Check power source (fuses).
4. Glass fogs up.	A. A normal result of gas combustion.	No action is necessary. After the fireplace has warmed up, the glass will clear.
5. Blue flames.	A. A normal result during the first 20 minutes of burning.	No action is necessary. Flames will begin to turn more yellowish after about 20 minutes of burning.
6. Appliance turns itself off after a period of time.	A. High limit safety switch is activated.	Have a qualified service technician check venting system for blockage, e.g., bird nests, damage. Ensure proper venting condition.



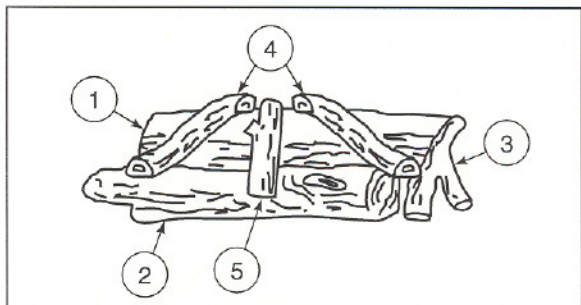
STANDING PILOT (GC500CL, GC500CLL, GC500CR, GC500CRL)

Problem	Cause	Corrective Action
1. Burner will not ignite.	A. 110 volts of electrical current has burned out the wall switch.	Remove voltage and replace valve and thermopile.
2. Spark ignitor will not light the pilot after repeat pressing of Red Button.	A. Defective ignitor. B. Misaligned electrode.	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 the bottom of the pilot hood. Adjust gap to give proper spark. Remove hands from electrode before pressing Red Button.
3. Pilot light will not stay lit.	A. Defective pilot thermopile.	Check pilot flame. See Figure 43. 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 the thermopile.
4. With pilot lit, valve and on/off switch in "On" position, no gas to burner.	A. On/off switch defective. B. Plugged burner orifice.	Check on/off switch for proper connections. Connect wires across terminal at on/off switch. If burner comes on, replace on/off switch. If burner does not come on, connect to on/off switch junctions at valve. If burner comes on, replace wires. Check burner orifice; remove blockage.
5. Appliance turns itself off after a period of time.	A. High limit safety switch activated.	Have a qualified service technician check venting system for blockage, e.g., bird nests, damage. Ensure proper venting condition.
6. Glass Fogs up.	A. A normal result of gas combustion.	No action is necessary. After the appliance has warmed up, the glass will clear.
7. Blue flames	A. A normal result during first 20 minutes of burning.	No action is necessary. Flames will begin to turn more yellowish after about 20 minutes of burning.

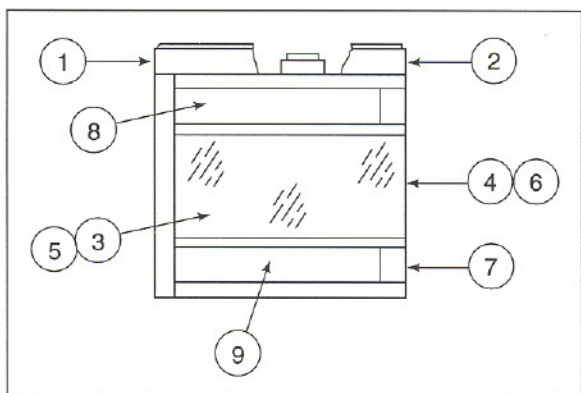


IX. REPLACEMENT PARTS

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

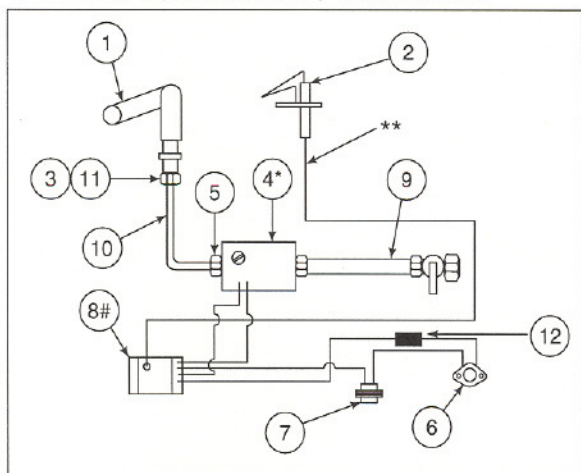


ITEM	PART NO.	DESCRIPTION
1	15691	Back Log
2	24755	Front Log
3	18782	End Log
4	17229	Left and Right Log
5	18781	Top Middle Log



ITEM	PART NO.	DESCRIPTION
1	19677 19678	Top Front, L.H. Top Front, R.H.
2	21019	Top Side
3	16146	Front Glass
4	19827	Side Glass
5	20188	Front Screen Assembly
6	20289	Side Screen Assembly
7	20165	Lower Side Face
8	19683	Upper Front Face
9	19650	Access Door Assembly

ELECTRONIC IGNITION-GC500CLE, GC500CLLE, GC500CRE, GC500CRLE



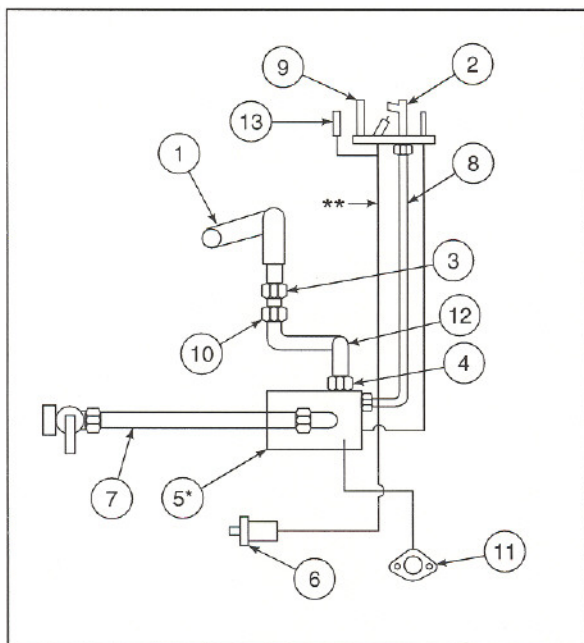
ITEM	PART NO.	DESCRIPTION
1	24170	Burner
2	15689	Ignitor
3	13410	Orifice - Natural
	13445	Orifice - Propane
4*	71515 71516 71517 71518	Valve - Natural (White-Rodgers) Valve - Natural (Robertshaw) Valve - Propane (White-Rodgers) Valve - Propane (Robertshaw)
5	13425	Male Connector - Brass
6	16957	High Limit Switch
7	17836	Transformer
8#	15695	Ignition Control (Channel Products) Ignition Control (Fenwal)
9	17230	Flexible Line Assembly
10	19830	3/8" Gas Tubing
11	13405	Bulkhead
12	13426	Microswitch

Ignition control identification must be made. They are marked Channel Products or Fenwal.

* Valve identification must be made. They are marked "White-Rodgers" or "Robertshaw".

** If any of the original wiring as supplied with the appliance must be replaced, it must be replaced with Type 18 ga., 105C wire, or its equivalent.



**STANDING PILOT - GC500CL, GC500CLL,
GC500CR, GC500CRL**


ITEM	PART NO.	DESCRIPTION
1	24170	Burner
2	25283	Pilot Assembly - Natural
	25282	Pilot Assembly - Propane
3	13410	Orifice - Natural
	13445	Orifice - Propane
4	13425	Male Connector - Brass
5	23363	Valve - Natural (Robertshaw)
	23364	Valve - Propane (Robertshaw)
6	13416	Push Button Ignitor
7	17230	Flexible Line Assembly
8	19831	1/4" Pilot Tubing (Robertshaw)
	19832	1/4" Pilot Tubing (White-Rodgers)
9	13411	Thermopile (Pilot Sensor)
10	13405	Bulkhead
11	24968	High Limit Switch
12	19830	3/8" Gas Tubing
13	13426	Microswitch (not shown)

** If any of the original wiring as supplied with the appliance must be replaced, it must be replaced with Type 18 ga., 105C wire, or its equivalent.



Attention

APPLIANCE INSTALLER

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

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The first name in fireplaces

Heatilator Inc.
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Mt. Pleasant, IA 52641
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319/385-9211 FAX 319/385-9225