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



NOVUS™ SERIES B-VENT GAS APPLIANCE OWNERS MANUAL AND INSTALLATION INSTRUCTIONS

SERIES: DECORATIVE 30", 33", 36"

This manual must be used for installation of the NOVUS Series Gas Appliances and retained by the homeowner for operating and maintenance instructions.

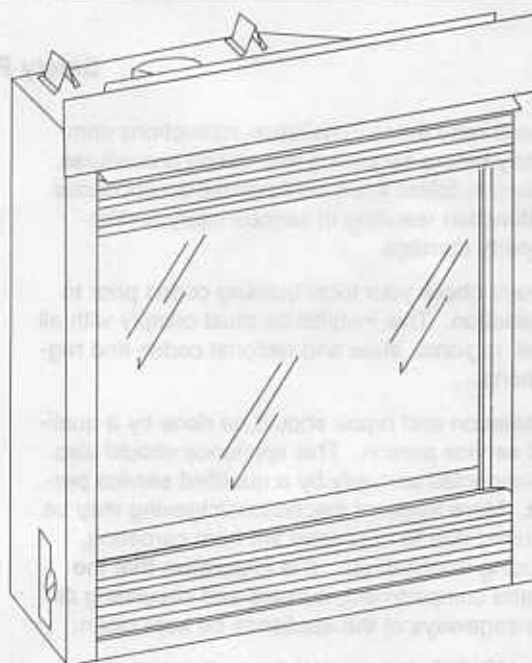
FOR YOUR SAFETY

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.

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 12 for wiring instructions.

Plumber: Please refer to page 7 and 12 for gas connection information.

Framer: Please refer to page 8 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 an appliance 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 passageways of the appliance be kept clean.
4. The NOVUS 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 appliance.
6. This appliance must be vented with a minimum 5" B-Venting system and must terminate above the roof line. Venting 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 appliance. Keep any flammable liquids a safe distance from the appliance.
8. While servicing this appliance, always shut off all electricity and gas to the appliance. This will prevent possible electrical shock or burns. Also, make sure the unit is completely cooled before servicing.
9. 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.
10. 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. and Canada Certification

The NOVUS Series Gas Appliance has been tested in accordance with the ANSI standard Z21.50-1991, or in Canada, the current CAN/CGA-2.22-M86, IR41 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 or CSA 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 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 appliance installation 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 must be made by a Heatilator distributor using factory specified and approved parts.

This product is manufactured to use natural gas or propane gas, depending on the model purchased. A natural gas unit can be converted to use propane, 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.

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II. DESCRIPTION OF THE SYSTEM

This HEATILATOR system must consist of the following:

1. Gas Appliance
2. B-Vent system
3. Termination

Optional components include:

1. Trim kits
2. Fan kit
3. Remote control
4. Refractory
5. Split Logs
6. Fixed Doors
7. Outside Air Kit

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.

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	

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 susceptible 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.



III. APPLIANCE SYSTEM COMPONENTS

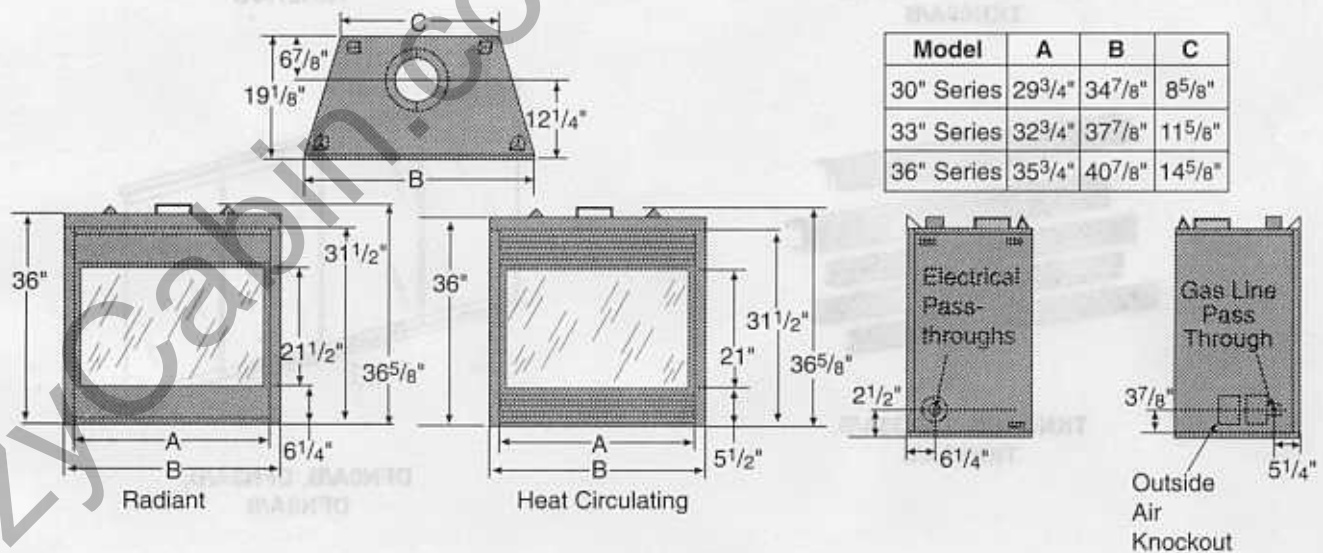
The table below is a list of only those components which may be safely used with this appliance.

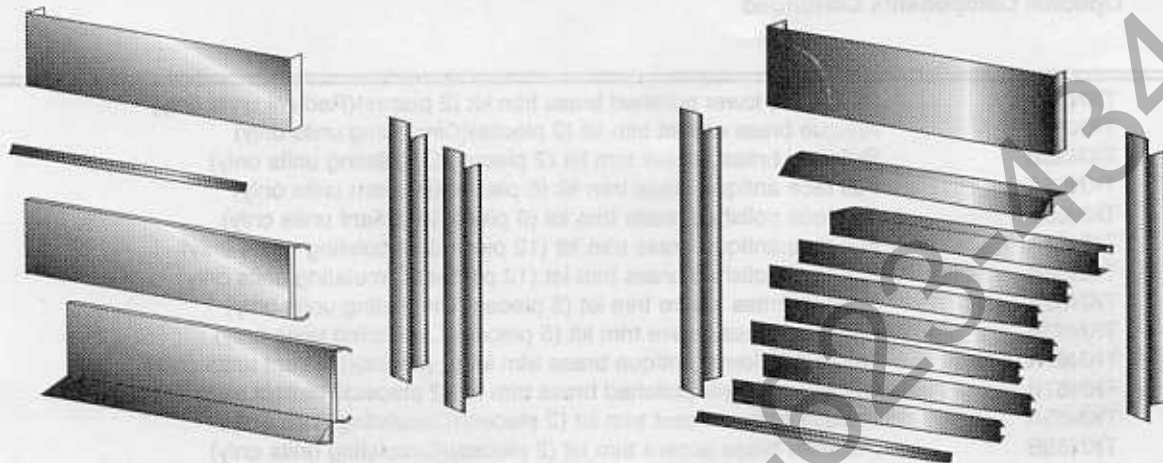
Catalog Number	Description
GNBC30LE	Appliance Order Code Number
GN	Gas Novus
B	B-Vent
C	C - Heat Circulating; R - Radiant
30	30 - 30" Unit
	33 - 33" Unit
	36 - 36" Unit
LE	No suffix - Standing Pilot, Natural Gas
	L - Standing Pilot, Propane Gas
	E - Electronic Ignition, Natural Gas
	LE - Electronic Ignition, Propane Gas
GNBC30LESRF	Appliance Order Code Number with Upgrade Code Number
S	Split Log Upgrade
R	Refractory Upgrade
F	Fan Kit Upgrade
	EXAMPLE
GNBC30LESRF	Gas NOVUS, B-Vent, Heat Circulating, 30", Propane Gas, Electronic Ignition unit with Split Logs, Refractory and Fan Kit Upgrades.
Optional Components	
CKP	Natural gas to propane gas conversion kit
CKN	Propane gas to natural gas conversion kit
MF1	Adjustable Low to High Flame Head for Standing Pilot Only - Natural
MF2	Adjustable Low to High Flame Head for Standing Pilot Only - Propane Gas
AK14	Outside Air Kit
BC10	Fan motor rheostat control
BC11	Automatic Variable Blower Control
FK4	Fan Kit, 160 CFM (33" and 36" units only)
FK21	Fan Kit, 75 CFM (30" unit only)
RC4	Remote control (standing pilot)
RC5	Remote control (electronic ignition)
RC6	Battery-operated remote control (standing pilot)
RCP	Remote Control Plus
LSP30/33	Split log set - 30" and 33"
LSP36	Split log set - 36"
RNB30	Refractory - 30"
RNB33	Refractory - 33"
RNB36	Refractory - 36"
TKN06A	Full face antique brass trim kit (6 pieces) (Radiant units only)
TKN06B	Full face polished brass trim kit (6 pieces) (Radiant units only)
TKN08A	Full face antique brass trim kit (12 pieces) (Circulating units only)
TKN08B	Full face polished brass trim kit (12 pieces) (Circulating units only)
TKN03A	Antique brass louvre trim kit (5 pieces) (Circulating units only)
TKN03B	Polished brass louvre trim kit (5 pieces) (Circulating units only)
TKN07A	Upper and lower antique brass trim kit (2 pieces) (Radiant units only)
TKN07B	Upper and lower antique brass trim kit (2 pieces) (Radiant units only)
TKNO5A	Antique brass accent trim kit (2 pieces) (Circulating units only)
TKNO5B	Polished brass accent trim kit (2 pieces) (Circulating units only)
TKN36A	Full face antique brass trim kit (6 pieces) (Radiant units only)
TKN36B	Full face polished brass trim kit (6 pieces) (Radiant units only)
TKN38A	Full face antique brass trim kit (12 pieces) (Circulating units only)
TKN38B	Full face polished brass trim kit (12 pieces) (Circulating units only)
TKN33A	Antique brass louvre trim kit (5 pieces) (Circulating units only)
TKN33B	Polished brass louvre trim kit (5 pieces) (Circulating units only)
TKN37A	Upper and lower antique brass trim kit (2 pieces) (Radiant units only)



Optional Components Continued

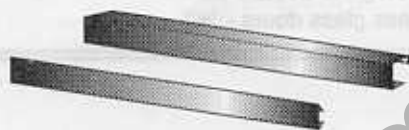
TKN37B	Upper and lower polished brass trim kit (2 pieces)(Radiant units only)
TKN35A	Antique brass accent trim kit (2 pieces)(Circulating units only)
TKN35B	Polished brass accent trim kit (2 pieces)(Circulating units only)
TKN66A	Full face antique brass trim kit (6 pieces)(Radiant units only)
TKN66B	Full face polished brass trim kit (6 pieces)(Radiant units only)
TKN68A	Full face antique brass trim kit (12 pieces)(Circulating units only)
TKN68B	Full face polished brass trim kit (12 pieces)(Circulating units only)
TKN63A	Antique brass louvre trim kit (5 pieces)(Circulating units only)
TKN63B	Polished brass louvre trim kit (5 pieces)(Circulating units only)
TKN67A	Upper and lower antique brass trim kit (2 pieces)(Radiant units only)
TKN67B	Upper and lower polished brass trim kit (2 pieces)(Radiant units only)
TKN65A	Antique brass accent trim kit (2 pieces)(Circulating units only)
TKN65B	Polished brass accent trim kit (2 pieces)(Circulating units only)
DFN0A	Fixed Original style bi-fold antique brass glass doors - 30"
DFN0B	Fixed Original style bi-fold polished brass glass doors - 30"
DFN3A	Fixed Original style bi-fold antique brass glass doors - 33"
DFN3B	Fixed Original style bi-fold polished brass glass doors - 33"
DFN6A	Fixed Original style bi-fold antique brass glass doors - 36"
DFN6B	Fixed Original style bi-fold polished brass glass doors - 36"





TKN06A/B, TKN36A/B,
TKN66A/B

TKN08A/B, TKN38A/B,
TKN68A/B



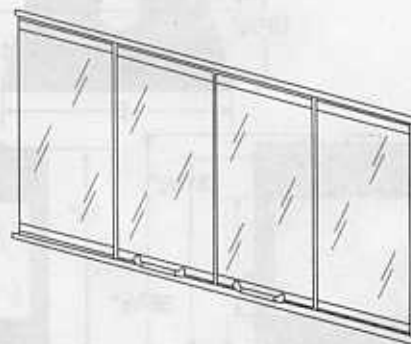
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TKN65A/B



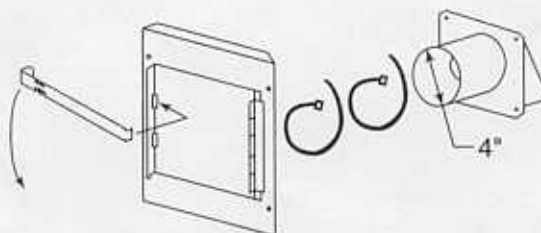
TKN07A/B, TKN37A/B,
TKN67A/B



TKN03A/B, TKN33A/B,
TKN63A/B



DFN0A/B, DFN3A/B,
DFN6A/B



AK14 Outside Air Kit



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 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. **NOVUS 30" and 33"** Natural Gas input rate is 25,000 Btu/hr. **NOVUS 36"** Natural Gas input rate is 32,000 Btu/hr. **NOVUS 30" and 33"** propane Gas input rate is 25,000 Btu/hr. **NOVUS 36"** propane Gas input rate is 30,000 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" water column for natural gas and 10.5" 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.

Due to our orifice coefficient of .8 (compared to the industry standard of .9), units below 7000 feet do not need to be derated.

Input should be reduced 4% for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification.

For Canada, 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.

Unit	Orifice Size	
	Natural Gas	Propane Gas
36" Decorative	.113 in/2.87 mm	.063 in/1.6 mm
30"/33" Decorative	.101 in/2.56 mm	.059 in/1.49 mm

C. APPLIANCE LOCATIONS AND SPACE REQUIREMENTS

This appliance may be installed along a wall, across a corner or use an exterior chase. The NOVUS Series may be installed directly on the floor or raised up 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.

D. CLEARANCES

The following clearances to combustibles must be maintained when installing this appliance: 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", to aside wall - 1". Minimum clearances to venting are as per the vent manufacturer's specifications. 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.

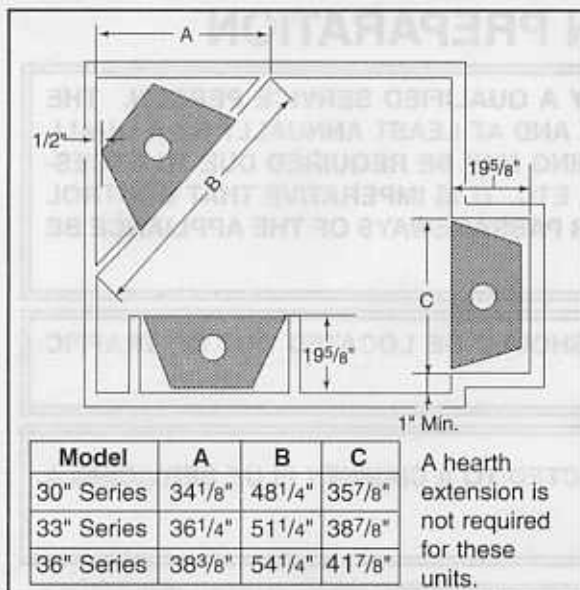


Figure 1
Appliance Locations and Clearances

E. FRAMING THE ENCLOSURE

Note: If an optional fan or hand held remote control 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.

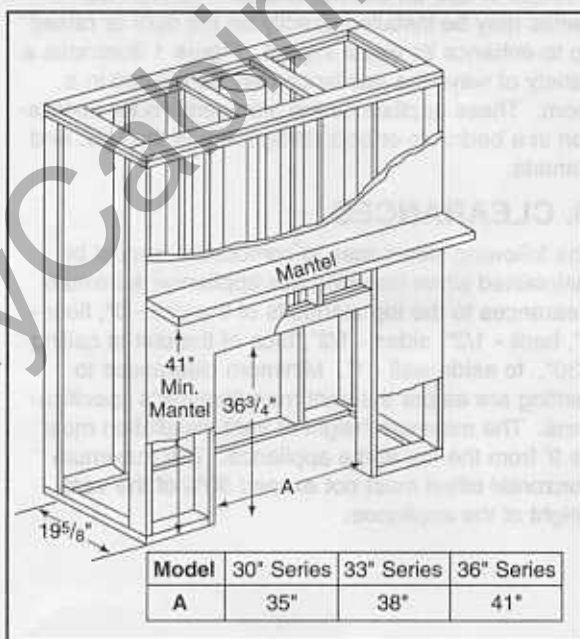


Figure 2
Framing

Figure 2 shows a typical framing of this appliance assuming combustible materials are used. All required clearances to combustibles around the appliance must be adhered to. A 1/2" air clearance must be maintained at the back and sides of the fire-box assembly. Any framing on top of the appliance must be above the top standoffs.

F. FINISHING MATERIALS

Only noncombustible materials may be used to cover the black surfaces of the appliance. The upper radiant panel may be covered, but the circulation grilles must never be covered.

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.

Noncombustible 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, or have a UL Fire rating of Zero (0).

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

After completing the framing and applying the finishing material (drywall) over the framing, a noncombustible sealant, 1/8" inch wide minimum, must be used to close off any gaps at the top and sides between the appliance and facing to prevent cold air leaks. See Figure 3.

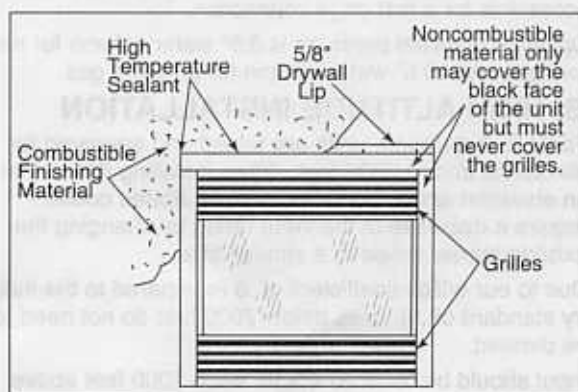


Figure 3
Finishing Materials

WARNING

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

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

Secure the appliance by bending out the nailing flanges located on each side of the appliance and nailing the unit to the framing. The nailing flanges have been positioned 5/8" back from the front of the unit to allow the addition of drywall.

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 4.

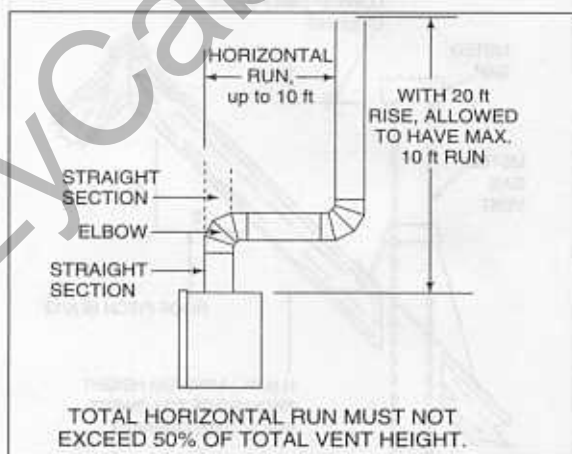


Figure 4
Venting Off The Top of Appliance

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. Attaching the Collar Shield. The collar shield, shipped inside the firebox, is centered around the flue collar. Holes on the three legs of the collar shield align with three holes on the top pan of the fireplace and attach with screws provided.

2a. Assembling Vent Sections. Attach a straight vent section to the top of the appliance. Use only B-vent sections.

2b. Attaching the Vent to the Collar Shield. Three tabs extend from the collar shield to the B-Vent section. Using the self-tapping screws provided, screw the tabs to the B-Vent section.

3. Using Elbows. Elbows exceeding 45 degrees from the vertical shall be considered horizontal and therefore adapt horizontal run limitations. See Figure 5.

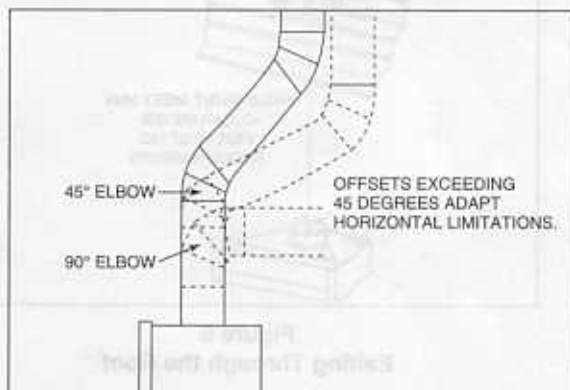


Figure 5
Using Elbows



4. 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.

5. 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.

6. 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.

7. 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 6.

8. 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 or greater minimum air space clearance (see Vent Instructions) must be maintained between the vent section and the roof.

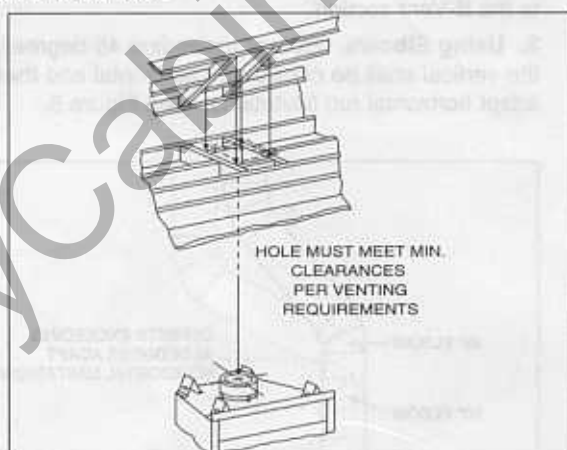


Figure 6
Exiting Through the Roof

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.

9. Install roof flashing or site-produced chase top. Position a roof flashing or a site-produced chase top and secure into place.

10. Assembling vent sections. Continue to add vent sections through the roof opening, maintaining minimum air space clearance.

11. 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.

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.

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 7 and 7a to determine the allowable termination height and location.

Measure the roof pitch. (Roof pitch is X/12 as shown in Figure 7.) Find your roof pitch in Figure 7a to determine the minimum height the termination cap must be located from the point where the vent section penetrates the roof (H in Figure 7).

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.

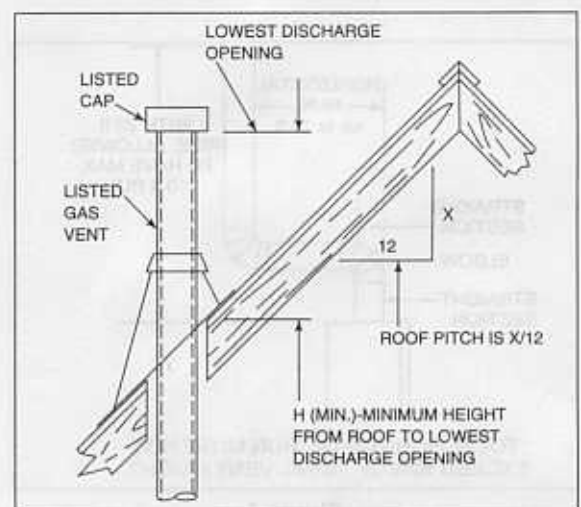


Figure 7
Termination Height if Termination Location is at Least 8' From a Vertical Wall



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 7a
Minimum Termination Height

These termination heights are necessary in the interest of safety and do not guarantee 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.

12. 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. See Figure 9.

STEP 4 - Installing an Outside Air Kit (strongly recommended)

An AK14 outside air kit should be purchased as a feature with this fireplace. An outside air kit helps to decrease the amount of room air taken, by utilizing outside air for combustion. The outside air kit can only be installed on the left side of the fireplace. Remove the outside air knock-out located behind the gas access panel. Install the AK14 outside air kit as detailed in the installation instructions provided with the outside air kit.

To operate the AK14, before starting the fireplace, open the valve area of the fireplace by rotating down the bottom grille or panel. Grasp the small, black handle located on the left side of the fireplace, just below the glass channel.

See Figure 8. Lift the handle out of its slot and pull towards the front. The outside air door should open until it contacts the firebox. Replace the handle back in the slot on the bracket from which it was removed (so the outside air door remains open) and close the lower grille or panel. When through burning the fireplace, lower the panel, grasp the handle and push the outside air door closed.

A maximum of 40' of air kit ducting is allowed to vent to the outside. Requirements for longer runs are that there must be at least 4 feet below the termination cap for the exhaust and the inlet must pull air from outside.

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.

Note: The outside air kit can terminate at any level with the exception that it must terminate at least one foot below the chimney terminal cap.

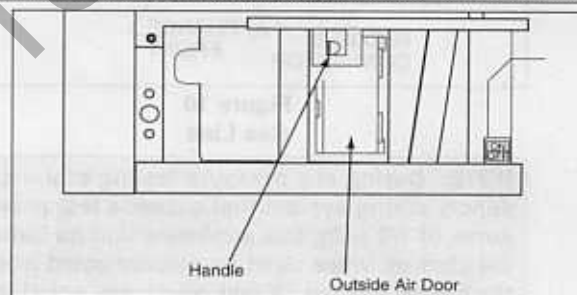


Figure 8 - AK14 Installed

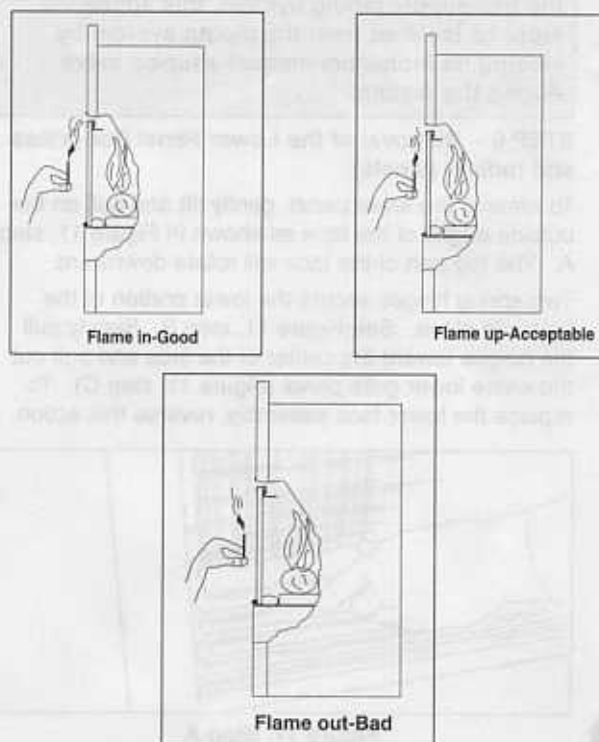


Figure 9 - Testing Ventilation



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. Gas connections can be made from outside the appliance by removing the lower grille panel. All connections must be checked for leaks with a soap and water solution or a leak detector.

Bleed the gas line for about 5 seconds to extract any air that may have been trapped inside the pipe.

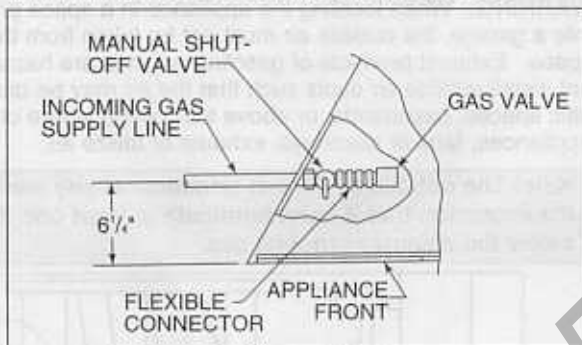


Figure 10
Gas Line

NOTE: During any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 psig, this appliance and its individual shut-off valve must be disconnected from the piping system. If test pressures equal to or less than 1/2 psig are used in pressure testing the gas supply piping system, this appliance must be isolated from the piping system by closing its individual manual shut-off valve during the testing.

STEP 6 - Removal of the Lower Panel (for grilles and radiant panels)

To remove the lower panel, gently lift and pull on the outside edges of the face as shown in Figure 11, step A. The top part of the face will rotate downward.

Two spring hinges secure the lower portion of the face into place. See Figure 11, step B. Simply pull the hinges toward the center of the face and pull out the entire lower grille panel (Figure 11, step C). To replace the lower face assembly, reverse this action.

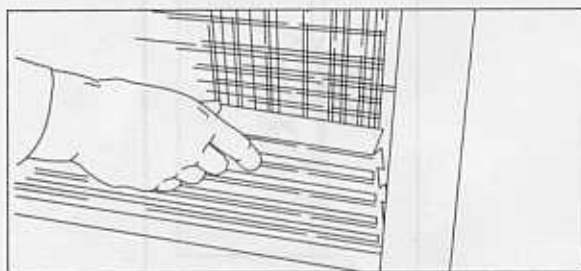


Figure 11, Step A
Lower Grille Panel Removal

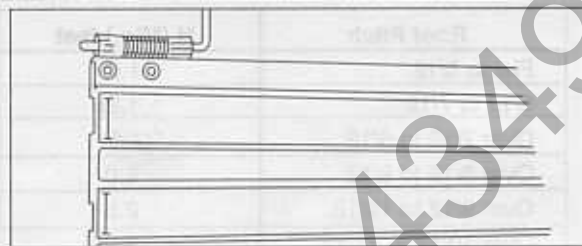


Figure 11, Step B
Lower Grille Panel Removal

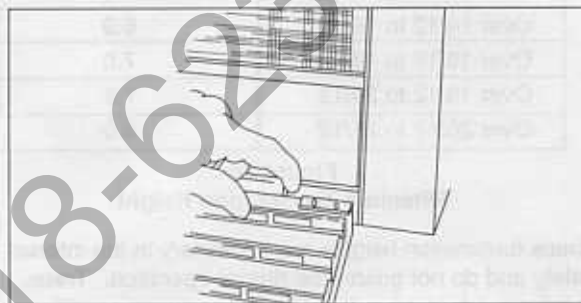


Figure 11, Step C
Lower Grille Panel Removal

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. 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 12. 12-3 gauge wiring with ground is recommended to the appliance Junction Box.

2. Remote Wall Switch. Position the junction box that will house the wall switch (neither are provided) in the desired place on the wall. Run the wire to the junction box, connect it to a wall switch and mount 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. The optional fan kit requires a separate 110VAC supply to the appliance junction box for operation, as shown in Figure 12. No additional 110VAC supply is required for the fan motor speed control (BC10) or the remote control (RC5) or BC11. Wiring diagrams are provided with all accessories.



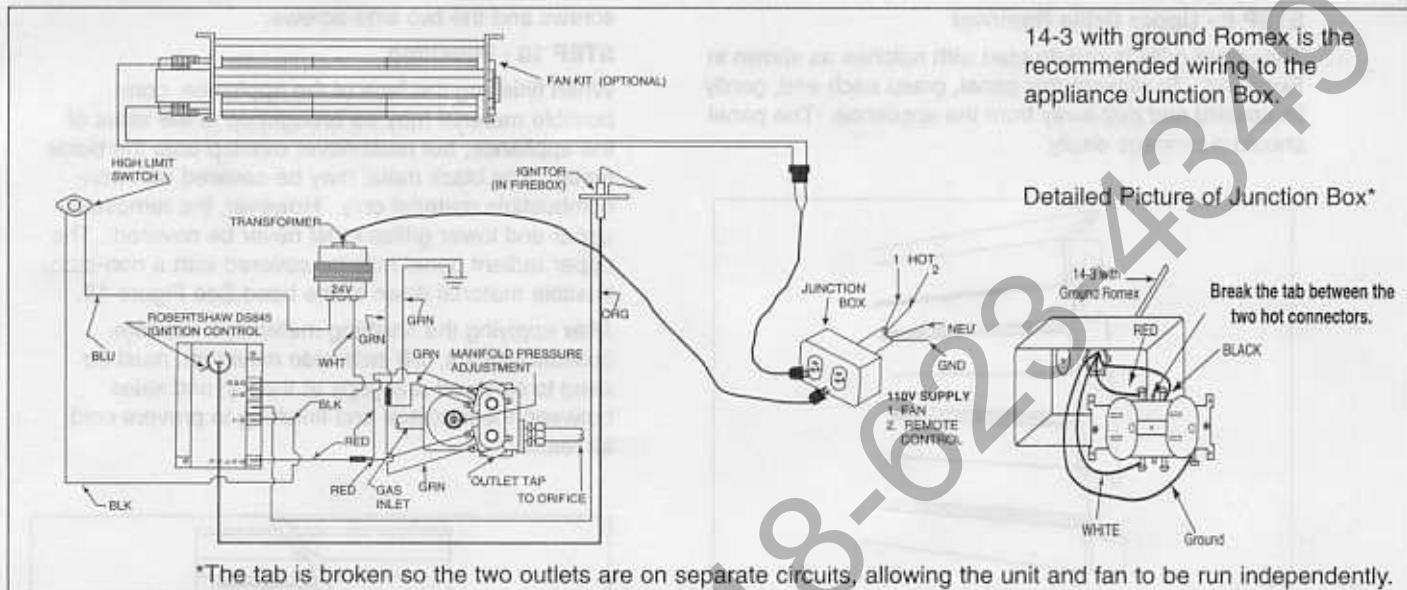


Figure 12
Electronic Ignition Wiring Diagram

B. STANDING PILOT IGNITION

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

1. Remote Wall Switch. Position the junction box that will house the wall switch (neither are provided) in the desired place on the wall. A wiring diagram is shown in Figure 13. If you extend beyond the wall switch wires provided, you must not use wire on nut extensions, but replace existing

wires with those of the desired length. Note: extended lengths of wire will reduce millivolt reading and may cause unit shut-downs.

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 if accessories are added later. The optional fan kit requires a 110VAC supply to the appliance junction box for operation. No additional 110VAC supply is required for the fan motor speed control (BC10). The remote control (RC4) requires a separate 110VAC supply directly to the appliance junction box, as shown

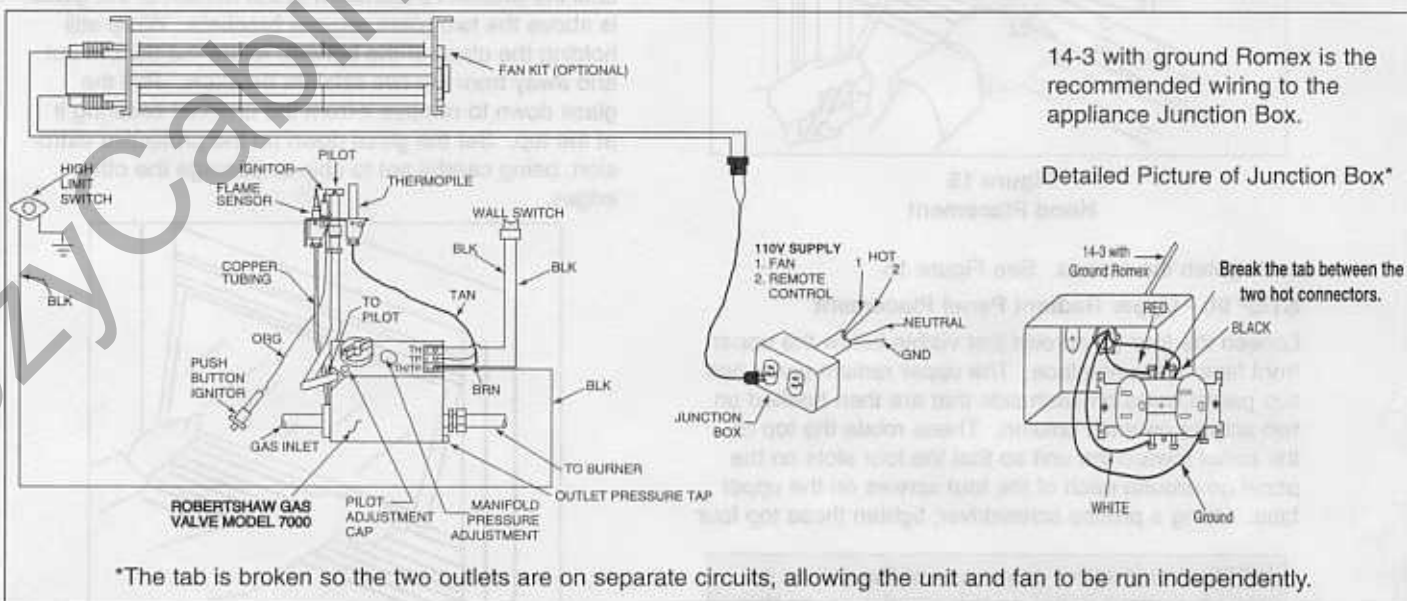


Figure 13
Standing Pilot Ignition Wiring Diagram

STEP 8 - Upper Grille Removal

The upper grille is constructed with notches as shown in Figure 14. To remove this panel, grasp each end, gently lift upward and pull away from the appliance. The panel should disengage easily.

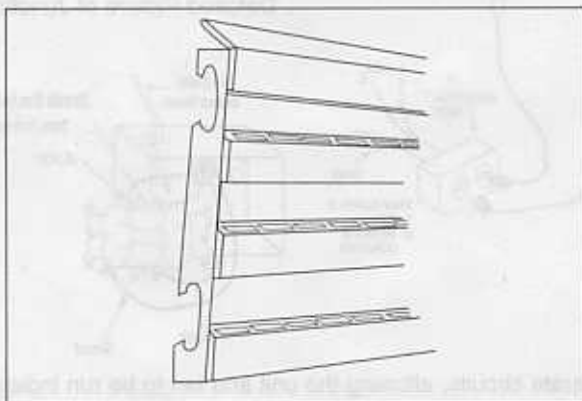


Figure 14
Upper Grille Panel

STEP 9a - Attaching the Hood (circulating units only)

The hood is to be located just above the upper grille panel. After the grille panel has been removed (Step 8), four screws are visible just inside the upper section of the fireplace. Loosen these screws, position the hood

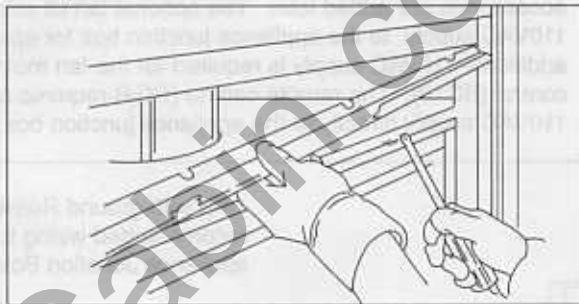


Figure 15
Hood Placement

and tighten the screws. See Figure 15.

STEP 9b - Upper Radiant Panel Placement

Loosen the four (4) screws just visible below the upper front face of the fireplace. The upper radiant panel has two partial holes on each side that are then hooked on two screws on each column. These rotate the top of the panel toward the unit so that the four slots on the panel go around each of the four screws on the upper face. Using a phillips screwdriver, tighten these top four

NOTE: You cannot cover any of the grilles or bottom radiant panel on this appliance, as this may create a fire hazard. See Figure 16 for grille/radiant panel location.



screws and the two side screws.

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. However, the removable upper and lower grilles must never be covered. The upper radiant panel may be covered with a non-combustible material down to the hood. See Figure 16.

After applying the finishing material, a noncombustible sealant, 1/8 inch wide minimum, must be used to close off any gaps at the top and sides between the fireplace and finishing to prevent cold air leaks.

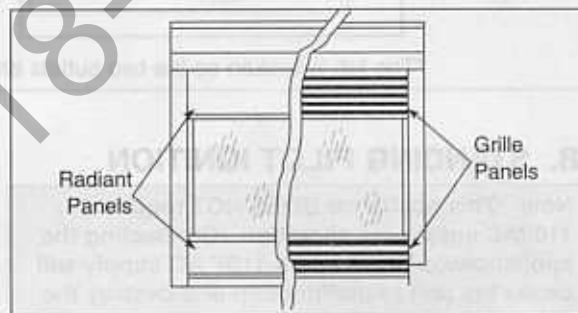


Figure 16
Location of Grilles

STEP 11 - Glass Removal

To remove the glass, grasp the glass at the bottom near the left and right sides. Lift the glass straight up until the protective extrusion at the bottom of the glass is above the two glass retainer brackets. While still holding the glass at the bottom, rotate the bottom out and away from the two retainer brackets. Pull the glass down to remove it from the channel securing it at the top. Set the glass down on the protective extrusion, being careful not to chip or damage the other edges.

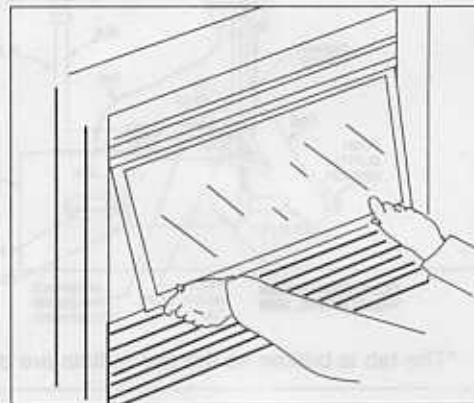


Figure 17
Glass Removal

STEP 12 - Firebox Preparation

CAUTION
REMOVE THE PLASTIC BAG FROM OVER THE PILOT ASSEMBLY BEFORE LIGHTING UNIT.

1. Using sharp scissors or a knife, cut the two (2) elastic straps that secure the logs in position. Remove the straps by pulling them out from underneath the ash lip. Remove the foam packaging from the logs. The whole logs should look similar to those in Figure 18A (for 30" and 33" units) or Figure 18B (for 36" units). The split logs should look similar to those in Figure 19A (for 30" and 33" units) or Figure 19B (for 36" units). If not, contact your Heatilator Representative to properly set up logs.

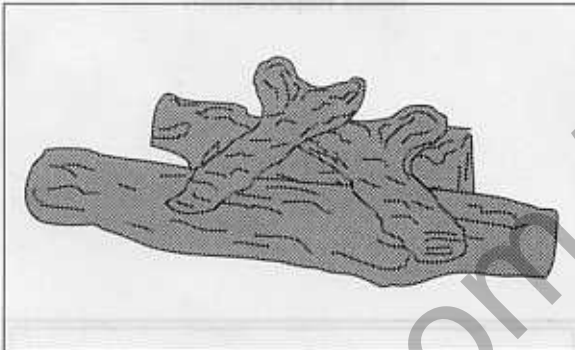


Figure 18A
Whole Log Set for 30" and 33" Units

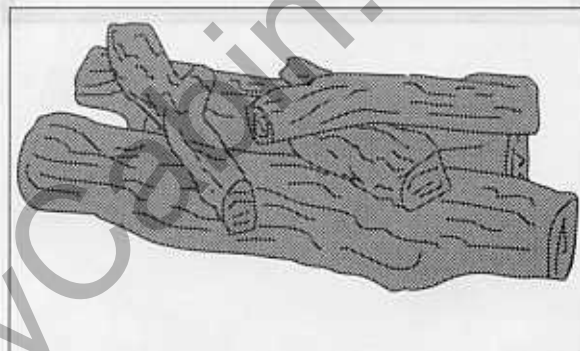


Figure 18B
Whole Log Set for 36" Units

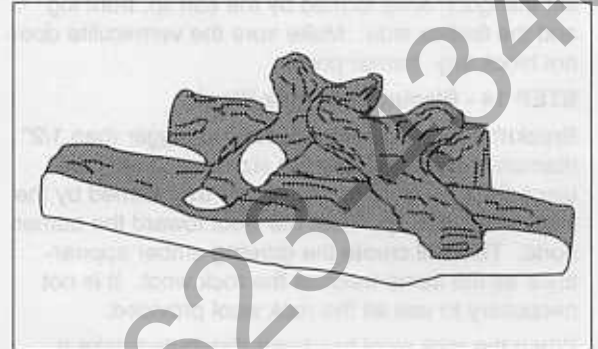


Figure 19A
Split Log Set for 30" and 33" Units

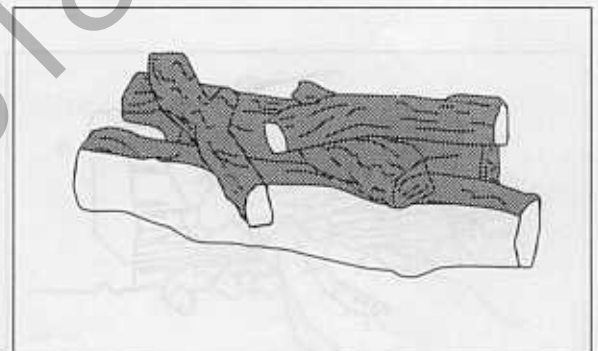


Figure 19B
Split Log Set for 36" Units

If removal of the logs becomes necessary, use the following directions. Remove the screw below the right side of the front log which is holding the log bracket to the hearth sheet. Carefully grasp the front log at each end. Lift the logs straight up on the left end and pull the log set to the left until the log brackets are free from the burner. Lift the log set out of the unit.

To replace the logs once they have been removed, grasp the front log at the left and right ends. Place the right end of the set down so the front and back logs are in between the curves of the burner. The tab on the right end of the front log bracket should be in front of the tab on the right side of the hearth sheet. Slide the set to the right until it stops. Then set the left end of the log set down. The logs should be resting on the hearth sheet and held in position by 2 hand-bent tabs on the middle and left sides of the hearth sheet. Secure the log set in place by driving the screw through the tab in the front log bracket into the tab on the right side of the hearth sheet.

STEP 13 - Placing the Vermiculite

Spread a light coating of vermiculite in the right and left triangular area formed by the ash lip, front log and the firebox side. Make sure the vermiculite does not block any 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 ember tray formed by the back of the ash lip. Rest the wool toward the burner ports. This will create the glowing ember appearance as the flame touches the rock wool. It is not necessary to use all the rock wool provided.

When the rock wool has been distributed, take a large piece of left over rock wool and rub it along the base of the front log. The elements in the rock wool that produce a glowing effect will cling to the log and create the effect that the log is also glowing.

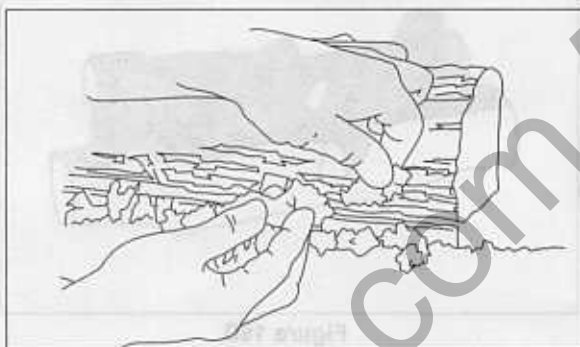


Figure 20
Placing the Rock Wool

STEP 15 - Glass Replacement

After arranging the log set in the unit, replace the fixed panel of glass by grasping the glass at the bottom and angling the top edge of the glass into the channel at the top of the firebox. Then rotate the bottom of the glass towards the unit until the sides of the glass contact the gasketing on each side. Carefully allow the glass to drop into the two bottom glass retainer brackets, making sure that the protective extrusion is completely down in the brackets.

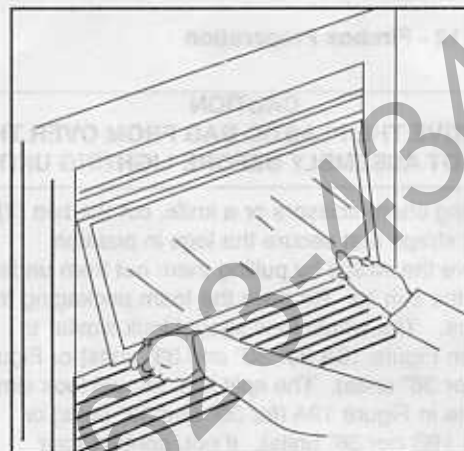


Figure 21
Glass Replacement

WARNING

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



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 22 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.

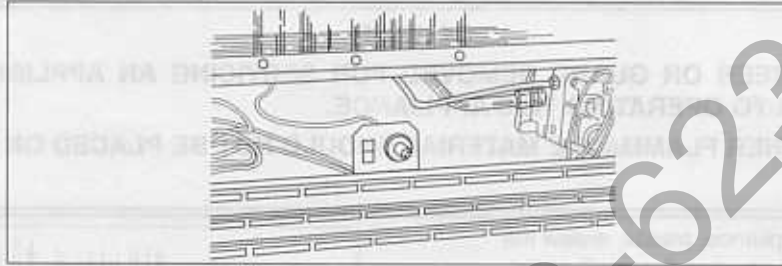


Figure 22
Standing Pilot Ignition

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

- A. This appliance (standing pilot version) has a pilot which must be lit manually. 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

- 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 manually light the burner.
- 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 vermiculite have all been placed correctly. (Refer to Steps 13 through 16 beginning on page 15). The top of the burner and the holes in the sides of the burner should not be covered with vermiculite. 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 (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. 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.
6. Read and understand these Instructions thoroughly before attempting to operate this appliance.

STEP 1- Lower Grille/Radiant Panel Removal

To remove the lower panel, gently lift and tug on the outside top edges of the panel as shown in Figure 23. The top of the panel will rotate downward.

Two spring hinges secure the lower portion of the panel into place. See Figure 24. Simply pull the hinges toward the center of the panel and then pull out the entire panel (Figure 25). 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 20.

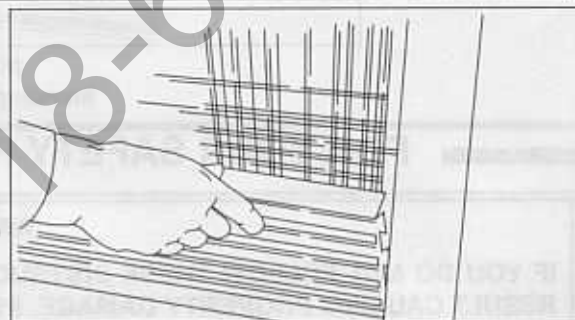


Figure 23
Lower Grille/Radiant Panel Removal

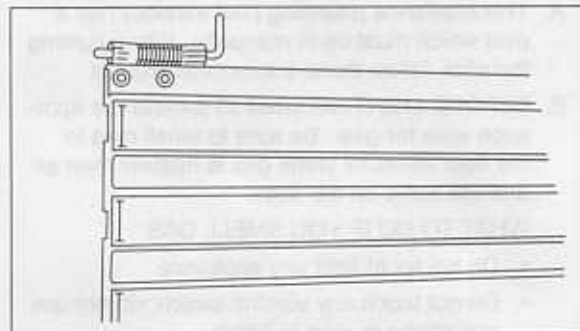


Figure 24
Lower Grille/Radiant Panel Removal

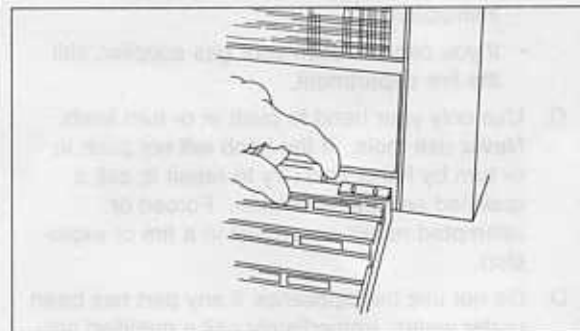


Figure 25
Lower Grille/Radiant Panel Removal



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, the ON/OFF switch underneath the unit (if it has been installed on your unit), and the gas knob (located inside the lower panel) have been turned to the OFF position. See Figure 26. 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 27, 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 30 seconds 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 28. 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 turning the remote wall switch and ON/OFF switch underneath the unit (if it was installed on your unit) to the OFF position.

The next step is to remove the lower grille panel to expose the wiring system. (Follow Step 1 on page 18.) 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 remote 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 25.)

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.

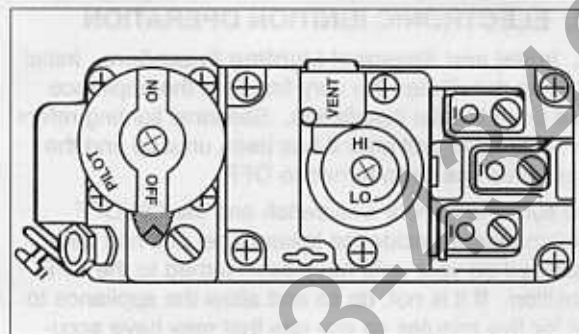


Figure 26
Standing Pilot Ignition valve "OFF"

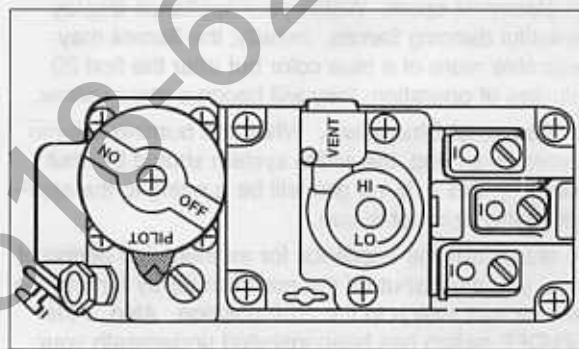


Figure 27
Standing Pilot Ignition valve to "PILOT"

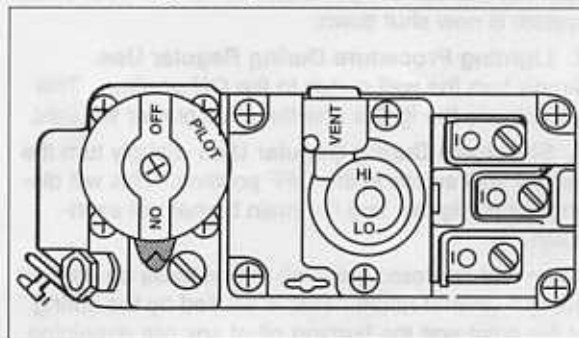


Figure 28
Standing Pilot Ignition to "ON"

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 to page 24.

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 ON/OFF switch located inside the lower panel (if it has been installed on your unit) have been turned to the OFF position. 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 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 shut off the main burner by turning the remote wall switch to the OFF position. Also, if the ON/OFF switch has been installed underneath your unit, it too must be turned 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 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 21.)

Each time this appliance is lit, it will cause condensation and fog on the glass. This condensation and fog

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 29 through 32.

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

Note: When cleaning the glass, NEVER use abrasive materials. NEVER clean glass when hot. Keep pets and children a safe distance away.

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 14. 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, carefully remove the glass frame. This will allow the removal of all glass fragments. Vacuum all remaining glass pieces with a shop vac. (DO NOT VACUUM IF PIECES ARE HOT.) Replace glass only with Heatilator Glass ordered direct or through your local distributor. Never use substitute material. Only fully tempered soda lime safety 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 soot is accumulating in your appliance, the air shutter should be opened farther as shown in Figure 32. 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.

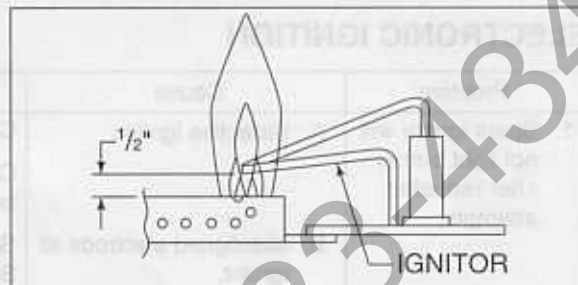


Figure 29
Electronic Ignition

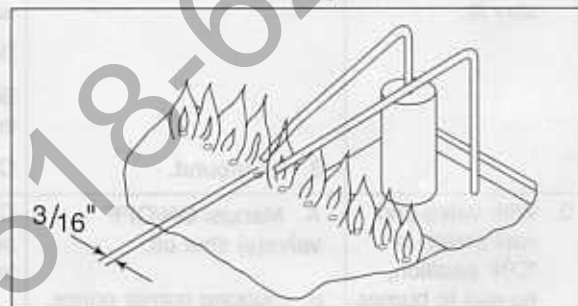
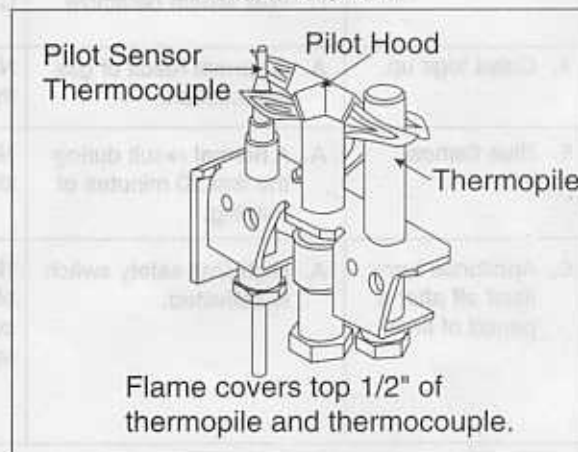
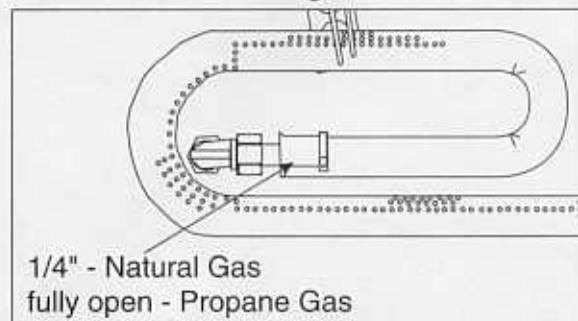


Figure 30
Electronic Ignition



Flame covers top 1/2" of thermopile and thermocouple.

Figure 31
Standing Pilot



1/4" - Natural Gas
fully open - Propane Gas

Figure 32
Both Ignitions

VIII. TROUBLE SHOOTING

ELECTRONIC IGNITION

Problem	Cause	Corrective Action
1. Spark ignitor will not light burner after repeated attempts.	A. Defective ignitor. B. Misaligned electrode at ignitor.	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 30. Adjust gap to give proper spark. Remove hands from electrode before attempting.
2. Burner will not stay lit.	A. Defective ignitor. B. No ground.	Check burner flame. See Figure 29 & 30. Adjust ignitor if necessary. Be sure ignitor 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 12.
3. With valve and wall switch in "ON" position, no gas to burner.	A. Manual ON/OFF 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 and reset limit switch located on upper side column. 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. B. Misaligned electrode. C. No gas to pilot/plugged orifice. D. Ignitor wire grounding out. E. Loose ignitor wiring.	Replace ignitor. 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. Check valve knob position & any shut-off valves. If propane, check for empty tank. Check pilot orifice; remove any blockage. Replace pilot assembly. 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. B. Pilot sensor not tightened/seated in valve properly. C. Defective pilot sensor thermocouple. D. Faulty valve.	Check log placement. Check pilot flame; adjust flame if necessary. Check that pilot sensor connector is tight in valve. Replace pilot sensor thermocouple. 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. B. ON/OFF wall switch defective. C. Plugged burner orifice. D. Defective thermopile. E. Burner not on orifice. F. Loose or faulty wiring. G. Faulty valve. H. Faulty high limit switch/microswitch.	Remove voltage and replace valve. 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. Check burner orifice; remove blockage. Replace thermopile. Check burner; place on orifice. Check for loose connections; verify wiring (See Figure 13). Replace valve. 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. B. Intermittent short in ON/OFF wiring system. C. Defective thermopile.	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. Check/replace ON/OFF wiring system. 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. B. Defective pilot sensor thermocouple.	Check log placement; check pilot flame, adjust flame if necessary. 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. B. Improper log placement causing soot. C. Dark yellow tipped flame.	Clean glass with Brasso or silver polish. Check log placement; reposition if necessary. Open air shutter to increase air to gas ratio.



Removal of the Valve/Hearth Pan Assembly System

Step 1 - Remove the upper and lower panels and the glass by following the instructions in Step 8 on page 14 of this installation instructions.

Step 2 - The logs, rock wool, vermiculite and ash lip must be removed from the burner pan and set aside. If optional refractory has been installed on the unit, this must be removed as well.

Step 3 - Locate the manual shut off valve under the hearth pan and close it to shut off all gas to the fireplace.

Step 4 - Using a 3/4" wrench, disconnect the flexible line from the manual shut-off valve, leaving the valve connected to the incoming gas supply line and in the closed position.

Step 5 - Disconnecting External Wires

Electronic Units Unplug the transformer from the junction box below the unit. Disconnect the high limit switch by unplugging the black wire coming from the high limit switch to the ON/OFF switch below the unit and by disconnecting the blue wire on the transformer. Continue with Step 5.

Standing Pilot Units Remove all the wires connected to the three screws on the valve.

Unplug the thermopile wire from the blue high limit wire. Also, unplug the two black wires on the ON/OFF switch on the left side of the valve assembly below the fireplace.

Step 5 - Carefully pull all the wires out of the cord clips fastened to the bottom pan of the fireplace.

Step 7 - On the firebox bottom in the valve area are four (4) wing bolts. Loosen and remove these bolts and place them in the bottom of the fireplace.

Step 8 - Carefully grasp the hearth pan inside the firebox, as shown in Figure 33, using an air slot (one of the oblong holes) as a hand hold. Slowly lift the entire hearth pan and valve assembly straight up, making sure that no metal edges or wires are caught in the fireplace.

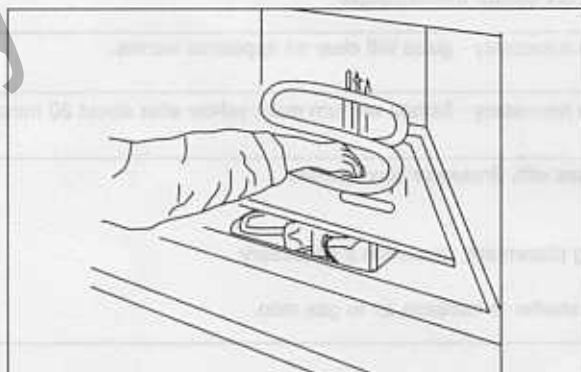


Figure 33
Hearth Pan Removal/Replacement

Replacing of the Valve/Hearth Pan Assembly System

Step 1 - Grasp the hearth pan from above by one of the oblong air slots and lift into the fireplace above the rectangular opening in the bottom of the firebox. Be careful not to scratch the sides of the fireplace as you position the hearth pan.

Step 2 - Bundle all extraneous wires and drop into the rectangular opening.

Step 3 - Carefully lower the valve assembly into the opening. Make sure that the flexible gas line and all wires are completely through the opening and into the bottom of the fireplace. Check that no wires are caught between the gasketing on the firebox bottom and the valve assembly.

Step 4 - Check the bottom of the fireplace to make sure that no wires are caught between the valve bracket and the bottom of the fireplace.

Step 5 - Reconnecting External Wires

Electronic Units Reconnect the high limit switch by plugging the black wire into the back of the ON/OFF switch in the bottom of the unit and by reconnecting the blue wire to the transformer (on the empty connection labeled "24V").

Next, plug the transformer into the junction box in the bottom of the unit.

Standing Pilot Units Reconnect the wall switch, high limit, and thermopile wires as shown in the wiring diagram in Figure 13. Branching off the wall switch wires are two short black wires with insulated female ends. These need to be reconnected to the ON/OFF switch on the left side of the valve assembly.

Step 6 - Hook any long wires through available cord clips attached to the bottom of the fireplace so they cannot contact the firebox bottom.

Step 7 - Replace the four (4) wing bolts by aligning the holes on the firebox with the holes on the steel plate of the valve assembly and tightening the wing bolts by hand.

Step 8 - Reconnect the gas by attaching the flex line coming from the gas valve to the manual ON/OFF valve connected to the incoming gas line. Tighten with a 3/4" wrench. Move the manual valve to the on or open position.

Check all gas connections for leaks with a soap and water solution.

Step 9 - Reposition the logs, ash lip, rock wool, and vermiculite by following the instructions on pages 15 and 16.

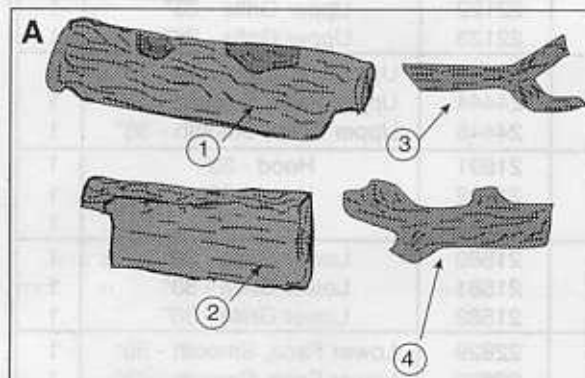
Step 10 - Replace the glass, screen and upper and lower panels.

Step 11 - The appliance may now be re-lit by following the operating instructions given on page 19 or 20.

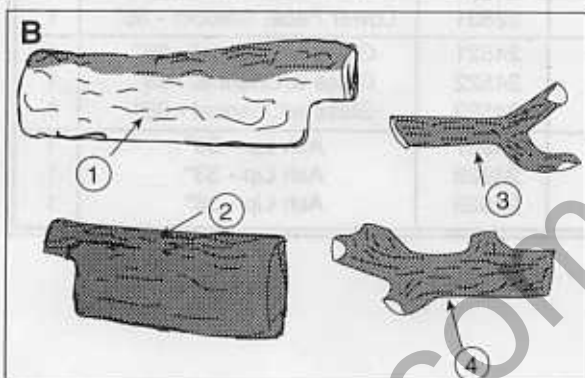


IX. REPLACEMENT PARTS

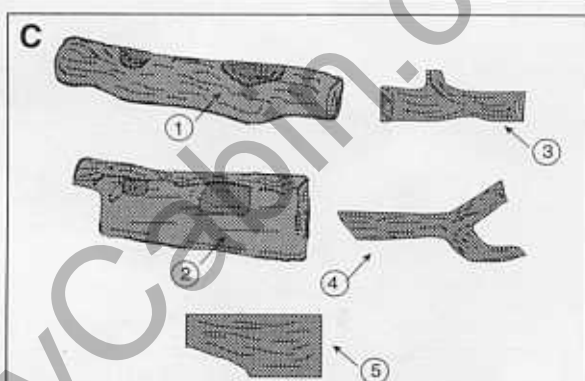
Replacement parts are available from your distributor/dealer, or through Heatilator Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.



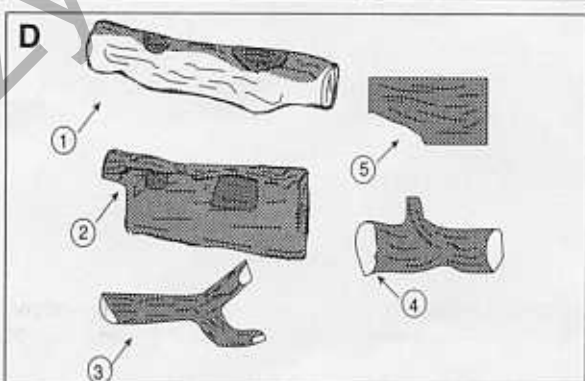
ITEM	PART NO.	DESCRIPTION	QTY
A	25567	LW30 - 30" whole log set	1
1	22936	Front Log	1
2	23513	Back Log	1
3	25255	Log	1
4	25226	Top Left Log	1



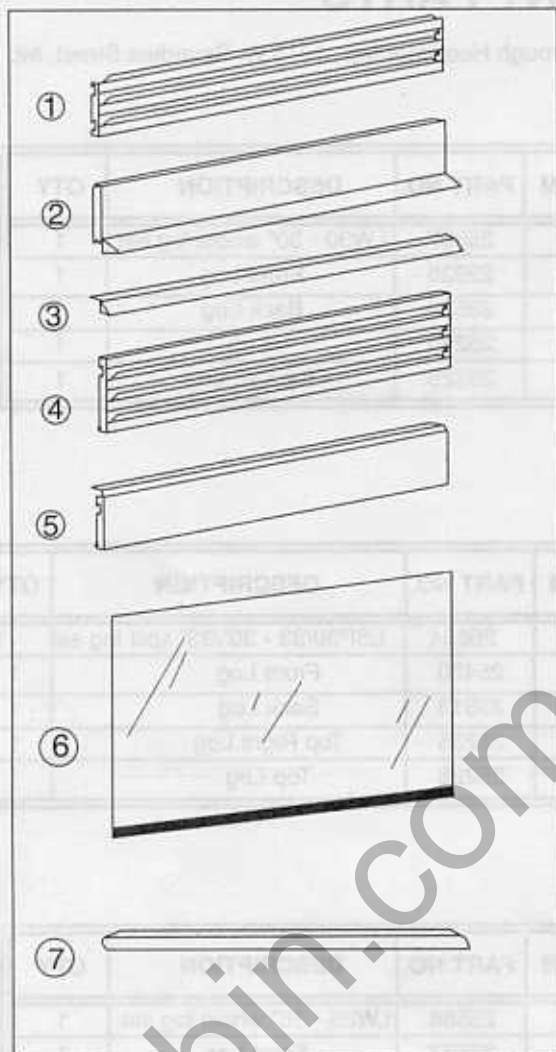
ITEM	PART NO.	DESCRIPTION	QTY
B	25634	LSP30/33 - 30"/33" split log set	1
1	25470	Front Log	1
2	23513	Back Log	1
3	25255	Top Right Log	1
4	25226	Top Log	1



ITEM	PART NO.	DESCRIPTION	QTY
C	25568	LW36 - 36" whole log set	1
1	22927	Front Log	1
2	22928	Back Log	1
3	25254	Top Left Log	1
4	25255	Top Right Log	1
5	25256	Middle Right Log	1

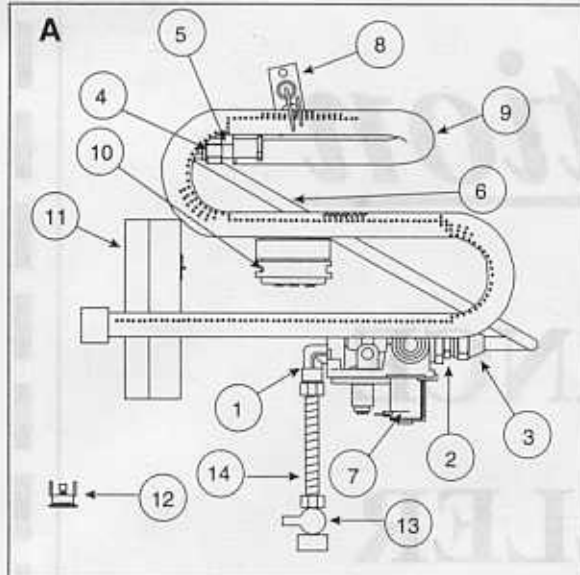


ITEM	PART NO.	DESCRIPTION	QTY
D	25635	LSP36 - 36" split log set	1
1	22932	Front Log	1
2	22928	Back Log	1
3	25255	Middle Right Log	1
4	25254	Top Left Log	1
5	25256	Log	1



ITEM	PART #	DESCRIPTION	QTY
1	22121	Upper Grille - 30"	1
	22122	Upper Grille - 33"	1
	22123	Upper Grille - 36"	1
2	24443	Upper Face, Smooth - 30"	1
	24444	Upper Face, Smooth - 33"	1
	24445	Upper Face, Smooth - 36"	1
3	21991	Hood - 30"	1
	21992	Hood - 33"	1
	21993	Hood - 36"	1
4	21580	Lower Grille - 30"	1
	21581	Lower Grille - 33"	1
	21582	Lower Grille - 36"	1
5	22829	Lower Face, Smooth - 30"	1
	22830	Lower Face, Smooth - 33"	1
	22831	Lower Face, Smooth - 36"	1
6	24521	Glass w/Channel - 30"	1
	24522	Glass w/Channel - 33"	1
	24523	Glass w/Channel - 36"	1
7	24927	Ash Lip - 30"	1
	24928	Ash Lip - 33"	1
	24929	Ash Lip - 36"	1

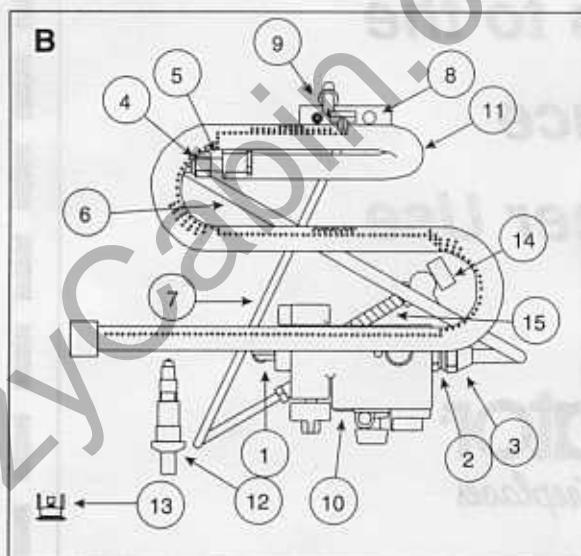


ELECTRONIC IGNITION

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

ITEM	PART #	DESCRIPTION	QTY
A	BNE	Entire burner and gas control platform, electronic ignition	1
1	14326	90° Elbow	1
2	17069	Brass Fitting, Male	1
3	14324	Brass Fitting, Female	1
4	13908	90° Bulkhead Elbow	1
5	13410	Orifice - Nat. - 30" & 33"	1
	17811	Orifice - Nat. - 36"	1
	17235	Orifice - Nat. - 36" Heater	1
	13445	Orifice - Propane - 30" & 33"	1
	17236	Orifice - Propane - 36"	1
6	21951	Burner Tube	1
7	21464	Valve	1
8	23164	Ignitor	1
9	21572	Burner	1
10	20947	Transformer	1
11	15695	Ignition Control	1
12	22922	High Limit Switch	1
13	15697	On/Off Valve	1
14	17245	Flex Line	1

STANDING PILOT

ITEM	PART #	DESCRIPTION	QTY
B	BNS	Entire burner and gas control platform, standing pilot	1
1	14326	90° Elbow	1
2	17069	Brass Fitting, Male	1
3	14324	Brass Fitting, Female	1
4	13908	90° Bulkhead Elbow	1
5	13410	Orifice - Nat. - 30" & 33"	1
	17811	Orifice - Nat. - 36"	1
	17235	Orifice - Nat. - 36" Heater	1
	13445	Orifice - Propane - 30" & 33"	1
	17236	Orifice - Propane - 36"	1
6	21563	Burner Tube	1
7	21564	Pilot Tube	1
8	13411	Thermopile	1
9	25660	Pilot Assy - Natural	1
	25661	Pilot Assy - Propane Gas	1
10	23363	Valve - Natural	1
	23364	Valve - Propane Gas	1
11	21572	Burner	1
12	13416	Push Button Ignitor	1
13	24967	High Limit Switch	1
14	15697	On/Off Valve	1
15	17245	Flex Line	1

Attention

**APPLIANCE
INSTALLER**

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

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