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

HFT DESIGNER GAS APPLIANCES (B-VENT)

OWNERS MANUAL

AND INSTALLATION INSTRUCTIONS

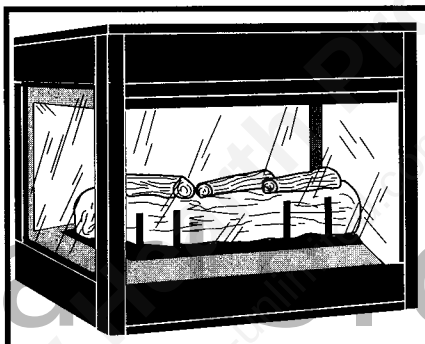
SERIES: GC112, GC720, GC920

This manual must be used for installation of a HFT Designer Gas Appliance and retained by the homeowner for operation and maintenance instructions.

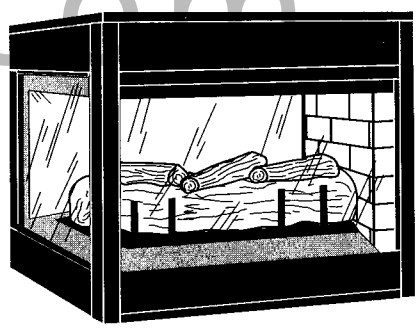
FOR YOUR SAFETY

What to do if you smell gas:

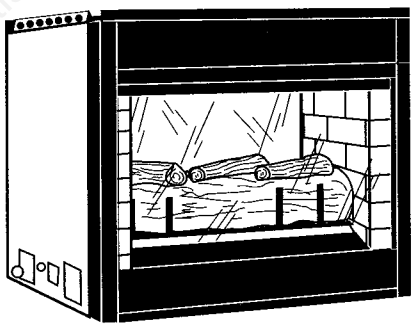
- **Do not try to light any appliance.**
- **Do not touch any electrical switch.**
- **Do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**



GC112 Series
Island



GC920 Series
Penisula



GC720 Series
See-Through

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 13 for wiring instructions.

Plumber: Please refer to page 6 and 12 for gas connection information.

Framer: Please refer to page 7 for framing specifications.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Table of Contents

Safety Precautions

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause a 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. GC112, 720, 920 series units are vented decorative gas appliances. Do not burn wood or other material in these appliances.
5. NEVER leave children unattended when there is a fire burning in the unit.
6. This appliance must be vented with a minimum 5" B vent system and must terminate above the roof line. Venting **must not be connected** to a chimney flue servicing a solid fuel burning appliance.
7. Use only the fuel gas specified on the rating label of this gas appliance. Keep any flammable liquids a safe distance from the unit.
8. While servicing this appliance, 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. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (kPa).
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.
12. Provisions shall be made to provide adequate combustion and ventilation air.
13. The appliance area shall be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.
14. The flow of combustion and ventilation air should not be obstructed.

I. LISTINGS AND CODE APPROVALS

U.S. and Canada Certification

The HFT Designer Gas Appliance has been tested in accordance with the ANSI standard Z21.50b-1990 or, in Canada, the current CAN/CGA M2.22-M92, CAN/CGA 2.17-M91 and have been LISTED by Underwriters Laboratories Inc. for installation and operation as described in these Installation and Operating Instructions. All components are UL, AGA, CGA orCSA safety certified.

Local codes

Check with your local building code agency prior to installing this appliance 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 below. 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, a separate source of electrical power should be supplied to the unit at the time of initial installation of the system for possible addition of these accessories at a later date.

Fuel

Any additions, changes or conversions required in order for the appliance to satisfactorily meet the application needs, they must be made by a qualified service technician using factory specified and approved parts.

This product is manufactured to use natural gas or propane gas, depending on model purchased. A natural gas unit can be converted to use propane gas later, but **only** if done by a qualified service technician and **only** if the CKP Natural Gas to Propane Gas Conversion Kit is used. In the event your appliance must be converted back to natural gas from propane, you must use a CKN Propane Gas to Natural Gas Conversion Kit.

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.

II. DESCRIPTION OF THE SYSTEM

The HFT Designer Gas Series are B-vent decorative gas appliances. While a significant amount of heat is created by these appliances, it is not intended to be and, therefore, should not be used as a heater.

This HEATILATOR system must consist of the following:

1. Fireplace
2. B-Vent System
3. Termination

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	
Level	
Electrical drills/bits	
Square	

We strongly recommend that you DO NOT install B-Vent Gas Appliances in strong negative air locations, such as a basement or a public facility. Living rooms with cathedral ceilings could be susceptable to a negative air situation, but such installations can be overcome through raising the termination, depending on specific installations. This fireplace uses room air for normal operation and could have problems establishing a positive draft in negative air locations. In lieu, we recommend a direct vent appliance.

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.

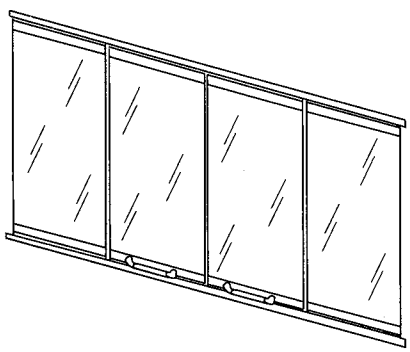
The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

III. SYSTEM COMPONENTS

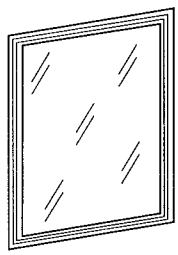
The table below is a list of only those components which may be safely used with this decorative gas appliance.

Catalog Number	Description
GC112	Island, standing pilot, natural gas, heat circulating appliance
GC720	See-Through, standing pilot, natural gas, heat circulating appliance
GC920	Peninsula, standing pilot, natural gas, heat circulating appliance
The following suffixes are defined as follows:	
no suffix	Natural Gas, Standing Pilot with standard round logs
L	Propane Gas
E	Electronic Ignition
S	Split Log Option
Example:	GC720LES is a See-through, electronic ignition, propane gas, heat circulating appliance with the split log option. GC920L is a Penisula, standing pilot, propane gas, heat circulating appliance with standard round logs.
	Optional Components
CKP	Natural gas to propane gas conversion kit
CKN	Propane gas to natural gas conversion kit
RC4	Remote control (standing pilot)
RC5	Remote control (electronic ignition)
RC6	Battery operated remote control (standing pilot only)
RCP	Remote Control Plus
TK112A	Antique brass trim kit (12 pieces)
TK112B	Polished brass trim kit (12 pieces)
TK720A	Antique brass trim kit (8 pieces)
TK720B	Polished brass trim kit (8pieces)
TK920A	Antique brass trim kit (10 pieces)
TK920B	Polished brass trim kit (10 pieces)
DF310A	Fixed Original style bi-fold antique brass glass doors
DF310B	Fixed Original style bi-fold polished brass glass doors
DF315A	Original style antique brass fixed end panel (GC112 & GC920 Series only)
DF315B	Original style polished brass fixed end panel (GC112 & GC920 Series only)

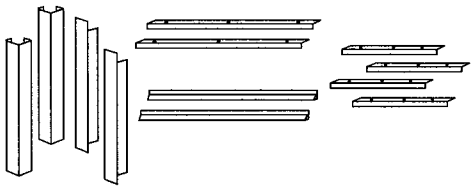
NOTE: An optional thermally-actuated vent damper may be purchased from your B-vent supplier to help reduce heat loss through the flue area while the appliance is not in operation.



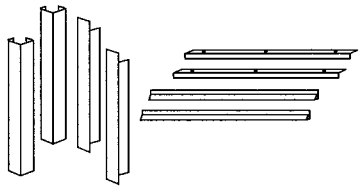
DF310
Original Style B-fold Fixed Doors



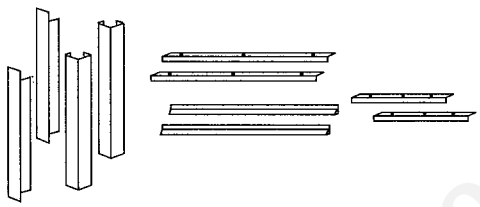
DF315
Original Style Fixed End Panel



TK112

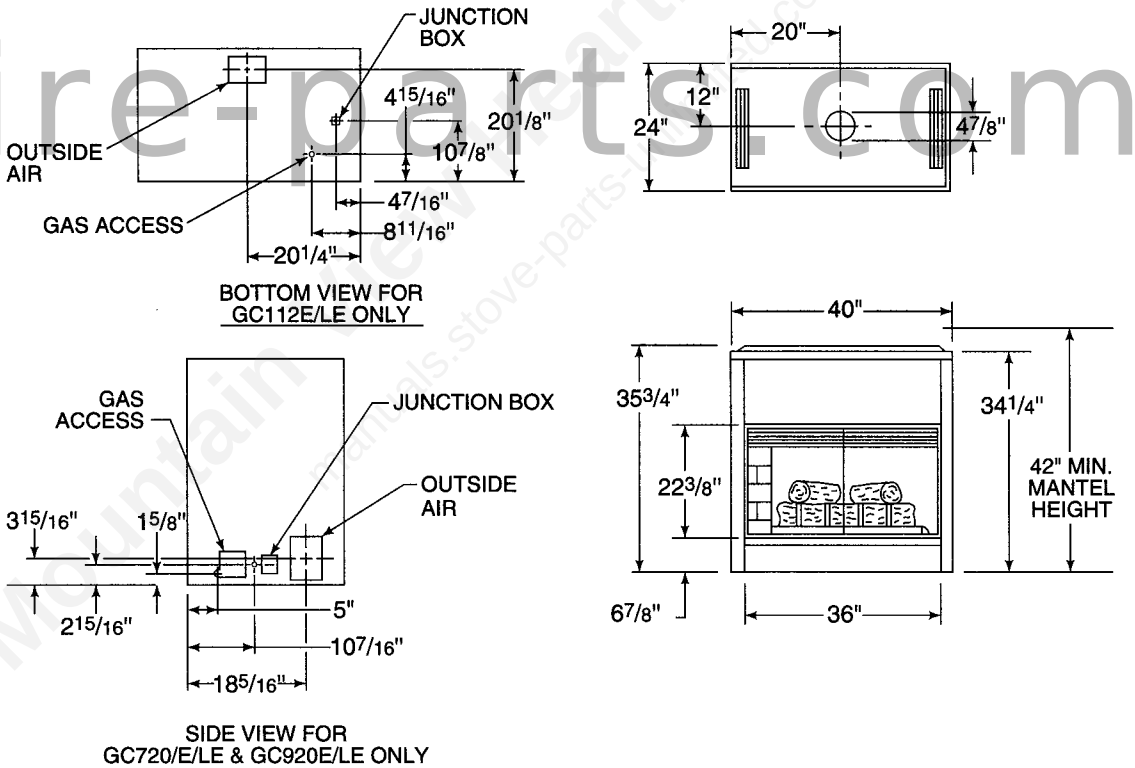


TK720



TK920

Trim Kits



Firebox Dimensions

Framing dimensions can be found on pages 6 & 7.

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 USE THE B-VENT CHIMNEY SYSTEM DESIGNED FOR USE WITH THE UNIT AND MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVICING A SEPARATE SOLID 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 36,000 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 is 10.5 inches water column for propane gas.

B. HIGH ALTITUDE INSTALLATION

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% for each 1000 feet above sea level. Check with the local gas utility for proper orifice identification. This unit uses a 110 in./2.80 mm. orifice size on natural gas versions and a .070 in./1.75 mm. orifice size on propane gas versions.

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.

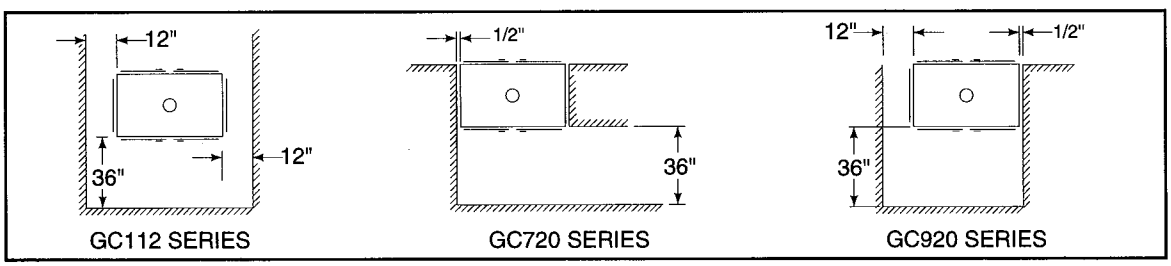
Canadian installation: Units are certified for elevations from 0-4500 feet. When installing this unit at an elevation between 0-4500 feet in Canada, the input rating does not need to be reduced.

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. LOCATION AND SPACE REQUIREMENTS

This appliance may be installed along a wall, across a corner or in an exterior chase. The HFT Designer 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.

Minimum clearances to glass panels are shown in Figure 1.



D. CLEARANCES

The following clearances to combustibles must be maintained: Minimum clearances to the top stand-offs of the unit - 0", floor - 0", back - 1/2", sides - 1/2", face of the unit to ceiling - 30". The minimum height of vent installation must be 9' from the top of the appliance. The maximum horizontal offset must not exceed 50% of the vent height of the appliance. Minimum clearances to venting are as per the vent manufacturer's specifications.

E. FRAMING

Note: If an optional hand held remote control (RC4 or RC5) is 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 to the wall in order to avoid reconstruction.

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

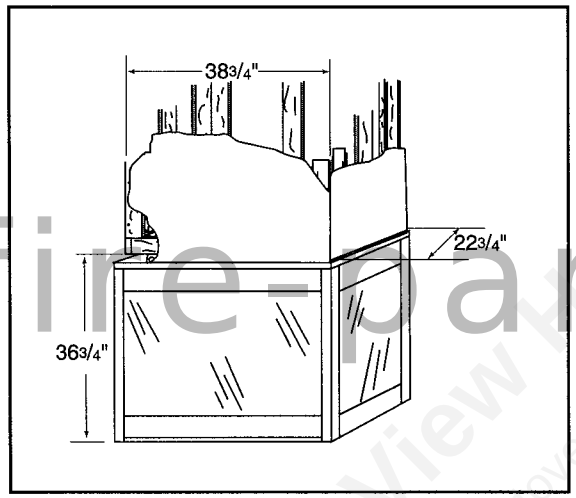


Figure 2A
GC112 Framing Requirements

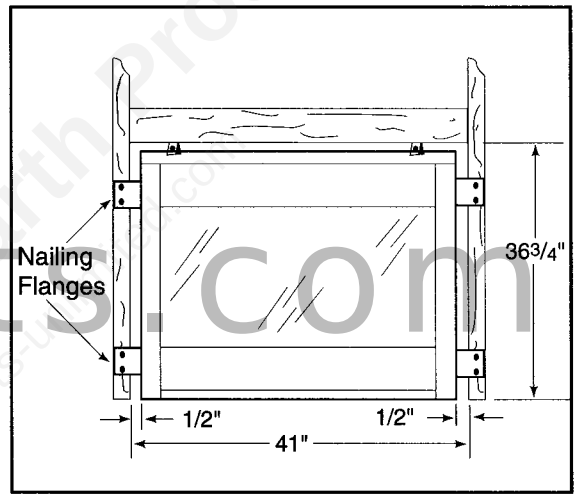
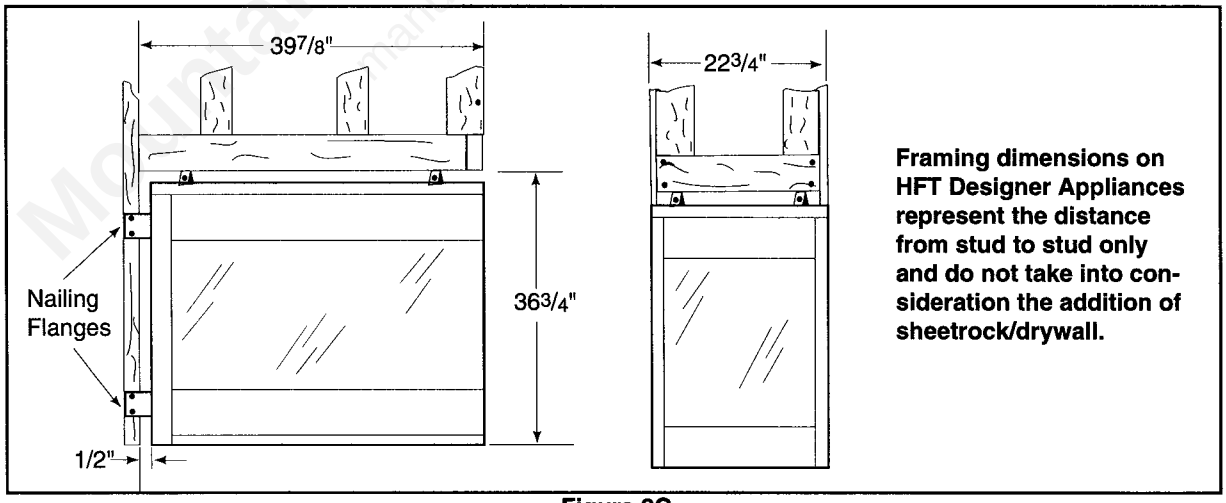


Figure 2B
GC720 Framing Requirements



Framing dimensions on HFT Designer Appliances represent the distance from stud to stud only and do not take into consideration the addition of sheetrock/drywall.

Figure 2C
GC920 Framing Requirements

F. FINISHING MATERIALS

Only non-combustible materials may be used to cover the black surfaces of the firebox front.

NOTE
THE LOWER FRONT FACE(ACCESS PANEL) CANNOT BE COVERED WITH NON-COMBUSTIBLE FINISHING MATERIAL UNLESS DONE IN A FASHION THAT PERMITS MANUAL REMOVAL OF PANEL.

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 of the materials.

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 over the framing, a non-combustible sealant, must be used to close off any gaps at the top and sides between the unit and facing to prevent cold air leaks. See Figure 3.

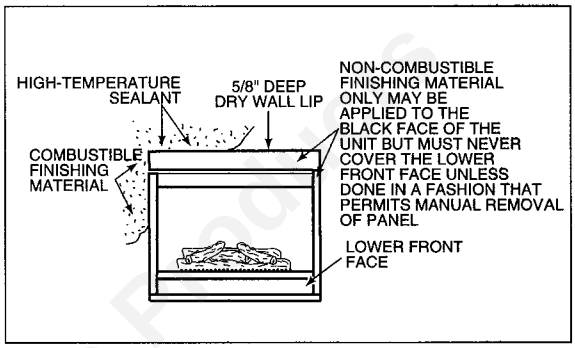


Figure 3
Finishing Materials

V. STEP-BY-STEP INSTALLATION OF THE 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 firebox may be placed on a smooth combustible or non-combustible continuous, flat surface. If the unit is installed on combustible flooring other than wood, a metal panel needs to be installed underneath the appliance extending its full width and depth. Slide the unit into position and level the firebox from side-to-side and front-to-back. Shim with non-combustible material, such as sheet metal, as necessary.

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

STEP 2 - Termination

Common venting of this gas appliance with other gas appliances is not allowed in multi-family dwellings.

This appliance requires the use of a 5" B vent for operation and must be terminated above the roof line. Never downsize pipe. Follow all B vent requirements and installation instructions.

The minimum height of vent installation must be 9' from the top or 12' from the base of the appliance. Horizontal run must never exceed 50% of the height of the vent system as shown in Figure 5.

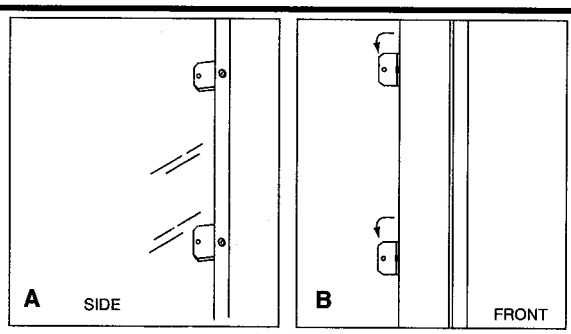


Figure 4
Nailing Flanges

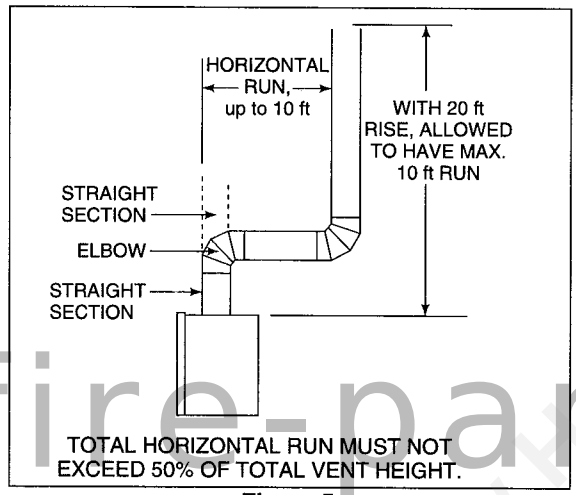


Figure 5
Venting Off The Top of Appliance

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.

NOTE: Vertical rise off the top of the unit before elbowing creates a less restrictive venting environment.

1. Assembling vent sections. Attach a straight vent section to the top of the appliance. This may cause the unit to operate ineffectively. Secure the attached vent section to the appliance with the three screws supplied. Use only B-vent sections.

2. Using Elbows. Elbows exceeding 45 degrees from the vertical shall be considered horizontal and therefore adapt horizontal run limitations. See Figure 6

3. Penetrating the ceiling. 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.

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

In all situations, firestop spacers are to be nailed to the ceiling joists from the bottom or appliance side, EXCEPT when the space above is an insulated ceiling or attic space. In this situation, the firestop spacer must be secured from the top side to meet fire stopping requirements.

Install the firestop spacer by positioning and securing the four sides of the firestop spacer to the joists using a minimum of three fasteners per side.

5. Securing vent system. Continue assembling the vent sections up through the firestop spacers as needed. Vent sections must be locked into position. Elbows and chimney stabilizers have straps for securing these parts to joists or rafters.

6. Marking the exit point in the roof. Locate the point where the venting will exit the roof by plumbing down to the center of the vent system. Drive a nail up through the roof to mark the center. See Figure 7.

7. Cutting out the hole in the roof. Measure to either side of the nail and mark the opening required to meet minimum clearances per venting requirements. 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 vent 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 into place.

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

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.

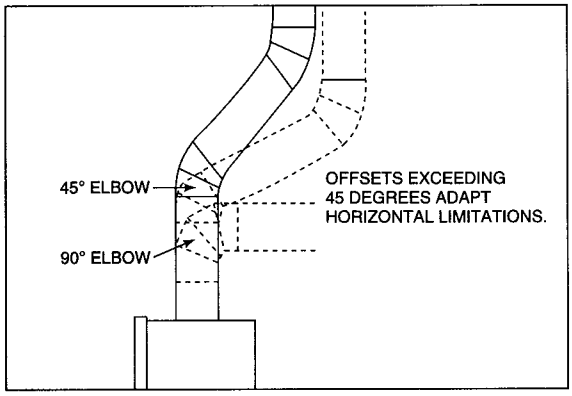


Figure 6
Using Elbows

WARNING

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

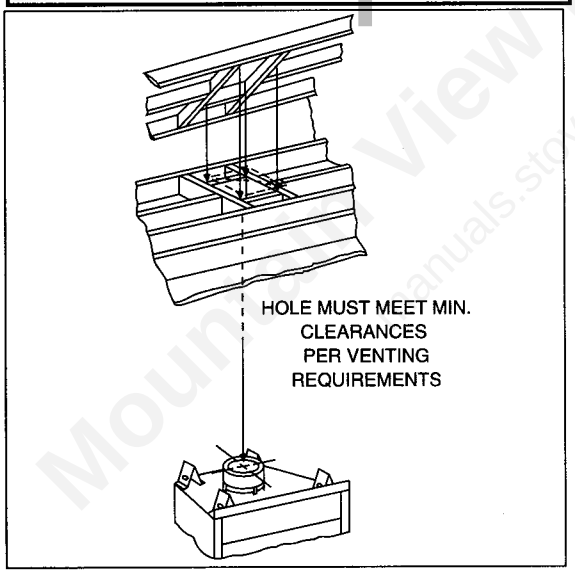


Figure 7
Exiting Through the Roof

10. Termination cap. Major building codes specify a minimum termination height above the roof top depending on the roof pitch. It is strongly recommended that the cap should be at least 2' higher than anything within 10' of it, and a minimum of 3' out of the roof. This will help to ensure the best air flow.

Unlisted Cap. If you are using an unlisted termination cap and your vent section is at least 8 feet from a vertical wall, follow Figures 8 and 9 to determine the allowable termination height and location.

Measure the roof pitch. (Roof pitch is X/12 as shown in Figure 8.) Find your roof pitch in Figure 9 to determine the minimum height the termination cap must be located from the point where the vent section penetrates the roof (H in Figure 8).

Listed Cap. If you are using a listed termination cap, you must follow the manufacturer's installation instructions for minimum clearances to roof and any obstructions.

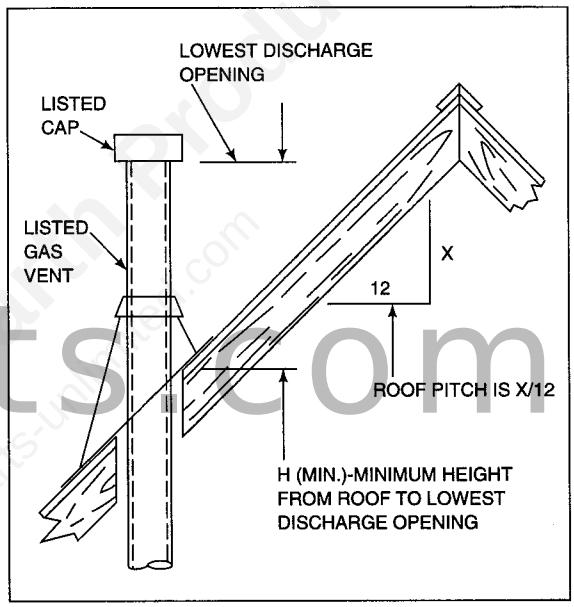


Figure 8
Termination Height if Termination Location is at Least 8' From a Vertical Wall

Roof Pitch	H (Min.) feet
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 9
Minimum Termination Height

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

To install the termination cap, slide the cap vent sections into the vent pipe. Secure the cap following manufacturers instructions.

11. Checking the vent system. Periodically the venting system should be tested to assure proper operation. This can be done with a match while the unit is operating.

Hold a lighted match at the top edge of the firebox opening. If the flames and smoke remain upright, ventilation is acceptable. If the flames and smoke are drawn into the firebox, this means ventilation is good. If the flames and smoke are forced away from the firebox, this may indicate a ventilation blockage or down draft resulting in gas spillage into your home. If this occurs, turn off the fireplace and do not burn it until it has been inspected by a qualified service person.

STEP 3 - Double Checking

When construction of the entire vent system has been completed, double check to make sure all venting pipes and termination caps are unobstructed.

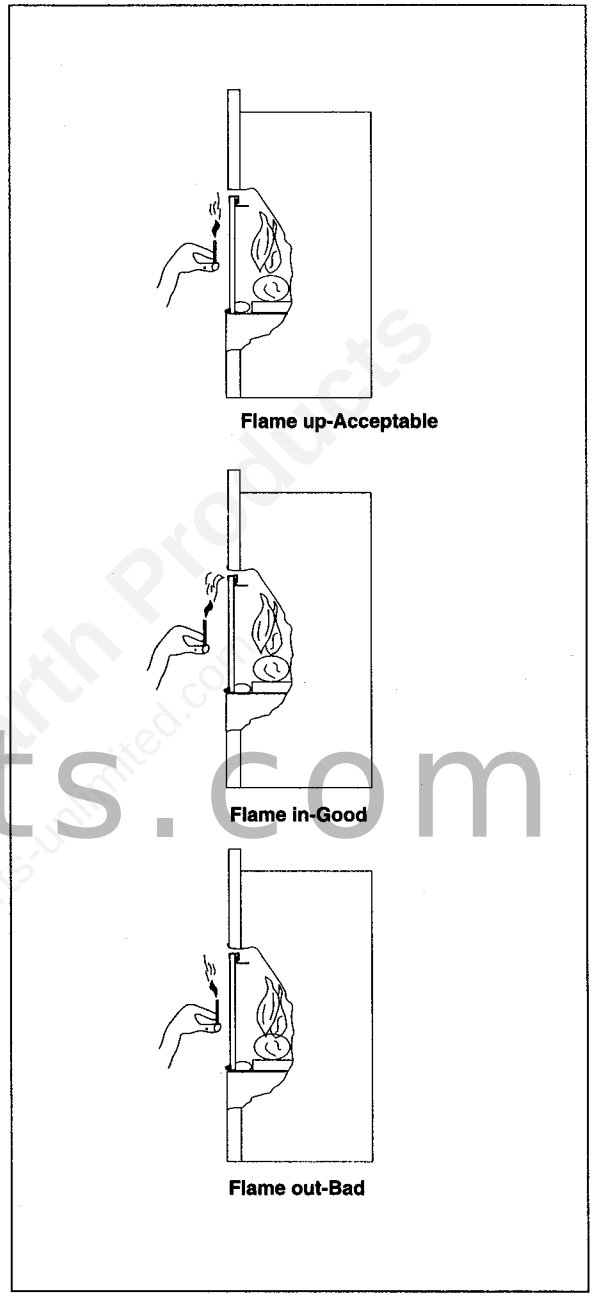


Figure 10
Testing Ventilation

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

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 4 - Gas Line Installation

Install the gas line piping into the right side of the gas appliance. A separate shut-off gas valve (supplied) should always be used. See Figure 11.

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 pipe. The pipe should be ran into the gas appliance and then connected to the manual shut-off valve and flexible connector. Gas connections can be made from the control area by removing the lower front face. All connections must be checked for leaks with a soap and water solution or a leak detector.

At this time, bleed the gas line to extract any air that may be trapped inside the pipe.

After finishing the gas line installation, be sure to place insulation or silicone sealant around the incoming gas line to prevent cold air infiltration into this gas appliance. See Figures 11 & 12.

STEP 6 - Lower Front Face Removal

To remove the lower front face, gently lift upward and pull on the upper outside edges of the lower front face as shown in Figure 12. The top part of the lower front face will rotate downward.

Two spring hinges secure the lower portion of the lower front face into place. See Figure 13. Simply pull the hinges toward the center of the lower front face and then pull out the entire lower front face (Figure 14). To replace the lower front face, reverse this process.

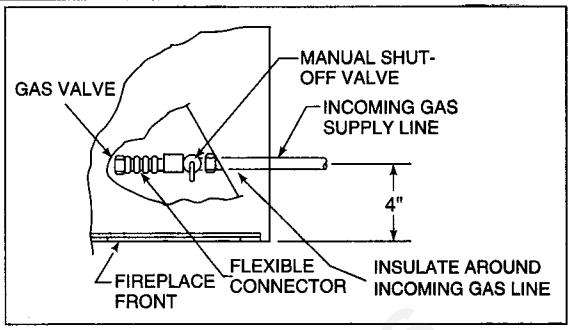


Figure 11
Gas Line

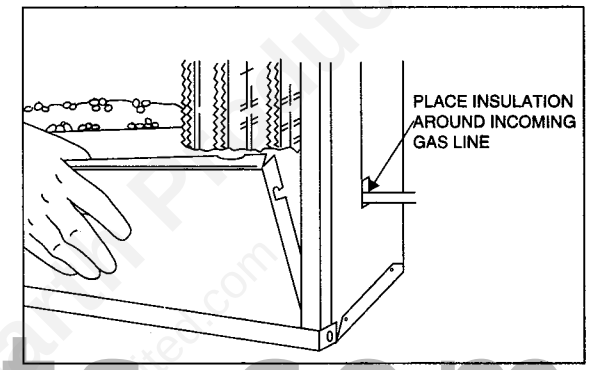


Figure 12
Lower Front Face Removal

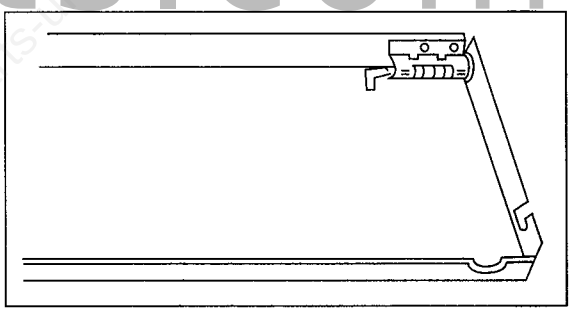


Figure 13
Lower Front Face Removal

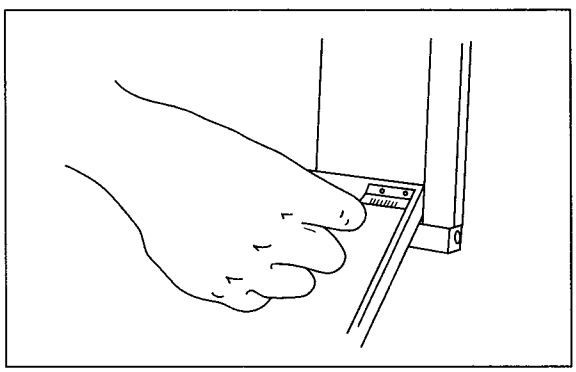


Figure 14
Lower Front Face Removal

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 CSA C22.1 Canadian Electrical Code, Part 1 Safety Standard for Electrical Installations. 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 110VAC supply from a remote wall switch to the appliance junction box for operation. A wiring diagram is shown in Figure 15.

2. Remote Wall Switch. Position the junction box (not provided) in the desired place on the wall. Run the provided wire from the junction box, connect it to the provided wall switch and mount the wall switch inside the junction box.

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 110VAC supplies are required for the remote control (RC5). Wiring diagrams are provided with all accessories. In line with the junction box, you must have an on/off switch or a BC10.

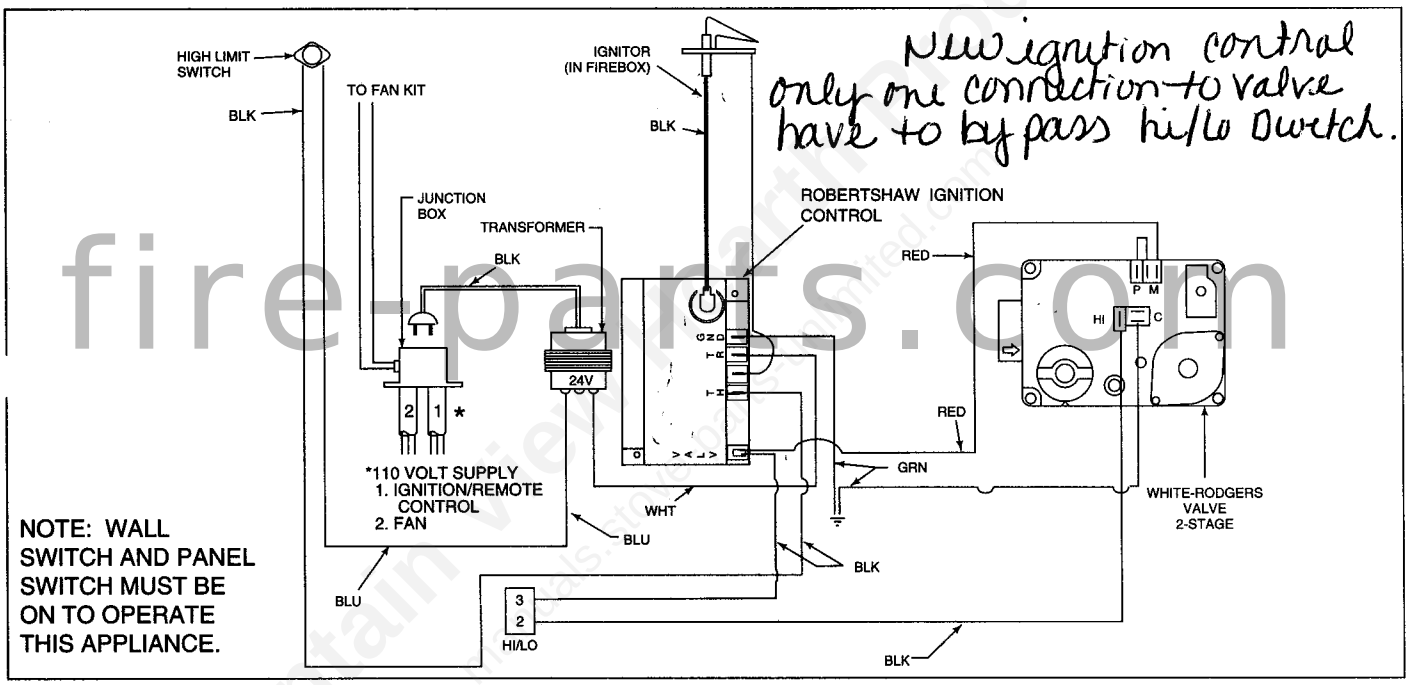
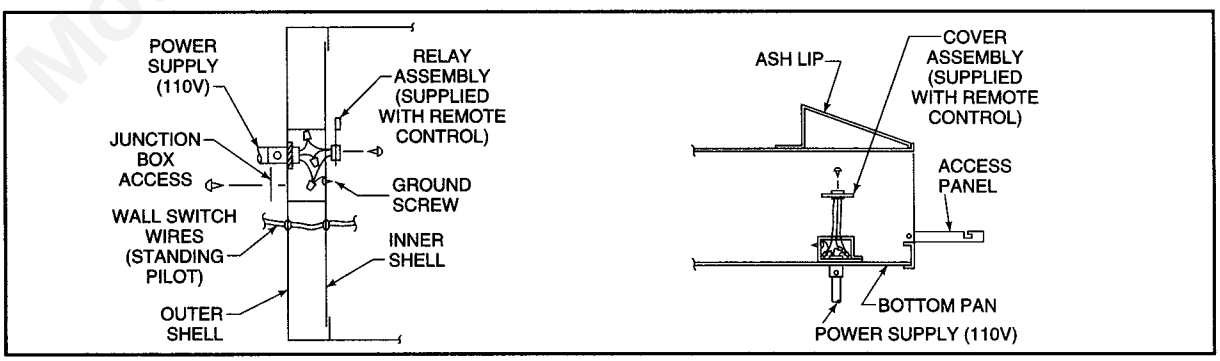


Figure 15
Electronic Ignition Wiring Diagram



GC720/GC920 **GC112**

Figure 16
Remote Control Location

B. STANDING PILOT IGNITION

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

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. 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.

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 the wall switch inside the junction box. A wiring diagram is shown in Figure 17.

If you extend beyond the wall switch wires provided, you must not wire on nut extensions, but replace existing wires with desired length. NOTE: extended lengths of wire will reduce millivolt readings 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 110VAC supply directly to the appliance junction box. In line with this junction box, you must have an on/off switch or a BC10. Wiring diagrams are provided with all accessories.

See Figure 16 for remote control location.

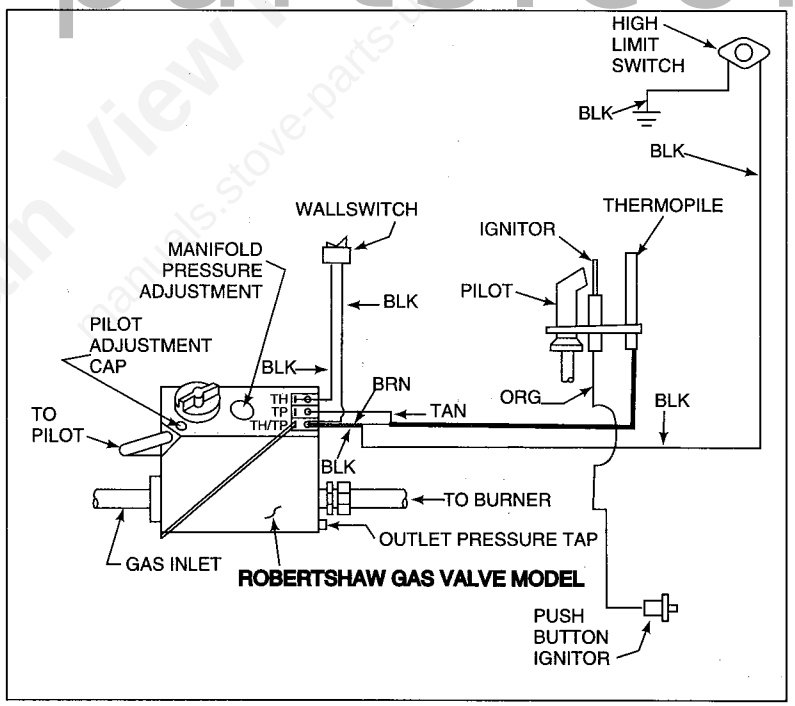


Figure 17
Standing Pilot Ignition Wiring Diagram

STEP 8 - Installing the Outside Air (OA) Kit (Recommended)

The automatic outside air control and door are installed in the finished unit. The connections from the unit to the outdoors are included in the kit marked AK19, which is shipped with the unit. A three (3) foot minimum height difference must be maintained from the top of the roof termination to the outside combustion air inlet (see Figure 18). Be sure to check vent height requirements for the firebox before attempting any basement location. The air inlet should be of sufficient height to prevent snow or other materials from blocking it. The vent inlet must be connected to an air supply outside of the building and must not exit higher than the building soffit.

WARNING

WHEN LOCATING THE APPLIANCE IN A SPACE PROJECTING INTO A GARAGE, THE OUTSIDE AIR MUST NOT BE TAKEN FROM THE GARAGE SPACE. EXHAUST PRODUCTS OF GASOLINE ENGINES ARE HAZARDOUS. DO NOT INSTALL OUTSIDE AIR DUCTS SUCH THAT THE AIR MAY BE DRAWN FROM ATTIC SPACES, BASEMENTS, OR ABOVE THE ROOFING WHERE OTHER HEATING APPLIANCES, FANS OR CHIMNEYS, EXHAUST OR UTILIZE AIR.

While connection of the outside air kit is optional, it is recommended to connect it, due to tighter construction practices in new housing.

NOTE

SIGNIFICANT COLD AIR MAY INFILTRATE THROUGH THE DUCT OR OTHER PARTS OF THIS SYSTEM. TO GUARD AGAINST THIS, CHECK FOR LIGHT LEAKS WITH A FLASHLIGHT AND SEAL THESE WITH DUCT TAPE AND/OR INSULATION.

STEP 9 - 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 19.

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

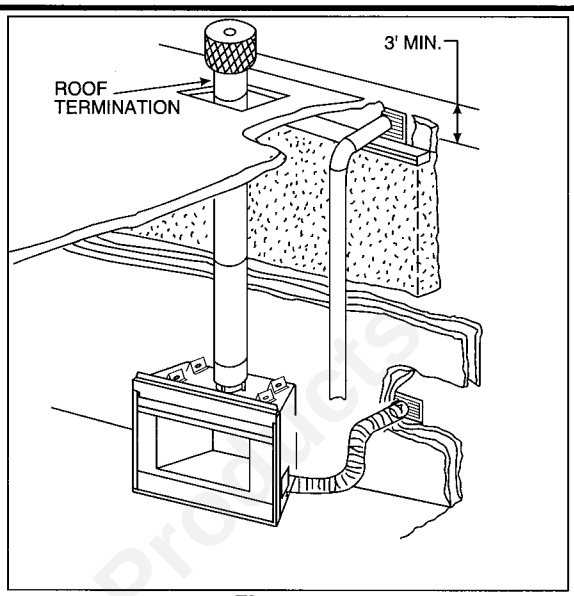


Figure 18
Outside Air Kit Installation

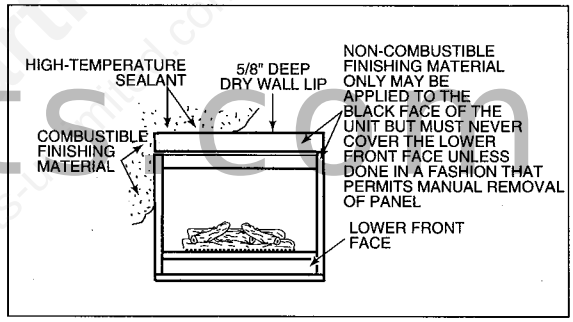


Figure 19
Finishing Materials

STEP 10- Remove Glass to Install Logs

Remove the glass panel from the unit. See Figure 43 on page 23.

Note: The placement of the logs, lava rock and rock wool is very critical to the appearance of the fireplace looks during its operation. Please take time during this portion of the setup to achieve the best appearance.

STEP 11 - Placing the Lava Rock

Spread the lava rock evenly on the firebox bottom around the base of the burner pan assembly. Spread the lavarock in the trough area of the burner pan assembly keeping the level of the lava rock approximately 1/8" below the bottom burner ports.

Step 12 - Placing the Vermiculite

Spread a light coating of vermiculite over the lava rock. Make sure the vermiculite does not block any burner pan assembly burner ports. See Figure 20.

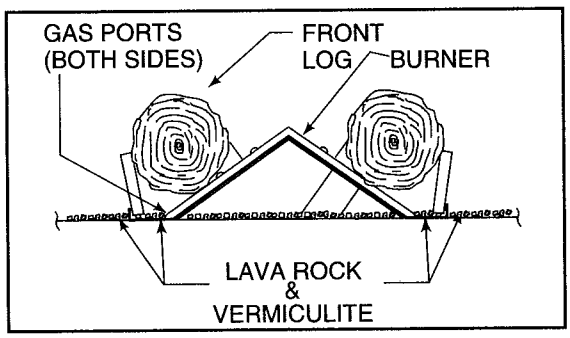


Figure 20
Round Log Installation

STEP 13 - Positioning of the Round Logs

The logs are pre-assembled at the factory and should look like Figure 21. If the logs have separated, contact your service representative to set them correctly.

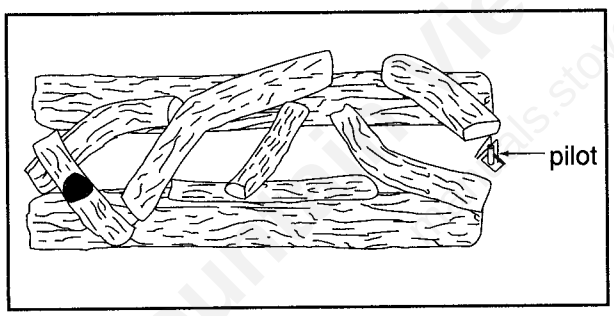


Figure 21
Round Log Installation

If removal of the logs becomes necessary, remove both sides of the glass and follow these instructions.

1. Looking at the valve access side of the unit, there is a tab off of the bracket that secures the front log. This tab is located at the right end of the log and is held by one screw to the burner pan near the top of the pan. Remove this screw.

2. There is a second tab and screw at the opposite end of the front log on the other side of the unit located near the bottom of the burner pan. This screw also needs to be removed.

3. Grasp the middle of each of the bottom front logs and lift the logset up and away from the pilot assembly until the bottom logs are above the pilot hood.

Log Replacement Instructions

1. Grasping the front bottom logs in the middle, place the logset down onto the burner pan. Make sure the tab at the right end of the front log that is placed near the pilot has the screw hole towards the top of the burner. The small straight log should rest on top of the pilot hood.

2. Align the hole at the right end of the front log tab with the hole at the end of the burner pan and attach with a screw.

3. Repeat this for the other tab at the opposite end of the other bottom front log. The screw hole should be located near the bottom of the burner pan on the non-access side of the unit.

Positioning of the Split Logs

GC112 Series

Place the two front logs on each side of the burner pan assembly, with the split side towards the outside of the unit. See Figure 22.

Determine from which side of the firebox you would like to see more of the split look.

Place one of the top end logs at the end of the burner pan assembly nestling it on the firebox bottom. Repeat this step for the opposite end. See Figure 23.

Place one end of the 10" narrow log on the top end log, just placed, and rest the other end on one of the front logs. Repeat this step for the opposite end. See Figure 23.

Position the log (long, narrow split) angled across the two front logs. The flat portion rests on top of the two front logs. As the log crosses over the burner assembly it must lay over a single row of burner ports. It should not impinge onto the flame coming out of a multiple row of burner ports. See Figure 24.

Place the top middle log across the long narrow log, across the burner pan assembly and onto one of the front logs. The log must pass over a single row of burner ports. See Figure 25.

Position one of the top end logs on the opposite front log/opposite end and lay it onto the long narrow log. Ensure that the top end log passes over a single row of burner ports. See Figure 26.

After positioning the logs, proceed to Step 14.

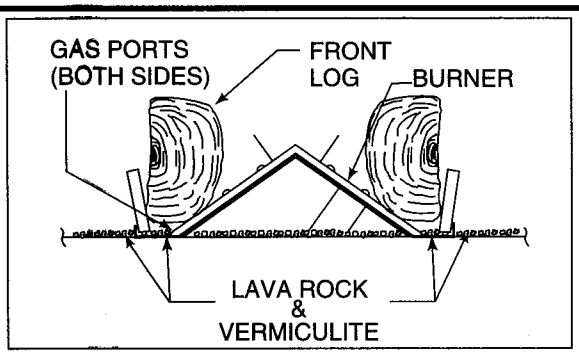


Figure 22
Split Log Installation

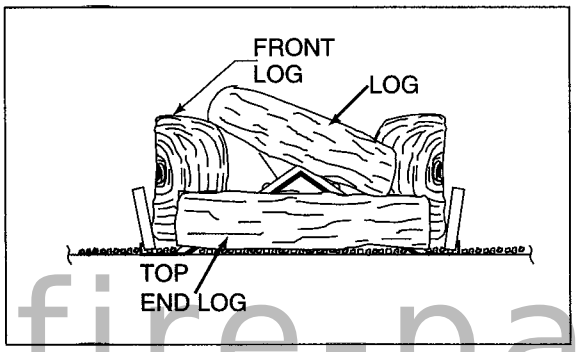


Figure 23
Split Log Installation

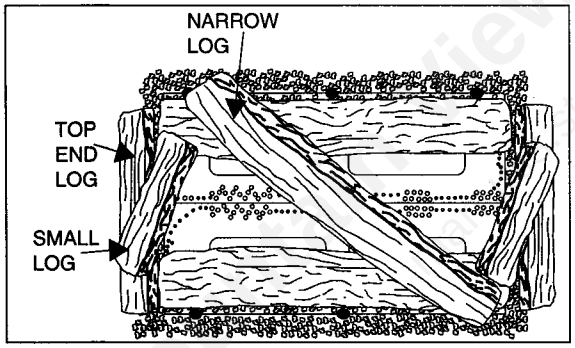


Figure 24
Split Log Installation

WARNING

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

CAUTION

DO NOT OPERATE THIS APPLIANCE IF THE GLASS IS BROKEN OR CRACKED.

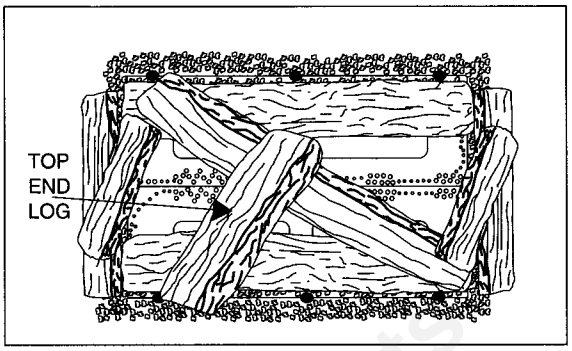


Figure 25
Split Log Installation

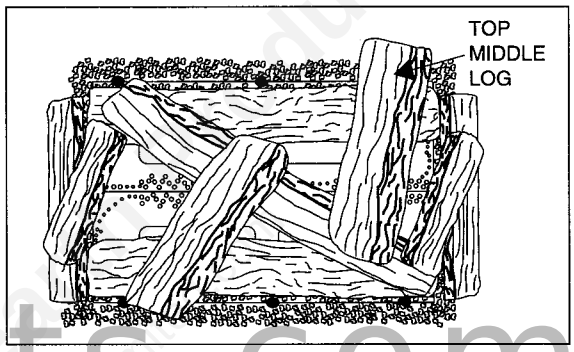


Figure 26
Split Log Installation

GC920 Series

Place the two front logs on each side of the burner pan assembly, with the split side towards the outside of the unit. See Figure 22.

Determine from which side of the firebox you would like to see more of the split look.

Place one of the top end logs at the end of the burner pan assembly, by the end glass panel, nestling it on the firebox bottom. See Figure 23.

Place one end of the 10" narrow log on the top end log, just placed, and rest the other end on one of the front logs. See Figure 23.

Position the log (long, narrow split) angled across the two front logs. The flat portion rests on top of the two front logs. As the log crosses over the burner assembly it must lay over a single row of burner ports. It should not impinge onto the flame coming out of a multiple row of burner ports. See Figure 24.

Position the remaining top end log on the front log and lay it onto the long narrow log. Ensure that the top end log passes over a single row of burner ports. See Figure 25.

Place the top middle log across the long narrow log, across the burner pan assembly and onto one of the front logs. The log must pass over a single row of burner ports. See Figure 26.

After positioning the logs proceed to Step 14.

GC720 Series

Place the two front logs on each side of the burner pan assembly, with the split side towards the outside of the unit. See Figure 22.

Determine from which side of the firebox you would like to see more of the split look.

Position the log (long, narrow split) angled across the two front logs. The flat portion rests on top of the two front logs. As the log crosses over the burner assembly it must lay over a single row of burner ports. It should not impinge onto the flame coming out of a mulltiple row of burner ports. See Figure 24.

Place the top middle log across the long narrow log and one of the front logs. See Figure 27.

Place one of the top end logs across the two front logs at their end, positioning it so that where it crosses over the burner pan assembly it passes over a single row of burner ports. Repeat this step for the other top end log. See Figure 27.

After positioning the logs proceed to Step 14.

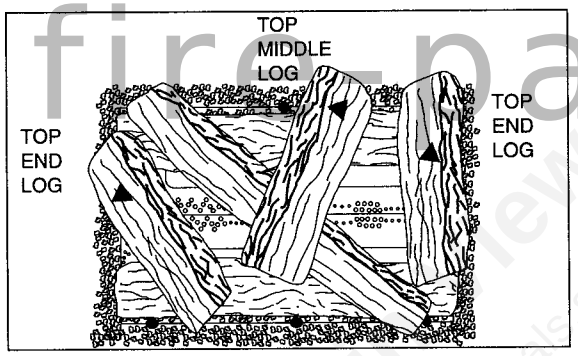


Figure 27
GC720 Split Log Installation

NOTE
WHEN POSITIONING LOGS OVER THE TOP OF THE BURNER PAN ASSEMBLY, ENSURE THAT THE LOG(S) DO NOT IMPINGE ON THE MULTIPLE ROWS OF BURNER PORTS

STEP 14 - Placing the Rock Wool

Break the rock wool into pieces, no bigger than 1/2" diameter (approximately the size of a dime), and place the rock wool on the lava rock that is in the trough and rest the wool towards the burner ports. This will create the glowing ember appearance as the flame touches the rock wool.

WARNING

DO NOT HIT OR STRIKE THE GLASS.

VI. OPERATING INSTRUCTIONS

TO THE CONSUMER: To determine whether your appliance is an electronic ignition or a standing pilot ignition, remove the lower front face (Step 1 on page 20) to examine the wiring system. If your system has a red push button (as shown in Figure 28 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 (behind the lower front face) to determine ignition type.

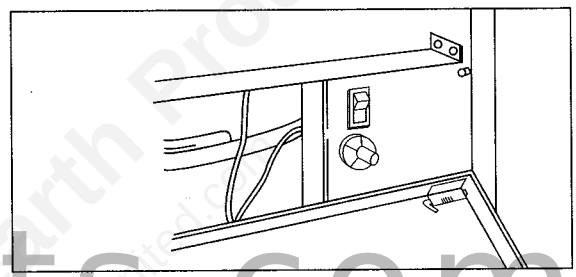


Figure 28
Standing Pilot Ignition

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

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 10 through 14 on pages 16 through18).
2. Check to see that all wiring is correct and enclosed to prevent possible shock. This is done by removing the lower grille (follow Step 1 below) 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. Verify that all venting and caps are unobstructed.
5. Read and understand these instructions thoroughly before attempting to operate this appliance.

STEP 1- Lower Access Panel Removal

To remove the lower access panel, refer to page 12, Figures 12-14.

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

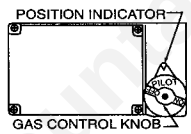
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

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.

STANDING PILOT LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Turn wall switch to the "OFF" position.
3. Turn off all electric power to the appliance.
4. Remove control access panel.
5. Turn gas control knob clockwise ↷ to "OFF".



6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above.If you don't smell gas, go to next step.
7. Find pilot - follow metal tube from gas control. The pilot is behind the burner tube.

8. Turn knob on control counterclockwise ↶ to "Pilot".
9. Push in the knob all the way and hold in. Immediately light the pilot by pressing the red ignitor button. Continue to hold the control knob in for about (1) minute after the pilot is lit. Release button and it will pop back up. Pilot should remain lit. If it goes out, repeat step 5 through 9.

   If button does not pop up when released, stop and immediately call your service technician or gas supplier.

   If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
10. Turn gas control knob counterclockwise ↶ to "ON".

    Knob can be turned to "ON" only if the control knob is popped out.
11. Replace control access panel.
12. Turn on all electric power to the appliance.

TO TURN OFF GAS TO APPLIANCE

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

ELECTRONIC IGNITION

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

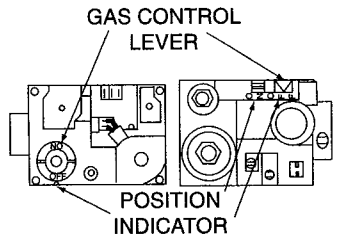
WHAT TO DO IF YOU SMELL GAS
- ❑ Do not try to light any appliance.
- ❑ Do not touch any electric switch; do not use any phone in your building.
- ❑ Immediately call your gas supplier from a neighbor's phone. Follow the supplier's instructions.
- ❑ If you can not reach your gas supplier, call the fire department.

C. Use only your hand to push in and move the gas control lever or turn the gas control knob. Never use tools. If the lever or knob will not move by hand, don't try to repair it - call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn wall switch to the "OFF" position.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light burner by hand.
5. Push gas control lever in and move to the "OFF" position or turn gas control knob clockwise ↷ to the "OFF" position. If knob is in "ON" position turn knob clockwise ↷ to "OFF" or turn lever to "OFF".
6. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
7. Move lever to the "ON" position or turn gas control knob clockwise ↷ to the "ON" position.
8. Replace control access panel.
9. To turn on burner, turn on all electric power to this appliance.
10. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.



TO TURN OFF GAS TO APPLIANCE

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

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, the rocker ON/OFF switch (if it was installed on your unit, behind the lower access panel) and the gas knob (located behind the lower access panel) have been turned to the OFF position. See Figure 32. 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 manual on/off valve to ON. Turn the gas knob to PILOT, as shown in Figure 33, and press in. While holding it in, light the pilot by pressing the red ignitor button, shown in Figure 34, several times until the pilot 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 35. You may now turn the remote wall switch to the ON position which will turn on the main burner. Initially, the flames may resemble more of a blue color but after the first 20 minutes of operation, they will become more yellow.

Note: 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.

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 the rocker ON/OFF switch (if applicable) to the OFF position.

Next step, remove the lower access panel to expose the valve area. (Follow Step 1 on page 20.) Locate the gas knob and turn it to the PILOT position. Press in and continue turning to the OFF position. Turn the manual ON/OFF valve to OFF. 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. The pilot light will continue to burn.

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

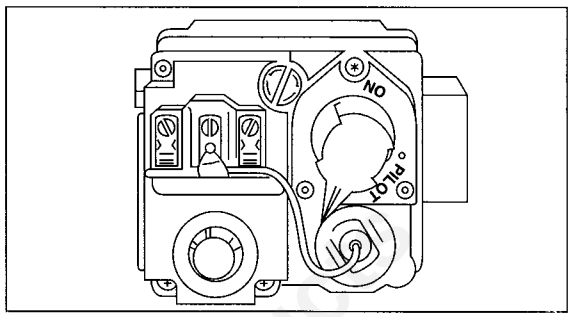


Figure 32
Standing Pilot Ignition Valve "OFF"

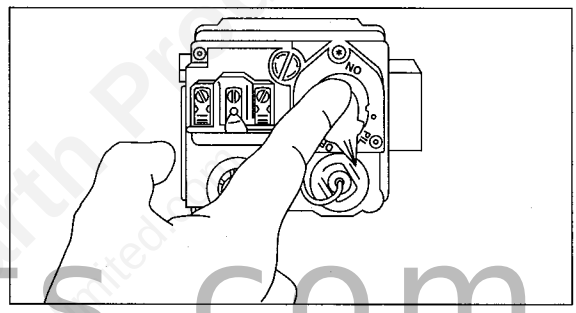


Figure 33
Standing Pilot Ignition Valve to "PILOT"

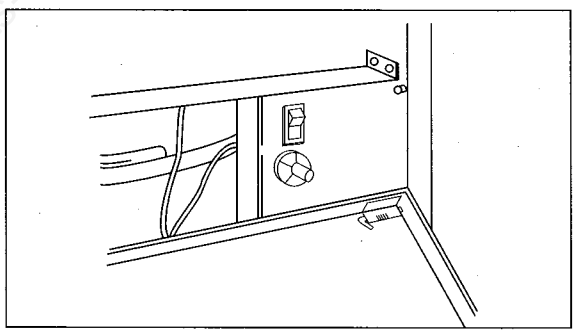


Figure 34
Red Ignitor Button

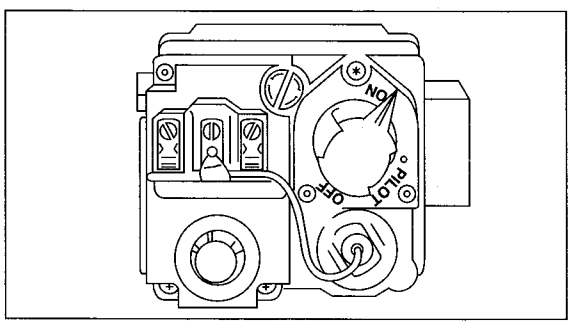


Figure 35
Standing Pilot Ignition to "ON"

If you own a standing pilot ignition, 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, the manual on/off switch (if installed on your unit) and the gas valve knob (both located behind the lower access panel) have been turned to the OFF position. See Figure 33. If it is 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 manual on/off knob and the gas valve knob inside the lower access area and turn them to the ON position. See Figure 34. Then, turn the remote wall switch to ON. This will activate an electronic spark. Initially, the flames may have more of a blue color but after the first 20 minutes of operation, they will become more yellow.

Note: 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.

2. Seasonal Shutdown. When the burning season comes to an end, the entire system should be shut down. **Note: Your unit has a wall switch. A rocker switch may have been added to your unit on a column in the control area. Both have to be off for the unit to be off.** 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 periods of time, you must first shut off the main burner by moving the remote wall switch to the OFF position.

The next step is to remove the lower access panel (Step 1 on page 20) to expose the valve area. Locate the gas valve knob and turn it to the OFF position. Turn the manual on/off knob to OFF. 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.

STEP 2 - Replacing the Lower Access Panel

To replace the lower access panel, align the lower hinges on the panel with the holes provided in the fireplace. Place the hinge pins in those holes and pivot the panel upward as shown in Figure 35. The panel should connect smoothly back into place.

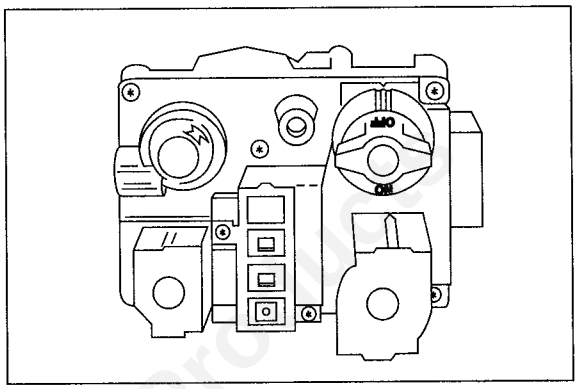


Figure 33
Electronic Ignition Valve to "OFF"

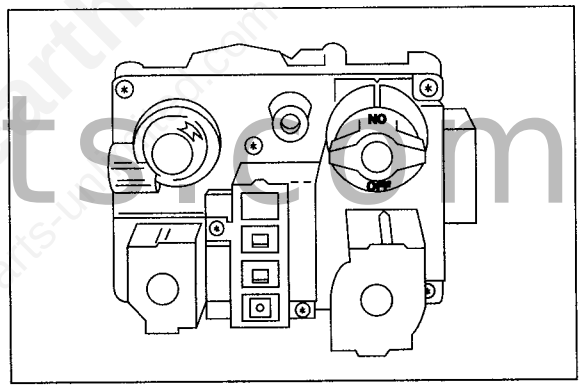


Figure 34
Electronic Ignition Valve to "ON"

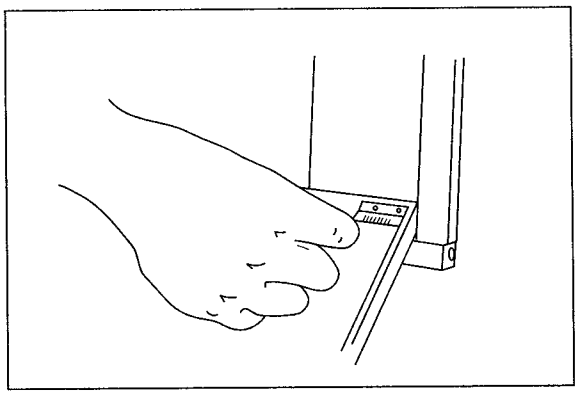


Figure 35
Lower Front Face Replacement

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 36 through 40.

Venting system inspection

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

Log cleaning

Logs can be easily lifted out of position. Carbon build-up (soot) 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 farther as shown in Figure 39. This can be done with a screwdriver or a 1/4" wrench. Also, ensure logs are positioned correctly to minimize contact with the logs.

Glass Removal

Do not attempt while hot. Remove the top glass closure, Item 1, Figure 40, by pressing up over the glass. Tilt the glass out and lift to remove. To install the glass, reverse the procedure. **DO NOT OPERATE THIS APPLIANCE WITHOUT THE GLASS PROPERLY POSITIONED AND SECURED.**

Cleaning the Glass

The Glass should be cleaned after the first hour of use. Thereafter, it should be cleaned as needed.

Note: When cleaning the glass, NEVER use abrasive materials. NEVER clean glass when hot.

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.

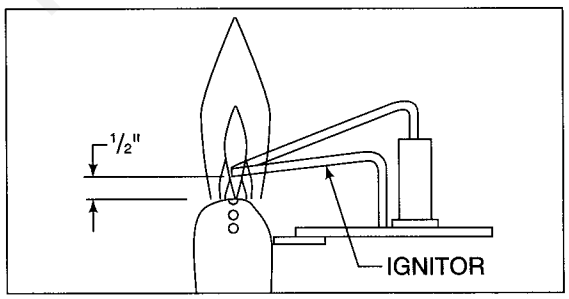


Figure 36
Electronic Ignition

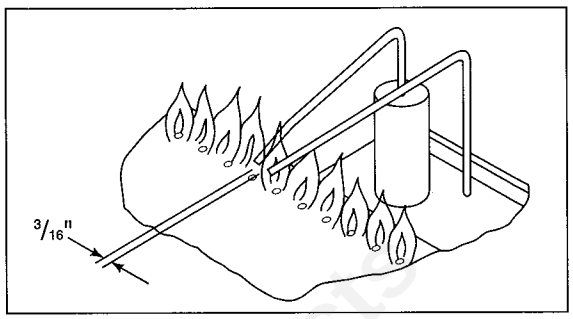


Figure 37
Electronic Ignition

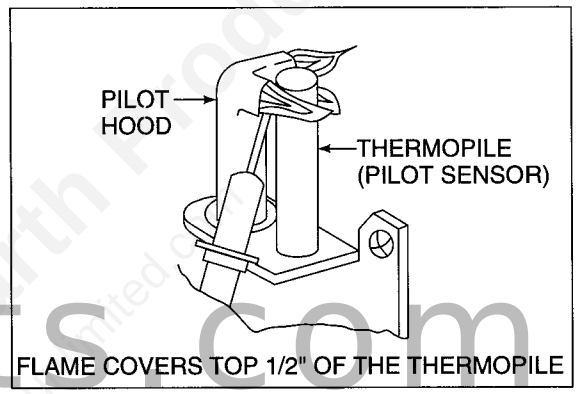


Figure 38
Standing Pilot

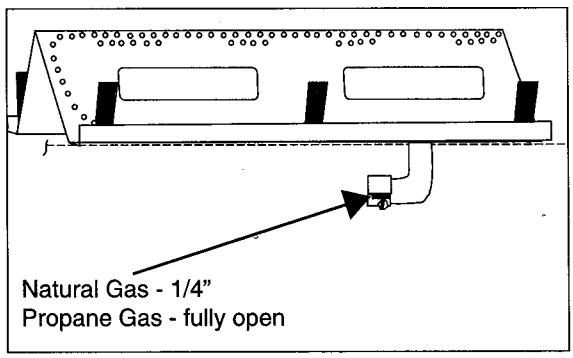


Figure 39
Both Ignitions

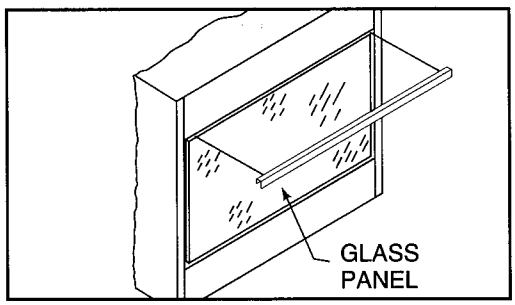


Figure 40
Designer Glass Removal

VIII. TROUBLE SHOOTING

ELECTRONIC IGNITION

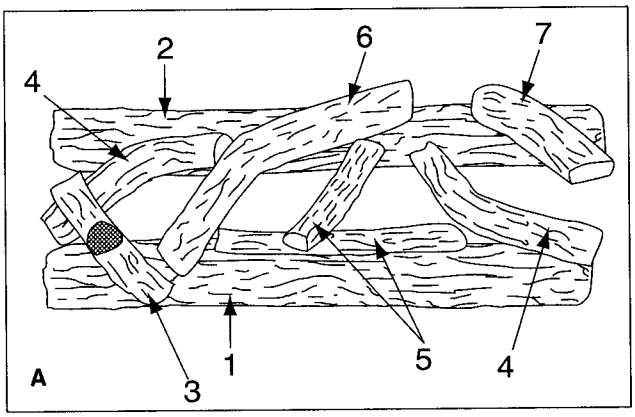
Problem	Cause	Corrective Action
1. Spark ignitor will not light burner after repeated attempts.	A. Defective ignitor; loose wire.	Check for loose connections on electrode and ignitor. Refer to the wiring diagram on page 13 for assistance.
	B. Misaligned electrode at ignitor.	Check for spark. If electrode connection is correct and there is no spark, replace ignitor. Spark should be extending approx. 3/16" to ground wire. See Figure 37. Adjust gap to give proper spark. Remove hands from electrode before attempting.
2. Burner will not stay lit.	A. Defective ignitor.	Check burner flame. See Figures 36 & 37. Adjust ignitor if necessary. Be sure ignitor is secured tight into bracket and bracket is secured tightly to the unit. Be sure wiring connections are tight throughout system, including high limit switch.
	B. No ground.	Check that wiring is grounded as shown in Figure 15.
3. With valve and wall switch in "ON" position, no gas to burner.	A. Manual on/off valve(s) shut off.	Check all gas valves leading to appliance. Turn to the "ON" position. Check for 24 volt power off secondary on the transformer.
	B. Plugged burner orifice.	Check burner orifice; remove blockage.
	C. Wall switch defective.	Check continuity.
	D. No Power	Check 110VAC supply (Fuses/Breaker)
4. Glass doors fog 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. If blue flames persist, check air shutter setting and check log and embers are positioned correctly.
	B. Improper air mixture.	Check air shutter setting.
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. High limit switch will reset automatically as unit cools.

STANDING PILOT

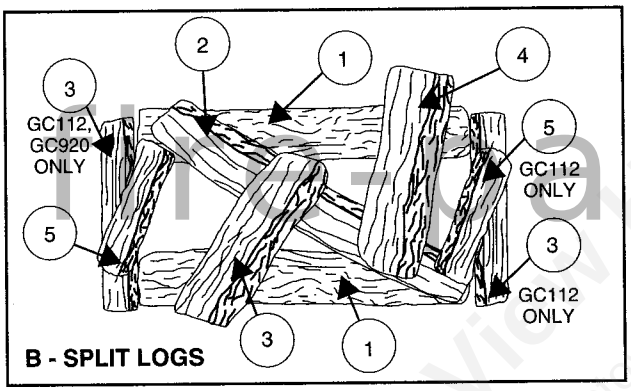
Problem	Cause	Corrective Action
1. Spark ignitor will not light pilot after repeated pressing of red button.	A. Defective ignitor.	Replace ignitor.
	B. Misaligned electrode.	Spark should be approximately 1/8" to bottom of pilot hood. Adjust gap to give proper spark. Remove hands from electrode before pressing red button.
	C. No gas to pilot/plugged orifice.	Check valve knob position & any shut-off valves. If propane, check for empty tank. Check pilot orifice; remove any blockage.
	D. Ignitor wire grounding out.	Replace pilot assembly.
	E. Loose ignitor wiring.	Check for spark. If electrode connection is correct & no spark, replace ignitor.
2. Pilot will not stay lit.	A. Pilot flame not in constant contact with pilot sensor.	Check log placement. Check pilot flame; adjust flame if necessary.
	B. Pilot sensor not tightened/seated in valve properly.	Check that pilot sensor connector is tight in valve.
	C. Defective pilot sensor thermocouple.	Replace pilot sensor thermocouple.
	D. Faulty valve.	Replace valve.
3. With pilot lit, valve and ON/OFF switch in "ON" position, burner will not light.	A. 110 volts of electricity has burned out valve.	Remove voltage and replace valve.
	B. ON/OFF wall switch defective.	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 doesn't come on, connect to ON/OFF switch junctions at valve. If burner comes on, replace wires.
	C. Plugged burner orifice.	Check burner orifice, remove blockage.
	D. Defective thermopile.	Replace thermopile.
	E. Burner not on orifice.	Check burner; place on orifice.
	F. Loose or faulty wiring.	Check for loose connections; verify wiring (See Figure 17).
	G. Faulty valve.	Replace valve.
	H. Faulty high limit switch/ microswitch.	Replace high limit switch or microswitch.
4. Appliance turns itself off after a period of time, but pilot stays lit.	A. High limit safety switch is activated.	Have a qualified service technician check venting system for blockage (i.e. bird nests, damage). Ensure proper venting condition. High limit switch will reset automatically as appliance cools.
	B. Intermittent short in ON/OFF wiring system.	Check/ replace ON/OFF wiring system.
	C. Defective thermopile.	Replace thermopile.
5. Appliance turns itself off after a period of time, pilot no longer lit.	A. Pilot flame not in constant contact with pilot sensor.	Check log placement; check pilot flame, adjust flame if necessary.
	B. Defective pilot sensor thermocouple.	Replace pilot sensor thermocouple.
6. Glass doors fog up.	A. Normal result of gas combustion.	No action necessary - glass will clear as appliance warms.
7. Blue flames.	A. Normal result during first 20 minutes of burning.	No action necessary - flames will turn more yellow after about 20 minutes.
8. Glass has film on it.	A. Normal result during initial few hours of operation.	Clean glass with Brasso or silver polish.
	B. Improper log placement causing soot.	Check log placement; reposition if necessary.
	C. Dark yellow tipped flame.	Open air shutter to increase air to gas ratio.

IX. REPLACEMENT PARTS

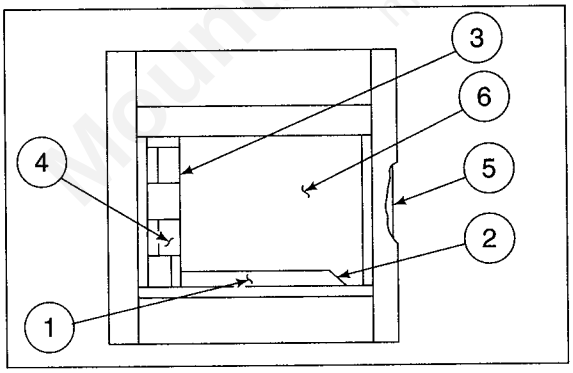
Replacement parts are available from your distributor/dealer, or through Heatilator Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.



ITEM	PART NO.	DESCRIPTION	QTY
A	25800	Log Assy	1
1	25774	Front Log	1
2	25775	Back Log	1
3	18780	Top Log	1
4	17229	Log	2
5	18782	Top Log	1
6	24694	Top Left Log	1
7	25569	Top Left Ext. Log	1

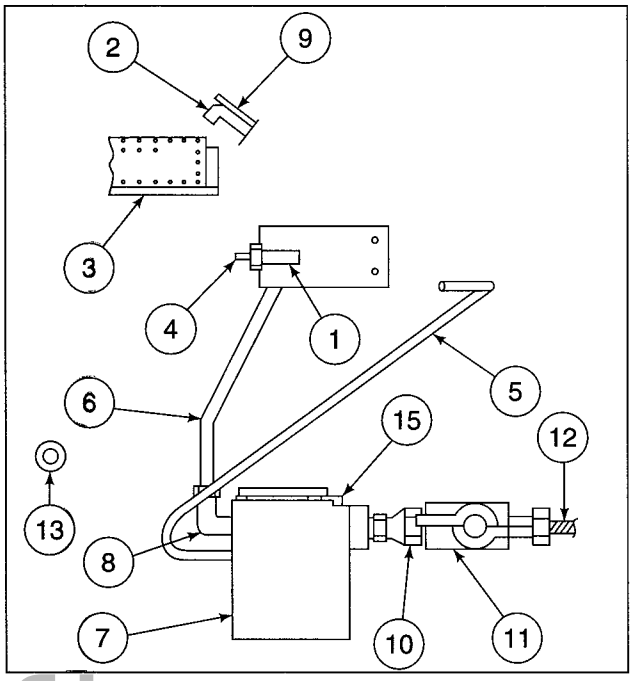


ITEM	PART NO	DESCRIPTION	QTY
B	22662	GC112 Log Assy	1
	22661	GC920 Log Assy	1
	22422	GC720 Log Assy	1
1	22543	Front Log	2
2	22542	Log (Long Narrow Split)	1
3	22420	Top End Log - GC112	3
		Top End Log - GC920	2
		Top End Log - GC720	2
4	22421	Top Middle Log	1
5	22544	Log (Small Split) - GC112	2
		Log (Small Split) - GC920	1



ITEM	PART NO	DESCRIPTION	QTY
1	22182	Front Ash Lip - GC112	2
	22181	Front Ash Lip - GC920	2
	22180	Front Ash Lip - GC720	2
2	22179	Side Ash Lip - GC112	2
		Side Ash Lip - GC920	1
3	13319	Back Refractory -GC920	1
		Back Refractory -GC720	2
4	13320	Side Refractory - GC920	2
		Side Refractory - GC720	4
5	18811	End Glass Panel - GC112	2
		End Glass Panel - GC920	1
6	13379	Front Glass Panel	2
7	22437	Embers Assy	1

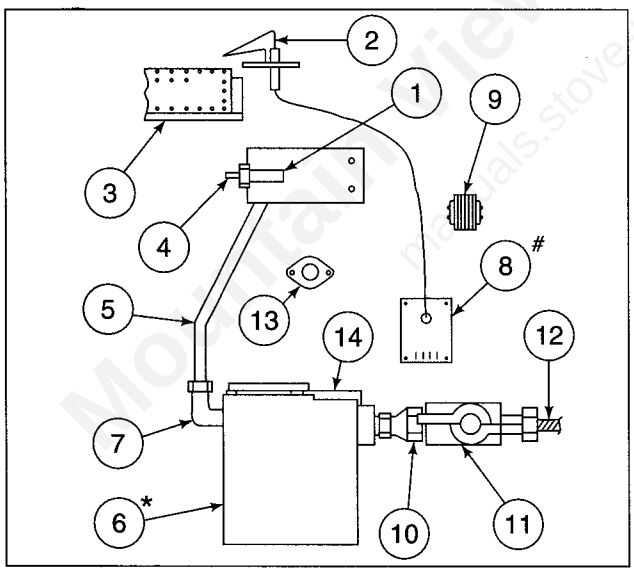
STANDING PILOT - G136



*** 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.

ITEM	PART NO.	DESCRIPTION	QTY
1	17237	90° Bulkhead Elbow	1
2	13406	Pilot w/Bracket - Natural	1
	13444	Pilot w/Bracket - Propane	1
3	18825	Burner Pan Assembly	1
4	25731	Orifice - Natural	1
	25732	Orifice - Propane	1
5	18803	Pilot Tube - White Rodgers	1
	18804	Pilot Tube - Robertshaw	1
6	18798	Burner Tube	1
7	12191	Valve* (White-Rodgers or Robertshaw)	1
8	16564	Valve Connector	1
9	13411	Thermopile	1
10	16564	Valve Connector	1
11	16565	Manual On/Off Valve	1
12	15696	Flex Line	1
13	13416	Push Button Ignitor	1
14	24968	Limit Switch	1
15	18795	Valve Bracket	1
16	18846	Valve Assembly	1

ELECTRONIC IGNITION



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

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.

ITEM	PART NO.	DESCRIPTION	QTY
1	17237	90° Bulkhead Elbow	1
2	17003	Electrode Assy	1
3	18825	Burner Pan Assembly	1
4	18677	Orifice - Natural	1
	18678	Orifice - Propane	1
5	18798	Burner Tube	1
6	18654	Valve - Natural	1
	18655	Valve - Propane	1
7	14326	Valve Connector	1
8	15695	Ignition Cont. (Channel)	1
		Ignition Cont. (Fenwal)	1
9	17836	Transformer	1
10	16564	Valve Connector	1
11	16565	Manual On/Off Valve	1
12	15696	Flex Line	1
13	16957	Limit Switch	1
14	18795	Valve Bracket	1
16	18846	Valve Assy - Natural	1
	18845	Valve Assy - Propane	

Attention

APPLIANCE INSTALLER

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

heatilator®
The first name in fireplaces

Heatilator Inc.
1915 W. Saunders Street
Mt. Pleasant, IA 52641
a HON INDUSTRIES company
319/385-9211FAX 319/385-5862