



P/N 900719-00 REV. C 04/2018



Installation and Operation Instructions

Unvented (Vent-Free) Radiant and Louvered Faced Fireplace System with Logs and Thermostat Blower

Models

VRT4032ZEN	VRT4032ZEP	VRT4036ZEN	VRT4036ZEP
VCT4032ZEN	VCT4032ZEP	VCT4036ZEN	VCT4036ZEP

For use with log set (required option)

LBG18BM	LBG24BM
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NATIONAL FIREPLACE INSTITUTE

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www.nficertified.org

We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

This appliance may be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to Air for Combustion and Ventilation section on *Page 7* of this manual.



WARNING:

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **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.
 - Leave the building immediately.
 - 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.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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SAFETY

⚠ WARNING: FIRE, EXPLOSION, AND ASPHYXIATION HAZARD
Improper adjustment, alteration, service, maintenance, or installation of this heater or its controls can cause death or serious injury.
Read and follow instructions and precautions in User's Information Manual provided with this heater.

⚠ WARNING: This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Air for Combustion and Ventilation* section on Page 7 of this manual.

This appliance may be installed in an aftermarket,* permanently located, manufactured (mobile) home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

⚠ WARNING: Vent-free products are prohibited for bedroom and bathroom installation in the Commonwealth of Massachusetts.

*** Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer**

⚠ WARNING: This product contains and/or generates chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the heater may not be working properly. **Get fresh air at once!** Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

⚠ DANGER: Carbon monoxide poisoning may lead to death!

Natural and Propane/LP Gas: Natural and propane/LP gases are odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Solid-fuels shall not be burned in a fireplace in which an unvented room heater is installed.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this heater.

SAFETY

Continued

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this fireplace. Improper use of this fireplace can cause serious injury or death from burns, fire, explosion, electrical shock and carbon monoxide poisoning.

⚠ WARNING: Any change to this heater or its controls can be dangerous.

⚠ WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.

⚠ WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

⚠ WARNING: Do not place log scraps or volcanic stone on burner.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the heater.

Fireplace front and screen become very hot when running fireplace. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.

Young children should be carefully supervised when they are in the same room with the appliance. When using the hand-held remote accessory, keep selector switch in the OFF position to prevent children from turning on burners with remote.

You must operate this heater with the fireplace screen and hood in place before running heater. The fireplace screen shall have openings for introduction of combustion air.

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

Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional 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.

This appliance must be mounted on a fully supported base extending the full width and depth of the unit. The fireplace may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

Any safety screen, guard, or barrier removed for servicing an appliance must be replaced prior to operating the heater

SAFETY

Continued

1. WARNING: This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors (propane/LP only).
3. If you smell gas
 - shut off gas supply
 - 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
4. This fireplace shall not be installed in a bedroom or bathroom.
5. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
6. Do not add extra logs or ornaments such as pine cones, vermiculite, or glowing embers. Using these added items can cause sooting. Do not add volcanic stone around base. Volcanic Stone and debris could fall into the control area of fireplace.
7. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person.
NOTE: During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
8. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, **Page 24**.
9. Before using furniture polish, wax, carpet cleaner, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
10. This fireplace needs fresh air ventilation to run properly. This fireplace has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the fireplace if not enough fresh air is available.
*See *Air for Combustion and Ventilation*, **Page 7**. If fireplace keeps shutting off, see *Troubleshooting*, **Page 25**.*
11. Do not run fireplace
 - where flammable liquids or vapors are used or stored.
 - under dusty conditions.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Never place any objects in the fireplace or on logs.
14. Do not use fireplace if any part has been under water. Immediately call a qualified service technician to inspect the room fireplace and to replace any part of the control system and any gas control which has been under water.
15. Turn off and unplug fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.
16. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
17. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
18. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity (propane/LP only).
19. Provide adequate clearances around air openings.
20. The screen or any other part removed for servicing must be replaced prior to operating this heater.

PRODUCT IDENTIFICATION

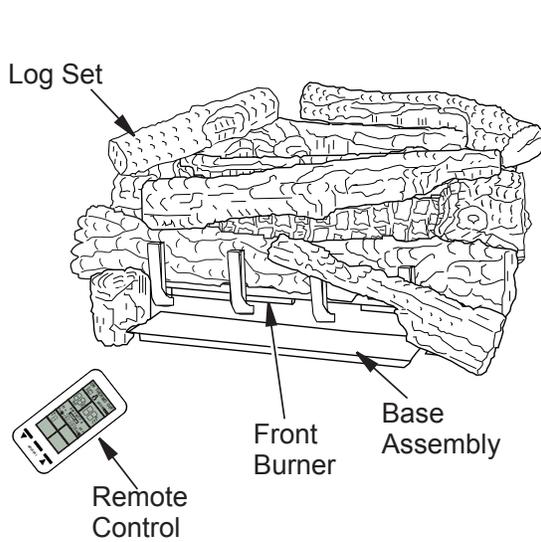


Figure 1 - Log Base Assembly

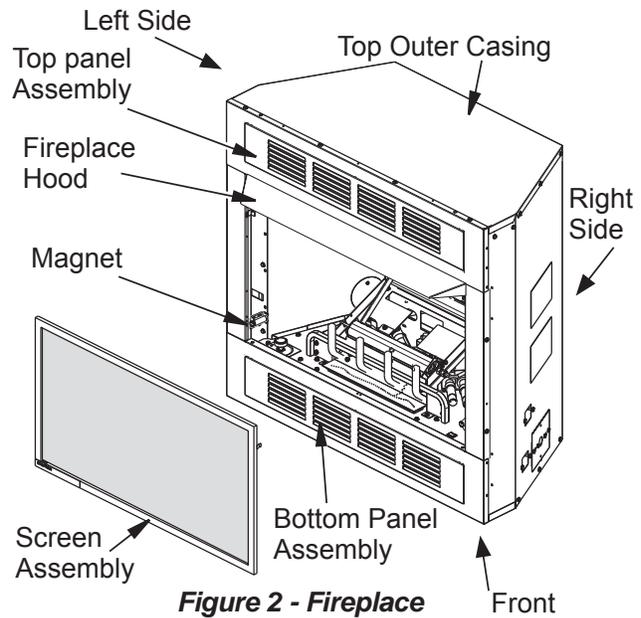


Figure 2 - Fireplace

LOCAL CODES

Install and use appliance with care. Follow all local codes. In the absence of local codes, use the latest edition of *The National Fuel Gas Code, ANSI Z223.1/NFPA 54**. Firebox must be electrically grounded in accordance with the *National Electrical Code, ANS/NFPA70* (latest edition).

*Available from:

American National Standards Institute, Inc.
25 West 43rd Street, 4th floor
New York, NY 10036
National Fire Protection Association, Inc.
1 Batterymarch Park
Quincy, MA 02169-7471

COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS

These appliances are approved for installation in the US state of Massachusetts if the following additional requirements are met:

- Un-vented Room Heaters shall be installed in accordance with 527 CMR 30.
- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 inches (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.
- Unvented appliances may NOT be installed in bedrooms or bathrooms.
- A working smoke detector must be installed in the area where vent-free appliances are installed.

Seller of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

UNPACKING

1. Remove logs and appliance base assembly from carton(s).
NOTE: Do not pick up appliance base assembly by burners. This could damage the appliance. Always handle base assembly by grate.
2. Remove all protective packaging applied to logs and appliance for shipment.
3. Check appliance for any shipping dam-

age. If appliance is damaged, promptly inform dealer where you purchased the appliance.

CAUTION: Do not remove the data plates from the grate assembly. The data plates contain important warranty and safety information.

PRODUCT FEATURES

OPERATION

This vent-free fireplace is clean burning. It requires no outside venting. There is no heat loss out a vent or up a chimney. Heat is generated by both realistic flames and glowing embers. When used without the blower, the fireplace requires no electricity making it ideal for emergency backup heat.

SAFETY DEVICE

This fireplace has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/pilot is a required feature

for vent-free room heaters. The ODS/pilot system shuts off the fireplace if there is not enough fresh air.

ELECTRONIC IGNITION SYSTEM

This heater has an electronic igniter to light the fireplace's fuel supply.

BLOWER ASSEMBLY

This fireplace includes a blower assembly. The blower operates thermostatically and features a variable speed control. The blower circulates heated air from the fireplace into the room.

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This heater shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the National Fuel Gas Code, ANSI Z223.1/NFPA 54, the International Fuel Gas Code, or applicable local codes. Read the following instructions to ensure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Homeowners apply weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, homeowners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

Exhaust fans, some fireplaces, clothes dryers and some fuel-burning appliances draw air from the house to operate. You must provide adequate fresh air for these appliances. This will ensure proper venting of vented fuel-burning appliances.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation*.

All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space
3. Confined Space

The information on **Pages 7–9** will help you classify your space and provide adequate ventilation.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

- a. walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6×10^{-11} kg per pa-sec- m^2) or less with openings gasketed or sealed and
- b. weather stripping has been added on openable windows and doors and
- c. caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all three criteria above, you must provide additional fresh air. See [Ventilation Air From Outdoors, Page 9](#).

If your home does not meet all three criteria above, proceed to [Determining Fresh-Air Flow For Heater Location](#).

Confined and Unconfined Space

The *National Fuel Gas Code, ANSI Z223.1/NFPA54* allows two methods for determining whether the space in which the heater is being installed is confined or unconfined space. The standard method defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m^3 per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed*, through openings not furnished with doors, are considered a part of the unconfined space.

Where the air infiltration rate of a structure is known, the Known Air Infiltration Rate Method may be used. Follow The National Fuel Gas Code, ANSI Z223.1/NFPA 54 to use this method to determine if the space is confined or unconfined.

* Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

DETERMINING FRESH-AIR FLOW FOR FIREPLACE LOCATION

Determining if You Have a Confined or Unconfined Space Using the Standard Method

AIR FOR COMBUSTION AND VENTILATION

Continued

Use this work sheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install fireplace plus any adjoining rooms with door-less passageways or ventilation grills between the rooms.

- Determine the volume of the space (length x width x height).
Length x Width x Height = _____ cu. ft. (volume of space)

Example: Space size 20 ft. (length) x 16 ft. (width) x 8 ft. (ceiling height) = 2,560 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

- Multiply the space volume by 20 to determine the maximum Btu/Hr the space can support.
_____ (volume of space) x 20 = (Maximum Btu/Hr the space can support)

Example: 2,560 cu. ft. (volume of space) x 20 = 51,200 (maximum Btu/Hr the space can support)

- Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free fireplace	_____	Btu/Hr
Gas water heater*	_____	Btu/Hr
Gas furnace	_____	Btu/Hr
Vented gas heater	_____	Btu/Hr
Gas fireplace logs	_____	Btu/Hr
Other gas appliances*	+ _____	Btu/Hr
Total	= _____	Btu/Hr

* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

Example:

Gas water heater	_____	40,000	Btu/Hr
Vent-free fireplace +	_____	33,000	Btu/Hr
Total	= _____	73,000	Btu/Hr

- Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

_____ Btu/Hr (maximum the space can support)

_____ Btu/Hr (actual amount of Btu/Hr used)

Example: 51,200 Btu/Hr (maximum the space can support)

73,000 Btu/Hr (actual amount of Btu/Hr used)

The space in the example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From Inside Building*.
- Vent room directly to the outdoors. See *Ventilation Air From Outdoors Page 9*.
- Install a lower Btu/Hr fireplace, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

! WARNING: If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/NFPA 54, the International Fuel Gas Code, or applicable local codes.

VENTILATION AIR

Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, **Figure 3**). You can also remove door into adjoining room (see option 3, **Figure 3**).

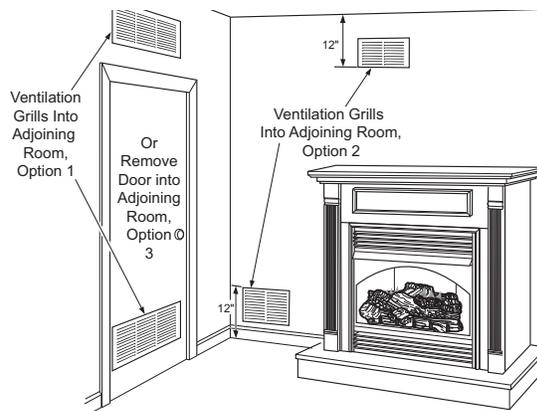


Figure 3 - Ventilation Air from Inside Building

AIR FOR COMBUSTION AND VENTILATION

Continued

Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

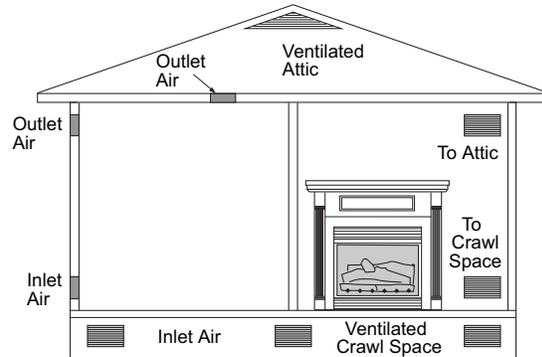


Figure 4 - Ventilation Air from Outdoors

INSTALLATION

NOTICE: This appliance is intended for supplemental heating. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

WARNING: A qualified service person must install fireplace. Follow all local codes.

WARNING: Never install the fireplace

- in a bedroom or bathroom
- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 36" from the front and 42" from the top of fireplace. For side clearances see *Figure 8, Page 11*
- in high traffic areas
- in windy or drafty areas

CAUTION: This fireplace creates warm air currents. These currents move heat to wall surfaces next to fireplace. Installing fireplace next to vinyl or cloth wall coverings or operating heater where impurities (such as, but not limited, to tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls or cause odors.

NOTE: Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides, or top of your fireplace, except where standoff spacers are integrally attached. Where standoff spacers are attached to your fireplace, combustible material (studs and wall board) may be placed on top and above the top of the standoffs.

Use the dimensions shown for rough openings to create the easiest installation. See *Built-In Fireplace Installation, Page 12*.

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation, Page 7*.

IMPORTANT: Make sure the fireplace is level. If fireplace is not level, log set will not work properly.

INSTALLATION

Continued

CHECK GAS TYPE

Use the correct type of gas (natural or propane/LP). If your gas supply is not the correct gas type, do not install appliance. Call dealer where you purchased the appliance for proper type appliance.

⚠ WARNING: This appliance is equipped for natural or propane/LP gas but not both. Gas type is indicated on rating plate. Field conversion is not permitted.

ELECTRICAL HOOKUP

This fireplace includes a blower which must be connected to either a wall receptacle or the electrical receptacle that is included within the fireplace. If the receptacle included with the fireplace is to be used, it must be wired to a 120 volt supply by a certified electrician.

INSTALLING HOOD

Install hood to rail already installed in fireplace as shown in **Figure 5**. Use 3 Phillips screws provided.

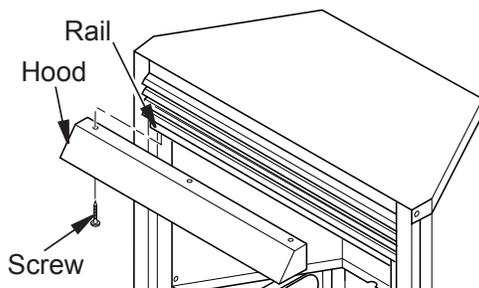


Figure 5 - Installing Hood

ASSEMBLING AND ATTACHING OPTIONAL PERIMETER TRIM (Included with Mantel Accessory)

IMPORTANT: If you are recessing the firebox in a wall, do not attach trim at this time. See *Built-In Fireplace Installation*, **Page 12**.

NOTE: These instructions show assembling and attaching trim to fireplace.

1. Remove packaging from three pieces of trim.

2. Locate four screws, two adjusting plates with set screws, and two shims in the hardware packet.
3. Align shim under adjusting plate as shown in **Figure 6**.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top trim (see **Figure 6**).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side trim (see **Figure 6**).
6. While firmly holding edges of trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
7. Repeat steps 1 through 6 for other side.
8. Tighten trim hanging screws (#10 x 6.25 shoulder) into holes in cabinets. Place the assembled trim onto fireplace cabinet. Align hanging notches on trim with hanging screws on side of fireplace (see **Figure 7**). Push trim firmly into place, sliding hanging notches over hanging screws.

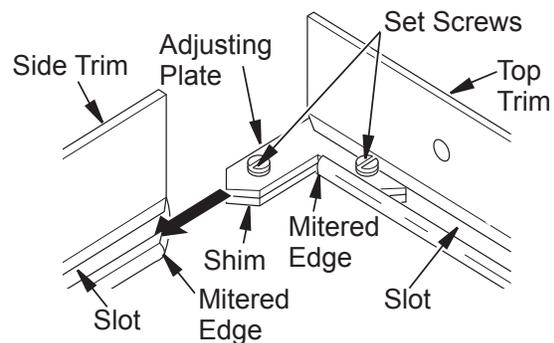


Figure 6 - Assembling Perimeter Trim

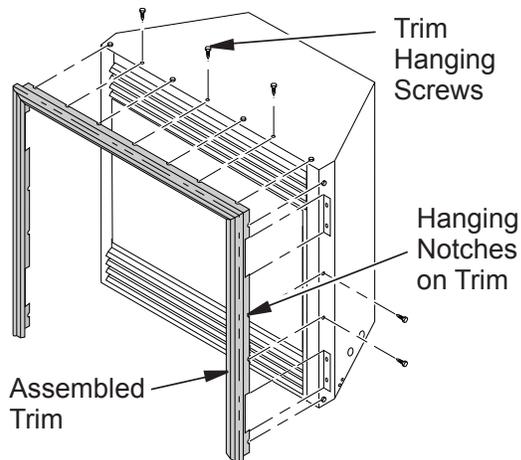


Figure 7 - Attaching Perimeter Trim to Fireplace

INSTALLATION

Continued

INSTALLATION CLEARANCES

⚠ WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling, and adjoining wall.

Carefully follow the instructions below. This will ensure safe installation.

Minimum Clearances For Side Combustible Material, Side Wall, and Ceiling

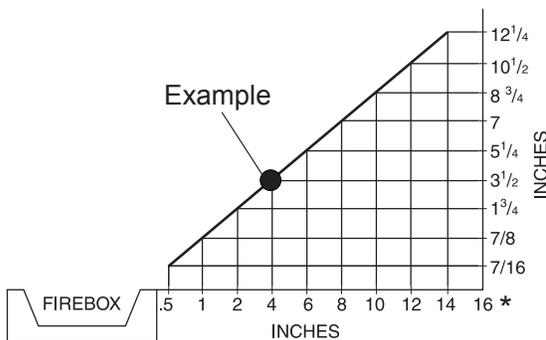
A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in **Figure 8**.

Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes 3-1/2" from the wall. This combustible material must be 4" from the side of the fireplace opening (see **Figure 8**).

B. Clearances from top of fireplace opening to ceiling should not be less than 42".

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS
 Top 0", Left and Right Sides 16",
 Bottom and Rear 0", Front 36"

Maintain adequate clearances for accessibility for purposes of servicing and proper operation.



*Minimum 16" from Side Wall

Figure 8 - Minimum Clearance for Combustible to Wall

CONVENTIONAL FIREPLACE INSTALLATION

Conventional installation of this fireplace involves installing fireplace along with the corner, face, or cabinet mantel with hearth base accessories against a wall in your home. Follow the instructions in this section to install the fireplace in this manner.

1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
2. Install a properly grounded, 120 volt three-prong electrical outlet at fireplace location if an outlet is not there. If possible, locate outlet so cabinet mantel will cover it when installed (see **Figure 9**).
3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, **Page 14**.
4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run flexible gas line to fireplace (see **Figure 9**). Make sure to locate access hole so cabinet mantel will cover it when installed.
NOTE: You can secure base to floor using wood screws. Countersink screw heads and putty over.
5. Route flexible gas line through access hole in hearth base.
6. Center cabinet mantel on hearth base (see **Figure 10, Page 12**). Make sure mantel is flush against wall.
7. Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
8. Attach flexible gas line from fireplace gas regulator to gas supply. See *Connecting Fireplace to Gas Supply*, **Page 15**.
9. Route blower electrical cord through access holes in either side of fireplace.

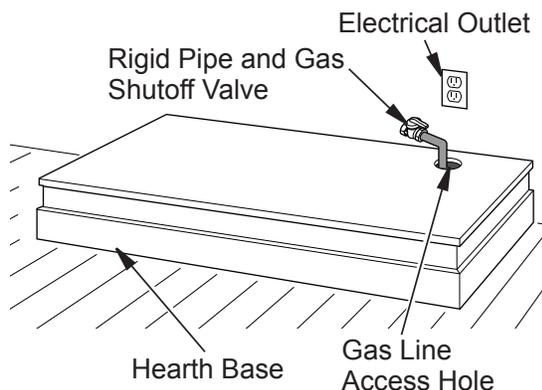


Figure 9 - Placing Hearth Base Accessory Against Wall

INSTALLATION

Continued

- Carefully insert fireplace into cabinet mantel. Be careful not to scratch or damage hearth base, cabinet mantel, or any laminate trim on hearth base. Remove protective material from top of hearth base and from front of fireplace (if any).

NOTE: You can secure fireplace to hearth or floor. Remove burner assembly. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor. Replace burner assembly.

- Check all gas connections for leaks. See [Checking Gas Connections, Page 16](#).

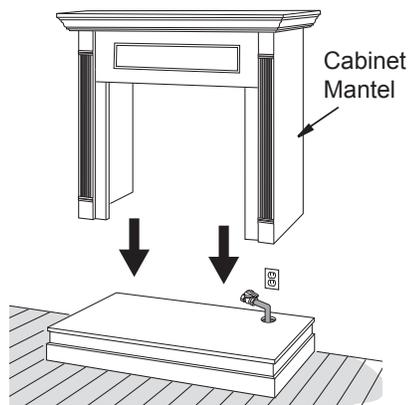


Figure 10 - Installing Cabinet Mantel

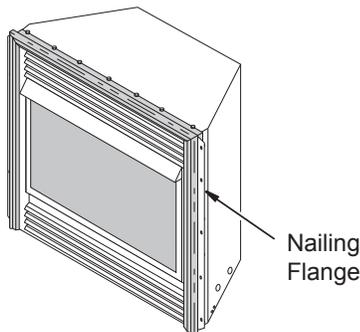


Figure 11 - Location of Nailing Flange

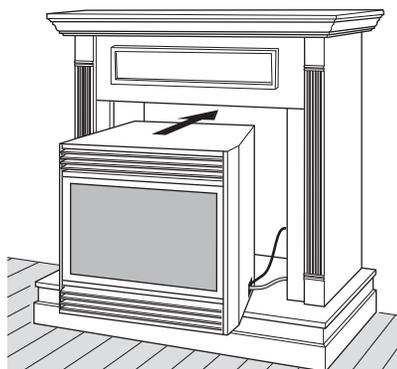


Figure 12 - Inserting Fireplace Into Cabinet Mantel

BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. If installing a mantel above the fireplace, you must follow the clearances shown in **Figure 16, Page 13**. Follow the instructions below to install the fireplace in this manner.

Rough Opening Dimensions for Built-in Installation			
Model	Front Width (Inside to Inside)	Height	Depth
32"	34 ⁷ / ₈ "	36 ³ / ₄ "	16 ¹ / ₄ "
36"	41 ¹ / ₂ "	40 ¹ / ₂ "	20 ³ / ₄ "

- Frame in rough opening. Use dimensions shown in **Figure 13** for the rough opening. If installing in a corner, use dimensions shown in **Figure 14, Page 13; Figure 13**, for the rough opening.

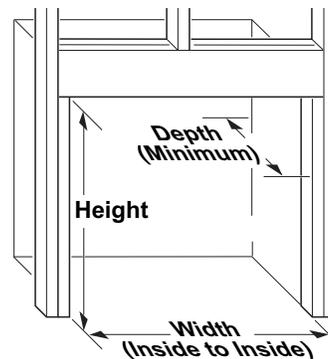


Figure 13 - Rough Opening for Installing in Wall

- Install gas piping into fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping. See [Installing Gas Piping to Fireplace Location, Page 14](#).
- Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
- Carefully insert fireplace into rough opening.
- Attach flexible gas line to gas supply. See [Connecting Fireplace to Gas Supply, Page 15](#).

INSTALLATION

Continued

- Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see **Figure 15**).

Figure a FOR 32" MODELS

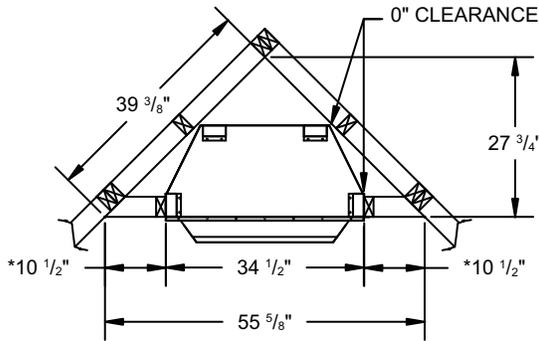
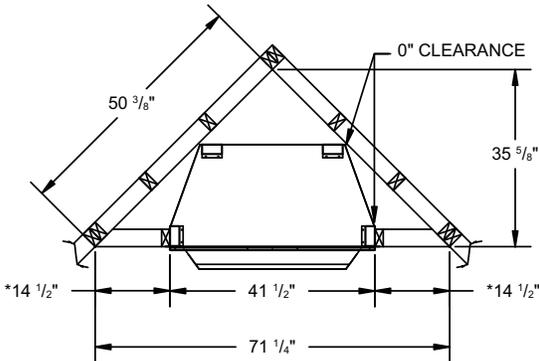


Figure b FOR 36" MODELS



* THESE DIMENSIONS ALLOW FOR MINIMUM CLEARANCES TO A 45° PROJECTED SIDE WALL
HOWEVER, CLEARANCES TO PROJECTED MANTEL TRIMS AND FACINGS ARE ALLOWED WITHIN A MINIMUM OF 16" TO A PERPENDICULAR WALL AS SHOWN IN **FIGURE 8**, ON **Page 11**

Figure 14 - Rough Opening for Installing in Corner

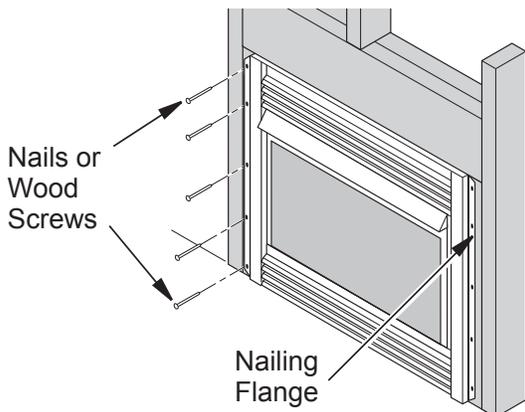


Figure 15 - Attaching Fireplace to Wall Studs

- Check all gas connections for leaks. See **Checking Gas Connections, Page 16**.
- Plug electrical cord into electrical outlet.
- Install trim after final finishing and/or painting of wall (see **Figure 7, Page 10**).

IMPORTANT: When finishing your firebox, combustible materials such as wall board, gypsum board, sheet rock, drywall, plywood, etc. may be butted up next to the sides and top of the firebox. Combustible materials should never overlap the firebox front facing.

WARNING: Do not allow any combustible materials to overlap the firebox front facing.

IMPORTANT: Noncombustible materials such as brick, tile, etc. may overlap the front facing, but should never cover any necessary openings like louvered slots or screen assembly.

WARNING: Do not allow noncombustible materials to cover any necessary openings like louvered slots.

WARNING: Use only noncombustible mortar or adhesives when overlapping the front facing with noncombustible facing material.

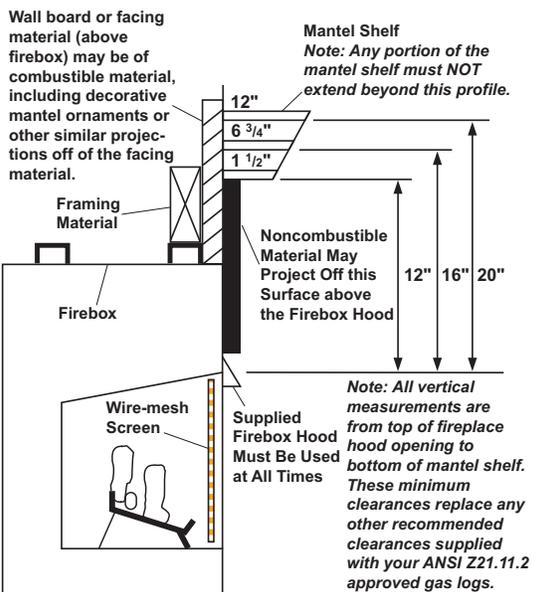


Figure 16 - Minimum Mantel Clearances for Built-In Installation

INSTALLATION

Continued

Mantel Clearances for Built-In Installation

If placing mantel above built-in fireplace, you must meet minimum clearance between mantel shelf and top of fireplace opening.

NOTICE: If your installation does not meet the minimum clearances shown, you must do one of the following:

- raise the mantel to an acceptable height
- remove the mantel

NOTICE: Surface temperatures of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become hot to the touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual.

INSTALLING GAS PIPING TO FIREPLACE LOCATION

⚠ WARNING: This appliance requires a 1/2" NPT (National Pipe Thread) inlet connection.

⚠ WARNING: A qualified service person must connect fireplace to gas supply. Follow all local codes.

⚠ CAUTION: Never connect propane/LP fireplace directly to the propane/LP supply. This fireplace requires an external regulator (not supplied). Install the external regulator between the fireplace and propane/LP supply.

⚠ WARNING: Never connect natural gas fireplace to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

Installation Items Needed

Before installing fireplace, make sure you have the items listed below.

- external regulator for propane/LP unit only (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection *
- sediment trap (optional)
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)

* A equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 17, Page 15*. Pointing the vent down protects it from freezing rain or sleet.

⚠ CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to fireplace. If pipe is too small, undue loss of volume will occur.

INSTALLATION

Continued

Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see **Figure 18**).

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves. Never use sealant on flare threads.

⚠ WARNING: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

We recommend that you install a sediment trap in supply line as shown in **Figure 18**. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and fireplace. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

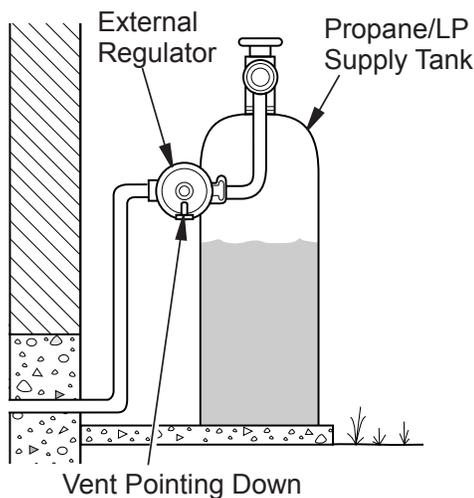


Figure 17 - External Regulator on Propane/LP Supply Tank with Vent Pointing Down

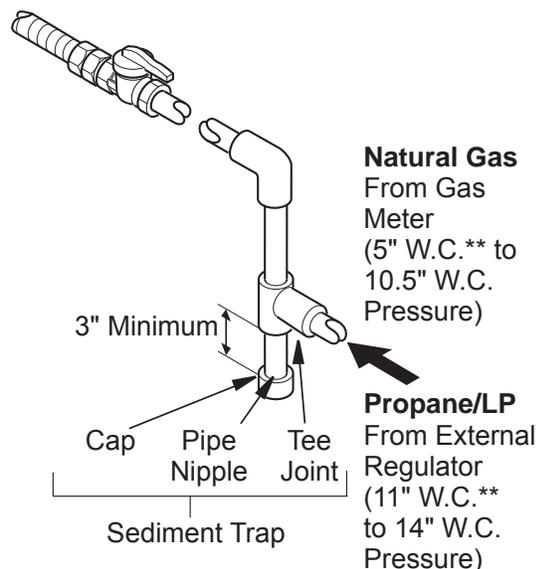


Figure 18 - Gas Connection

** Minimum inlet pressure for purpose of input adjustment.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- 5/16" hex socket wrench or nut-driver
 - Phillips screwdriver
 - sealant (resistant to propane/LP gas, not provided)
1. Remove fireplace screen. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Push the bottom corners of the screen in and release. The screen will pop out at the bottom. Grasp the bottom of the screen, lift the screen up and pull out to remove.
 2. Remove screws that attach log base assembly to fireplace (see **Figure 19, Page 16**). Carefully lift up log base assembly and remove from fireplace (see **Figure 19, Page 16**).
 3. Route gas line (provided by installer) from equipment shutoff valve to fireplace. Route flexible gas supply line through one of the access holes.
 4. Attach the flexible gas line to gas supply (see **Figure 20, Page 16**). Check tightness of flexible gas line attached to gas regulator of fireplace (see **Figure 20, Page 16**).
 5. Check all gas connections for leaks. See **Checking Gas Connections, Page 16**.
 6. Replace log base assembly back into fireplace. Feed flexible gas line into

INSTALLATION

Continued

fireplace base area while replacing log base assembly. Make sure the entire flexible gas line is in fireplace base area. Reattach log base assembly to fireplace with screws removed in step 2, [Page 15](#).

⚠ CAUTION: Do not pick up log base assembly by burner. This could damage burner. Only handle base by grates.

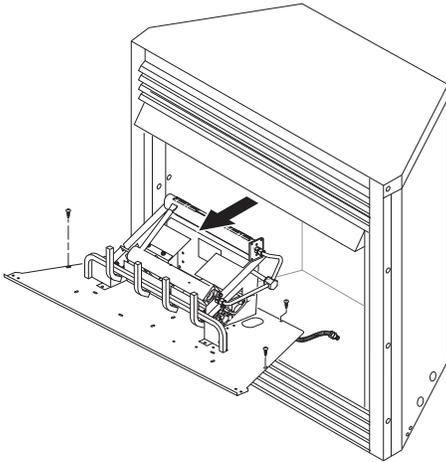


Figure 19 - Removing Log Base Assembly From Fireplace

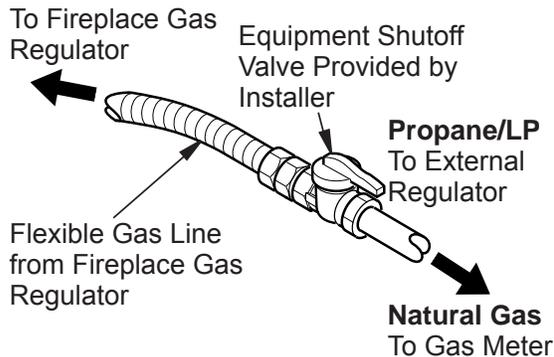


Figure 20 - Attaching Flexible Gas Lines Together

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see [Figure 20](#)). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

⚠ WARNING: Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

⚠ CAUTION: Make sure external regulator has been installed between propane/LP supply and fireplace. See guidelines under [Connecting Fireplace to Gas Supply, Page 15](#).

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

1. Disconnect fireplace with its main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig (3.5 kPa) will damage fireplace regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas, or using compressed air.
4. Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect fireplace and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

INSTALLATION

Continued

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve (see **Figure 21**).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas, or using compressed air.
3. Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP (see **Figures 22 and 23**). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

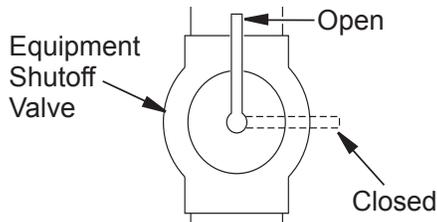


Figure 21 - Equipment Shutoff Valve

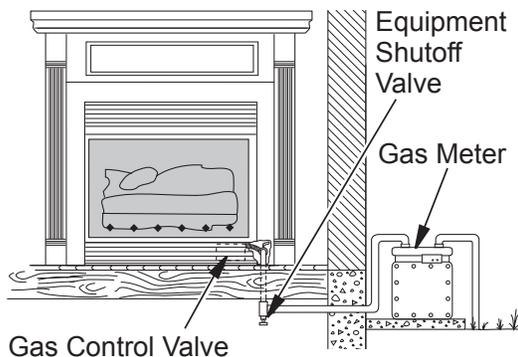


Figure 22 - Checking Gas Joints for Natural Gas

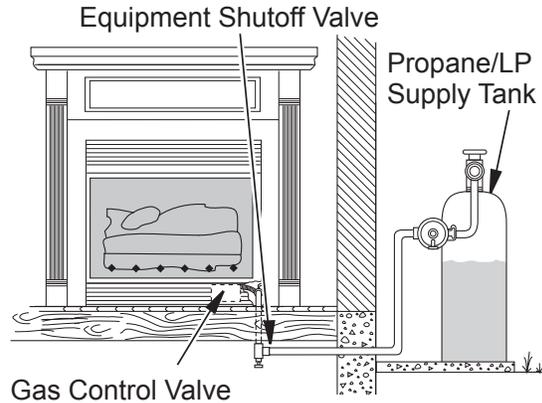


Figure 23 - Checking Gas Joints for Propane/LP Gas

PRESSURE TESTING FIREPLACE GAS CONNECTIONS

1. Open equipment shutoff valve (see **Figure 21**).
2. Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from equipment shutoff valve to gas control valve (see **Figures 22 or 23**). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see **Operation, Page 23**). Check all other internal joints for leaks.
7. Turn off fireplace (see **To Turn Off Gas to Appliance, Page 23**).

INSTALLATION

Continued

INSTALLING LOGS

⚠ WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

⚠ CAUTION: Do not remove the data plates attached to the heater base assembly. The data plates contain important safety and warranty information.

1. Place fiber ramp log in center of chassis as shown in **Figure 28**. The fiber ramp log can be identified by the shape and much lighter weight when compared to the other logs. The log must sit flat on the black sheet metal and behind the left metal tab as shown. Make sure the side marked "BOTTOM" is setting down.
2. Place front left and front right logs as shown in **Figure 29**.

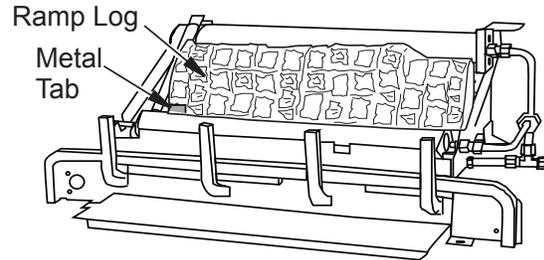


Figure 28 - Installing Fiber Ramp Log

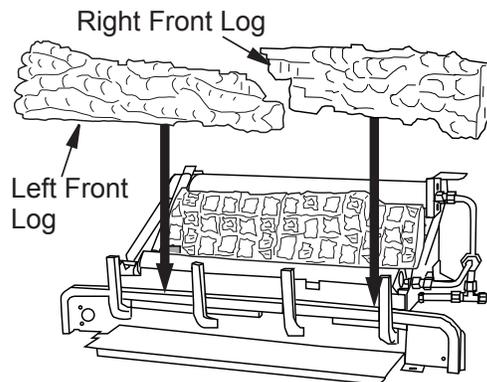


Figure 29 - Installing Left/Right Front Logs

INSTALLATION

Continued

- Place left ember bed log as shown in **Figure 30**. The log has groove on one side that sets on the ember bed pan. The back side of this log needs to rest against the front of the base assembly. Make sure the flame from the ember pan does not touch the ember bed log.

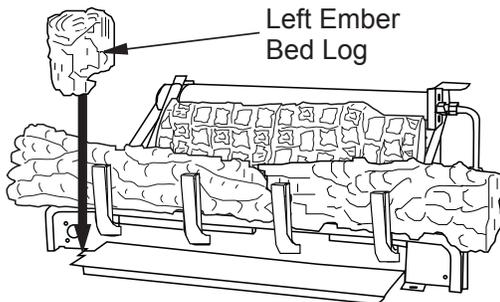


Figure 30 - Installing Left Ember Bed Log

- The VRT4032 and VRT4036 use two different right ember bed logs. The VRT4032 right ember bed log is installed in the same manner as the log in step 3 above but on the right side. The VRT4036 right ember bed log has a hole in the bottom that sets on the grate finger and the other end rest on the fireplace floor, place log as shown in **Figure 31**. The back side of this log needs to rest against the front of the base assembly, make sure the flame from the ember pan does not touch the ember bed log.

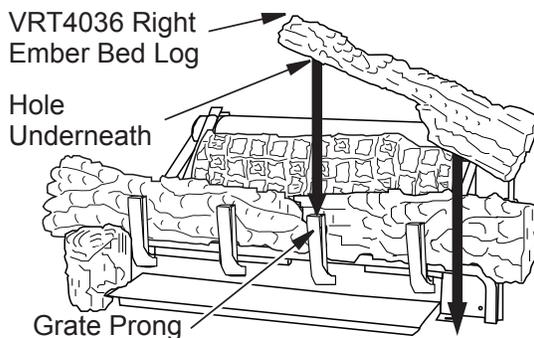


Figure 31 - Installing Right Ember Bed Log

- The left middle log has a groove on the bottom to sit on the chassis and has to sit on the tab on the back of the left front log as shown in **Figure 32**.
- The right middle log has a groove on the bottom to sit on the chassis and has to sit on the tab on the back of the right front. The right middle log should have a recess area that fits around the ramp log as shown in **Figure 33**.

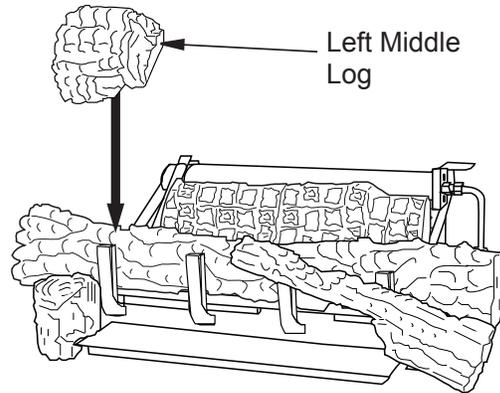


Figure 32 - Installing Left Middle Log

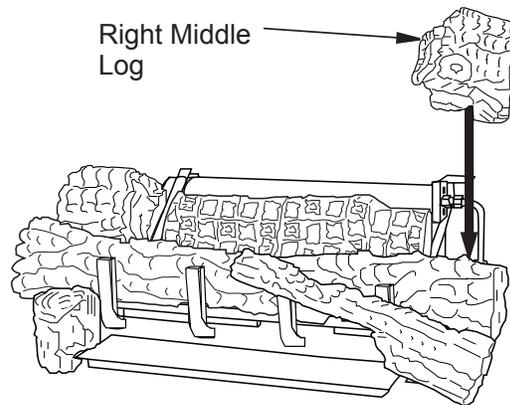


Figure 33 - Installing Right Middle Log

- The rear middle log should fit between the ramp log and the rear burner. The left and right middle logs have recessed areas for the rear middle log to sit into (See **Figure 34, Page 20**). Be careful not to push the rear burner out of position while installing this log.
- Rest rear log in back corner sections of chassis assembly as shown in **Figure 35, Page 20**.

INSTALLATION

Continued

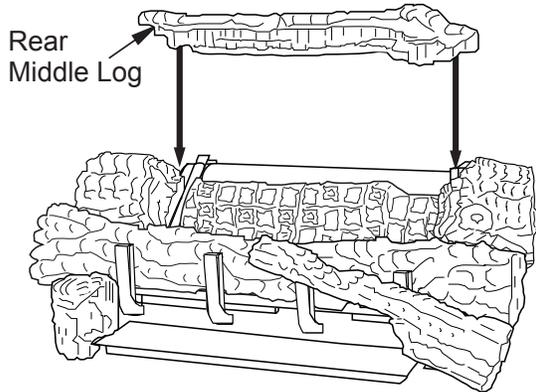


Figure 34 - Installing Rear Middle Log

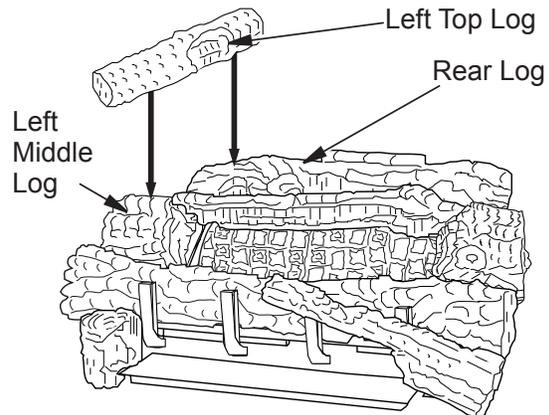


Figure 36 - Installing Left Top Log

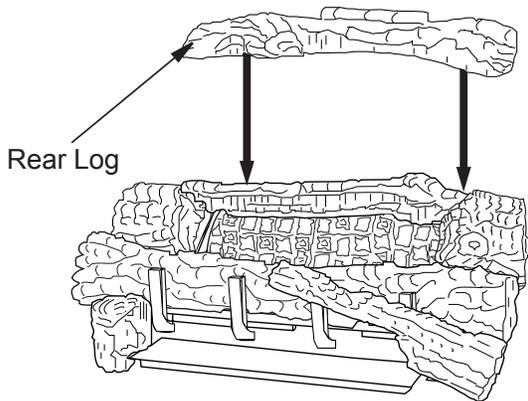


Figure 35 - Installing Rear Log

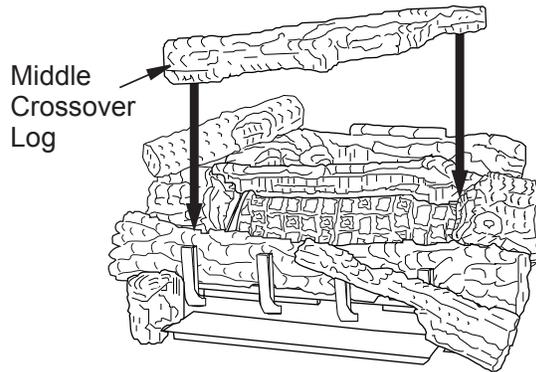


Figure 37 - Installing Middle Crossover Log

9. Place the left top log onto the rear log and the left middle log. Make sure to place the projection on the bottom of the left top log into the recessed areas on the rear and left middle logs (see **Figure 36**).
10. Rest the middle crossover log onto the right middle log and the left front log (see **Figure 37**). Make sure to match the projection on the bottom of the crossover log with the recess area in the right middle log and the left front log.
11. Place the top rear log onto the rear log as shown. The rear log has a projection that will fit into the recess area on the bottom of the top rear log (see **Figure 38**).

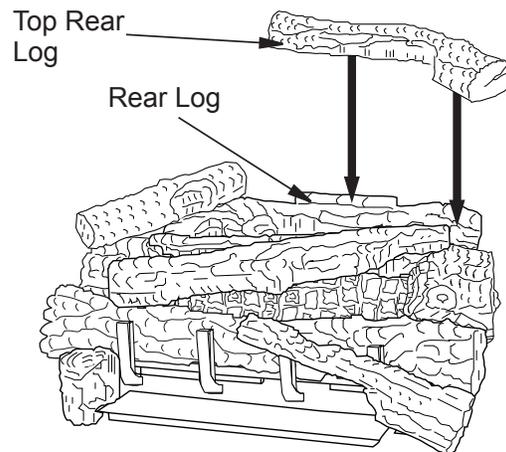


Figure 38 - Installing Top Rear Log

INSTALLATION

Continued

EMBER PLACEMENT

⚠ WARNING: Do not use any other ember material not supplied with this unit.

⚠ WARNING: Do not operate unit without ember material correctly in place as shown in Figures 40 and 41. Do NOT place ember material anywhere else on the unit. Use only ember material supplied with unit. Excessive or incorrectly placed ember material may produce carbon monoxide or soot.

1. **Ember Chunk Placement.** The VRT4036 series burner systems include three ember chunks that are designed to fit over shoulder screws on the ember pan burner. The bottom of each ember chunk has a hole for securing the ember chunk in place when it is placed over a shoulder screw. Place the ember chunks as shown

in **Figure 39** by placing the ember chunk with the number "1" on the left, "2" in the center, and "3" on the right. These numbers are embossed on the back of each piece for identification purposes. Please note that VRT4032 series burner systems **do not** include ember chunks.

2. Two ember materials are supplied with this log set. Platinum Bright Embers give a bright glow appearing as hot coals. Should embers need replacing, see *Parts, Page 42*.

Platinum Bright Ember placement. Add embers to front, flat burner. Gently remove embers from bag. Separate pieces of ember material and place on surface of flat burner just behind horizontal ports as shown in **Figure 40**.

Glowing embers (rockwool) placement. Place glowing embers material on front flat burner in areas away from ports as shown in **Figure 41**.

3. **DO NOT place volcanic stone or additional logs on front burner or on logs.** Placing any material on unit other than ember material on front burner may result

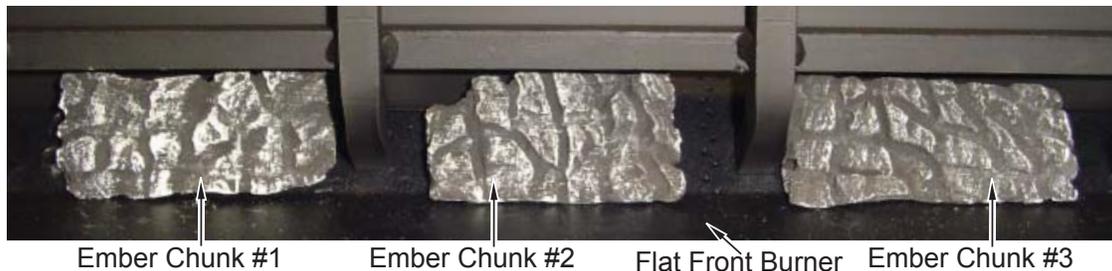


Figure 39 - Ember Chunk Placement VRT4036 Series

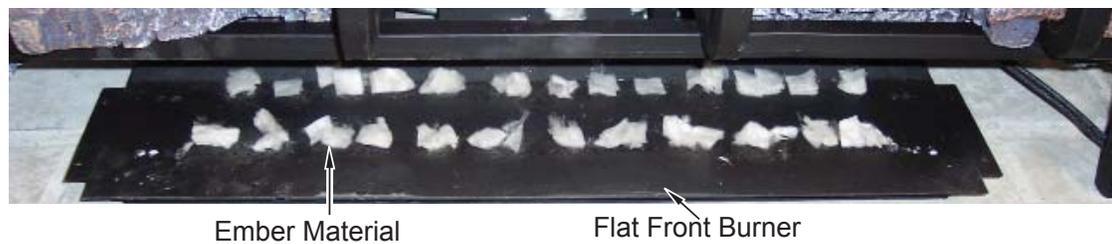


Figure 40 - Platinum Bright Embers



Figure 41 - Placement of Glowing Embers (shown with Platinum Bright Embers)

INSTALLATION

Continued

in production of carbon monoxide or soot. If replacement embers are needed, the replacement embers must be purchased from IHP. See **Page 44** for part numbers.

4. Install fireplace screen by placing the screen brackets on top of the fireplace screen brackets as shown in **Figure 42**. Push the bottom of the screen inward against the magnetic catches to secure in place.

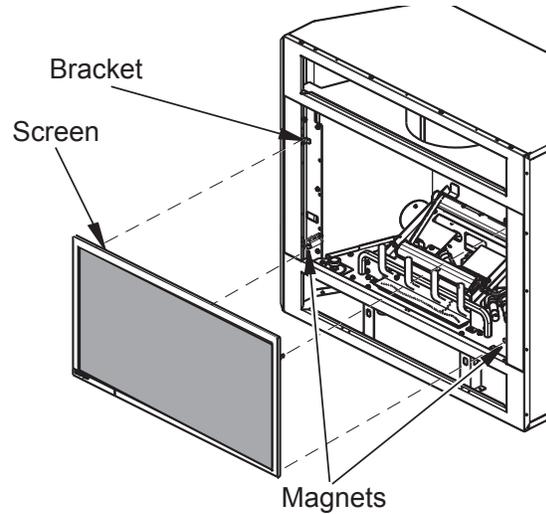


Figure 42 - Installing Fireplace Screen

⚠ WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.

⚠ WARNING: All previously applied loose material must be removed prior to reapplication.

OPERATION

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 is equipped with an ignition device which automatically lights the pilot. Do not light pilot by hand.
- 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 gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. 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.

LIGHTING INSTRUCTIONS

⚠ WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Open damper or window to vent smell. This will only last a few hours.

1. STOP! Read the safety information in column 1.
2. Make sure equipment shutoff valve is fully open.

⚠ WARNING: Burners will come on automatically within one minute when the selector switch is in the ON position after the pilot is lit.

3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information, column 1. If you don't smell gas, go to the next step.
4. Press any button on the remote to power the remote on. Press the MODE zone or the MODE/SET Button to start the unit. You will hear a beep from the control module and the pilot will start to light the unit.

NOTE: You may be running this heater for the first time after hooking up to gas supply. If so, you may have to restart the unit several times to allow the air to bleed from the system.

⚠ CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

TO TURN OFF GAS TO APPLIANCE

1. Once you have activated the screen press the MODE Zone or MODE/SET Button until you see OFF.
2. Close equipment shutoff valve (see *Figure 21, Page 17*).

OPERATION

Continued

REMOTE CONTROL OPERATION

BASIC CONSTRUCTION

- Touch-Screen LCD and three push buttons will allow input from users.
- LCD screen will provide system status & input feedback to user.
- Backlight will illuminate LCD screen for 5 seconds after any user input – the 1st touch of the LCD screen will only illuminate the backlight (will not respond to associated zone function). To activate any command, the backlight for the screen must be on and the command must be touched before the backlight goes off.
- Powered via four AAA sized batteries (6V nominal) with LOW BATTERY INDICATOR (5.0V).

Touch-Screen LCD and Button Layout (Not to scale)

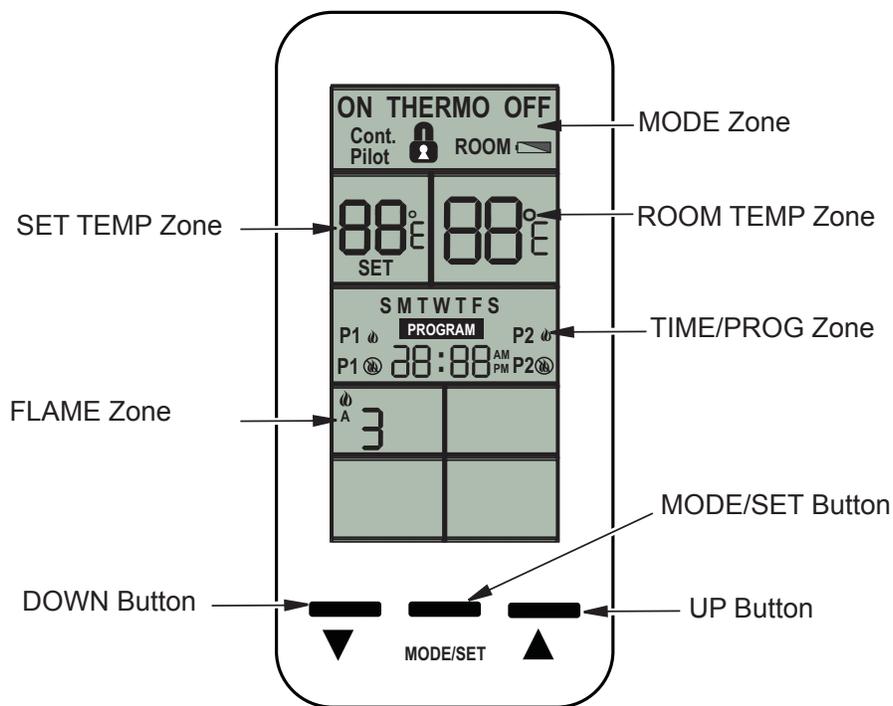


Figure 43 - Touch-Screen LCD and Button Layout

OPERATION

Continued

FUNCTIONAL DESCRIPTION

NOTE: All function adjustments will be automatically accepted 15-seconds after pressing a given touch zone or button. The user may press the MODE/SET button to immediately accept the adjustment manually.

MODES OF OPERATION

OPERATION MODES:

- MANUAL OFF
- MANUAL ON
- THERMOSTAT (with optional PROGRAM Mode)

The modes may be cycled in the order above by touching the MODE Zone or pressing the MODE/SET Button.

MANUAL OFF MODE:

- Transmits flame OFF command.
- Pilot Method: Intermittent Pilot Ignition (IPI)/Spark-to-Pilot only (continuous/standing pilot not allowed)
- Pilot flame will be turned OFF
- LCD Displays:
- MODE Zone: OFF is displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: Blank
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: Blank

MANUAL ON MODE:

- Transmits flame ON command.
- Pilot Method: Intermittent Pilot Ignition (IPI)/Spark-to-Pilot only (continuous/standing pilot not allowed)
- Pilot flame will be ignited before turn Main Flame ON.
- LCD Displays:
- MODE Zone: ON is displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: Blank
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: A Flame Icon and flame setting level number is displayed

THERMOSTAT MODE:

- Will cycle flame on and off based on room and set temperatures. Will transmit ON command if SET TEMP (+SWING) is higher than ROOM TEMP and will transmit OFF command if SET TEMP (-SWING) is lower than ROOM TEMP.
- Built-in thermostat will measure room temperature.
- All programming should be written for deg. F and converted to deg. C when selected.
- Temperatures may be displayed in degrees F (factory default) or degrees C. Press the UP and DOWN Buttons simultaneously to change between degrees F and C.
- SET TEMP: While in THERMOSTAT mode, press the UP or DOWN Button to change the SET TEMP (45-90 deg. F, 7-32 deg. C); the new set temperature will automatically be accepted after 2 seconds. The factory default SET TEMP is 68 deg. F.

OPERATION

Continued

- SWING Temperature: This model does not allow for SWING temperature adjustment. This model utilizes thermostatic flame modulation that will modulation the main flame based on the difference between room temperature and set temperature (see example below).
- Important - factory SWING TEMPERATURE setting is 2 degrees. The thermostatic flame modulation feature will not allow this SWING to be changed.
- MODE Zone: THERMO and ON are displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: SET TEMP is displayed
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: A Flame Icon and flame setting level number is displayed

EXAMPLE:

<u>Set Temperature</u>	<u>Room Temp.</u>	<u>Flame Level</u>
	74F	OFF
	73F	Level 1
Set Temperature (72) →	72F	Level 2
	71F (or less)	Level 3

- Pilot Method: Continuous/Standing Pilot only (Intermittent Pilot Ignition (IPI)/ Spark-to-Pilot not allowed).
- Pilot flame will remain ON when Main Flame Cycles ON and OFF.
- Manual Flame Adjustment while in THERMOSTAT mode: If Flame-A is manually adjusted while in thermostat mode, it will override the automatic flame setting until the flame cycles off, then back ON thermostatically; when the flame cycles ON again, automatic flame adjustment will resume. Automatic flame adjustment will also resume if the operational mode is cycled out of, then back into THERMOSTAT mode or if the SET temperature is changed.
- THERMOSTAT OFF LCD Displays:
- MODE Zone: THERMO and OFF is displayed
- ROOM TEMP Zone: Measured temperature is displayed
- SET TEMP Zone: SET TEMP is displayed
- TIME/PROG Zone: Current day indicator and current time is displayed
- FLAME Zone: Blank
- THERMOSTAT ON LCD Displays:

Thermostat Disable Feature

- The Thermostat Mode (described above) may be disabled for applications where a thermostat is not allowed or undesirable. When Thermostat Mode is Disabled:
- The Modes of operation will cycle between MANUAL ON and MANUAL OFF (omitting THERMO).
- Program Operation (described below) is also disabled.
- The SET TEMP zone will be blank.
- The room temperature will still be measured & displayed in the ROOM TEMP Zone.
- The TIME/PROG zone will continue to display the Clock and Day of week, but none of the icons associated with Program Mode will be displayed.
- To disable or re-enable the Thermostat, the transmitter must be in MANUAL OFF Mode, then touch and hold the SET TEMP Zone and the DOWN Button simultaneously for 10- seconds. The LCD screen will go blank except either THERMO and OFF or THERMO and ON will flash 3-times (0.5-seconds OFF, 0.5-seconds ON) to indicate the change has been made.

DAY AND TIME DISPLAY

- The current day of week and time of day will be continuously displayed in the TIME/PROG Zone (except during Setup operations).
- The day of week will be displayed as one of the following: S, M, T, W, T, F, S
- The time of day will be in 12-hour AM, 12-hour PM format. Midnight will be displayed as 12:00am.
- Day/Time Setup:
 1. Press and hold the MODE Zone for 5 seconds to enter Day/Time Setup.

OPERATION

Continued

2. Touch the UP or DOWN Buttons to adjust the day of week (press the MODE/SET Button or wait for 15 seconds for adjustment to be accepted, then enter hour of day adjustment).
3. Press the UP or DOWN Buttons to adjust the hour of the day. The time will advance in 1-hour increments; AM and PM will change when the hour advances to 12:00 midnight and 12:00 noon respectively (press the MODE/SET Button or wait for 15 seconds for adjustment to be accepted, then enter minute of hour adjustment).
4. Press the UP or DOWN Buttons to adjust the minute of the hour. The time will advance in 1-minute increments (press the MODE/SET Button or wait for 15 seconds and the transmitter will exit Day/Time Setup and return to normal operation).
5. LCD Displays – when in Day/Time Setup:
 - MODE Zone: Blank
 - ROOM TEMP Zone: Blank
 - SET TEMP Zone: Blank
 - TIME/PROG Zone: Day of Week, or Time of Day will Flash
 - FLAME Zone: Blank

Program Operation

- Touch the TIME/PROG Zone to activate or deactivate Program Operation. Touching the MODE Zone or pressing the MODE/SET Button will also deactivate Program Operation. When Program Operation is deactivated, the transmitter will return to MANUAL OFF Mode.
- Program Operation will cycle fireplace ignition ON and OFF based on time settings (2 weekend periods and 2 weekday periods) and thermostat settings. Press the MODE/SET Button or wait for 15 seconds to advance to each subsequent program setting.
- To enter Program Setup, touch and hold the TIME/PROG Zone for 5 seconds.
- Program OFF LCD Displays:
 - MODE Zone: OFF
 - ROOM TEMP Zone: Measured temperature is displayed
 - SET TEMP Zone: Blank

- TIME/PROG Zone: Current day indicator, current time, and Program status (P1- OFF or P2-OFF) is displayed
- FLAME Zone: Blank
- Program ON LCD Displays:
 - MODE Zone: THERMO and either ON or OFF is displayed
 - ROOM TEMP Zone: Measured temperature is displayed
 - SET TEMP Zone: SET TEMP is displayed
 - TIME/PROG Zone: Current day indicator, current time, and Program status (P1- ON or P2-ON) is displayed
 - FLAME Zone:
 - If Thermostat is ON, A Flame Icon and flame setting level number is displayed.
 - If Thermostat is OFF, display is blank.

Program Disable Feature

- The Program Mode (described above) may be disabled for applications where a program operation is not allowed or undesirable. When Program Mode is Disabled:
 - The user will not be able to activate Program Mode
 - The user will not be able to enter Program Setup or edit Program Mode settings.
 - The TIME/PROG zone will continue to display the Clock and Day of week, but none of the icons associated with Program Mode will be displayed.
- To disable or re-enable the Program Mode, the transmitter must be in MANUAL OFF Mode, then touch and hold the TIME/PROG Zone and the DOWN Button simultaneously for 10-seconds. The LCD screen will go blank except either PROGRAM and OFF (OFF display in MODE Zone) or PROGRAM and ON (ON display in MODE Zone) will flash 3-times (0.5-seconds OFF, 0.5-seconds ON) to indicate the change has been made.

Flame-A (or Main) Adjustment

- Transmits a flame height setting command to the control module to adjust the Flame-A height.

OPERATION

Continued

- Available settings are 1-3 with a factory default of 3. Refer to the THERMOSTAT Mode section for additional details on flame modulation in THERMOSTAT mode.
- While in MANUAL ON, THERMOSTAT ON, or PROGRAM ON modes, touch the FLAME Zone to enter Flame-A Adjustment, then press the UP or DOWN buttons to raise and lower the flame; press the MODE/SET Button or wait for 15 seconds to accept the new setting.
- LCD Display: When setting the Flame-A height, the Flame-A icon, and Flame-A setting number will flash in the FLAME Zone.

Child-Lock Operation

- Child-Lock operation prevents any user input to the transmitter. No mode of operation or feature may be adjusted when Child-Lock is activated. All automatic functions (thermostat, program, etc.) will continue normally.
- To activate or deactivate the Child-Lock feature, press and hold the MODE/SET and DOWN Buttons simultaneously for 5 seconds.
- LCD Displays:
 - When activated, the LOCK icon will appear in the MODE Zone.
 - If any touch-zone or button is pressed when activated, the LCD backlight will illuminate and the LOCK icon will flash for 5 seconds in the MODE Zone.

Room Temperature Limit

- The Room Temperature Limit Shut-down feature will operate in MANUAL ON, THERMOSTAT ON mode, and PROGRAM ON modes. If the room temperature reaches 95 deg. F or greater, the transmitter will automatically change to MANUAL OFF mode and send a MANUAL OFF command to the control module. If the user turns the control back ON and the room temperature is still 95F or greater, the transmitter will switch to back manual OFF and send another OFF command the next time the transmitter reads & updates the room temperature (2-minute update interval).

LEARN PROCESS (PAIRING THE REMOTE TO THE CONTROL MODULE)

NOTE: The transmitter must be in the "OFF" or "THERMO OFF" in order to allow the remote to pair with the control module.

To pair the remote transmitter to the control module, press the learn switch and release. There should be an audible beep indicating the module is ready to accept a transmitter code. Next, press the mode/set button twice on the transmitter within 60 seconds to send a signal (the "MODE/SET" button must be pressed once to activate the screen [lights up] and then a second time for the remote and module to pair). If the signal is received, the module should beep indicating the signal was received. **NOTE:** Module will remain "Open" and ready to accept a signal for 60 seconds after the learn switch is pressed.

The control module will learn up to 3 different transmitter security codes (only one may be a thermostat style).

Press and hold in the learn switch in for 6 seconds to clear all transmitter security codes retained in memory. After releasing the switch, three series of beeps will be heard. This serves as proof that the transmitter's security codes have been cleared from memory. Repeat learn process as needed.

Unit Mounted Switches



Burner Hi-Lo Learn

ON/OFF Switch turns the burner on and off

Hi (Off) / Low (On) Switch controls the main burner flame height

Momentary Switch (Learn) is for programming the remote (see instructions above).

OPERATION

Continued

SWITCHING ON

To turn the system on, press the Burner ON/OFF switch to the ON position (see figure on **Page 28**). Once the start up process is complete, the main burner and pilot will be lit.

REGULATING THE FLAME LEVEL.

1. To decrease the flame level to low, press the Hi-Low switch to the ON position.
2. To increase to high flame level, press the Hi-Low switch to the OFF position.

NOTE: If the appliance is set to the low flame level and turned off, it will light on high flame level and then cycle to low flame level on the next flame sequence.

SWITCHING OFF

To switch off the fire, press the Burner ON/OFF Switch to the OFF position.

⚠ WARNING: Do not convert heater to use different fuel type. Only use heater with fuel type specified.

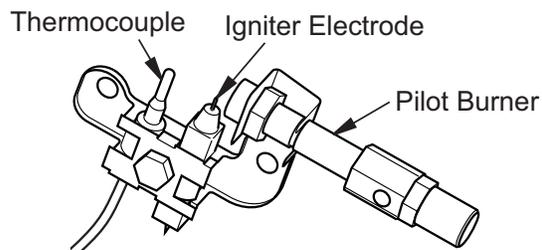


Figure 45 - Pilot (Natural)

BLOWER OPERATION

⚠ WARNING: This fireplace has a three-prong, grounded electrical plug. This plug helps protect you against electrical shock. Only connect plug to a properly grounded, three-prong receptacle. Do not cut or remove the grounding prong from this plug.

Access the blower control knob by pushing in on the bottom corners of the fireplace screen, grasp the bottom of the screen and pull out and up to remove the screen. The blower control knob is located on the left side of the fireplace floor.

The blower is thermostatically controlled. This means the fireplace and blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the fireplace is shut off, the blower will continue to operate until the fireplace temperature cools.

The blower also includes a variable speed control. Turn the knob clockwise to turn the blower to the high position. Continuing to turn the knob will reduce the speed of the blower until it reaches a preset low speed.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 46 shows a correct pilot flame pattern. **Figure 47** shows an incorrect pilot flame pattern. The incorrect pilot flame is not properly heating the thermocouple. When the thermocouple cools, the heater will shut down. If pilot flame pattern is incorrect, as shown in **Figure 47**.

- turn heater off (see *To Turn Off Gas to Appliance, Page 23*)
- see *Troubleshooting, Page 34*

NOTE: The pilot flame on natural gas units will have a slight curve, but flame should be blue and have no yellow or orange color.

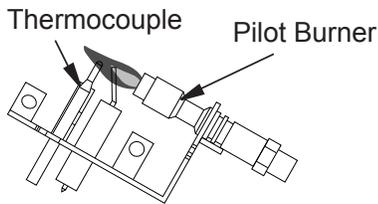


Figure 46 - Correct Pilot Flame Pattern

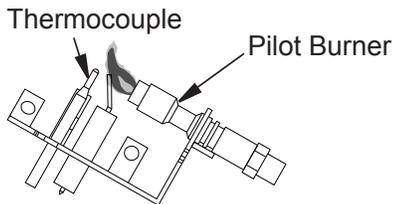


Figure 47 - Incorrect Pilot Flame Pattern

MAIN BURNER

Periodically inspect all burner flame holes with the heater running. All slotted burner flame holes should be open with yellow flame present. All round burner flame holes should be open with a small blue flame present. Some burner flame holes may become blocked by debris or rust, with no flame present. If so, turn off heater and let cool. Remove blockage. Blocked burner flame holes may create soot.

BURNER FLAME PATTERN

WARNING: If incorrect burner flame pattern occurs your fireplace could produce increased levels of carbon monoxide.

NOTICE: Do not mistake orange flames with yellow tipping. Dirt or other fine particles are burned by fireplace, causing brief patches of orange flame.

Figure 48 shows the correct burner flame.

The front ember burner should have a small blue flame. When the ember material is applied, the embers will glow red and the flame may have a few small bright yellow tips less than 1/2 inch in height.

The middle burner produces a blue flame that impinges upon the ceramic ramp causing the ramp to glow red with an occasional yellow streak.

The rear burner produces a bright yellow flame with the base of the flame being blue.

Figure 49 shows the incorrect burner flame.

The front ember burner should not produce yellow flames greater than 1/2" in height or any dark yellow or orange flames.

The middle burner should not produce flame that remains yellow or yellow flame that extends above the ceramic ramp.

The rear burner should not produce a dark yellow / orange flame nor should it be absent of blue color near the base of the flame next to the shiny stainless steel burner.

If burner flame pattern is incorrect, as shown in **Figure 49**.

- turn fireplace off (see *To Turn Off Gas to Appliance, Page 23*)
- see *Troubleshooting, Page 34*

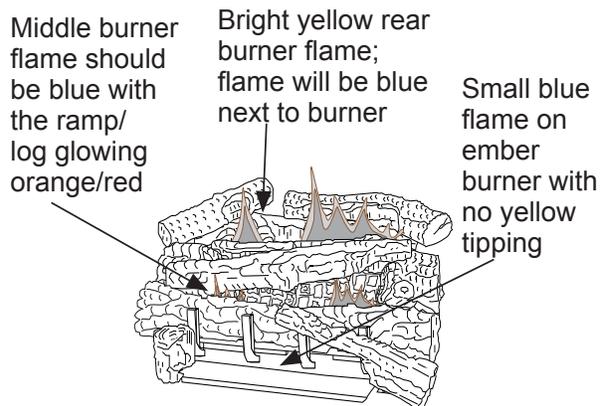


Figure 48 - Correct Burner Flame Pattern

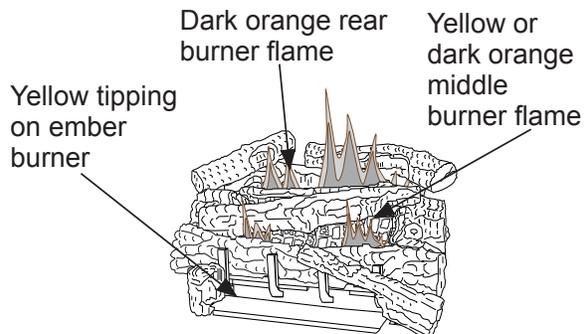


Figure 49 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off fireplace and let cool before cleaning.

⚠ CAUTION: You must keep control areas, burner, and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

⚠ WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint, and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have heater inspected yearly by a qualified service person.

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

1. Shut off unit, including pilot. Allow unit to cool for at least thirty minutes.
2. Inspect burner, pilot, and primary air inlet holes on injector holder for dust and dirt (see **Figure 50**).
3. Blow air through the ports/slots and holes in the burner.

4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hair with a soft cloth or vacuum cleaner nozzle.
5. Blow air into the primary air holes on the injector holder.
6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

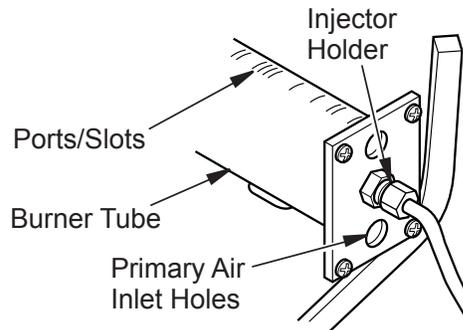


Figure 50 - Injector Holder On Outlet Burner Tube

Clean pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about 2" from where the pilot flame comes out of the pilot assembly (see **Figure 51**). With unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

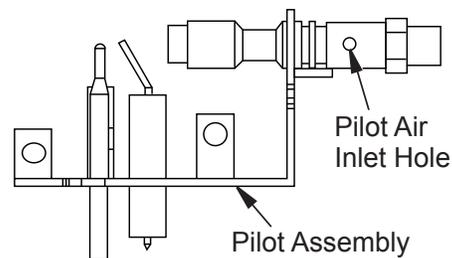
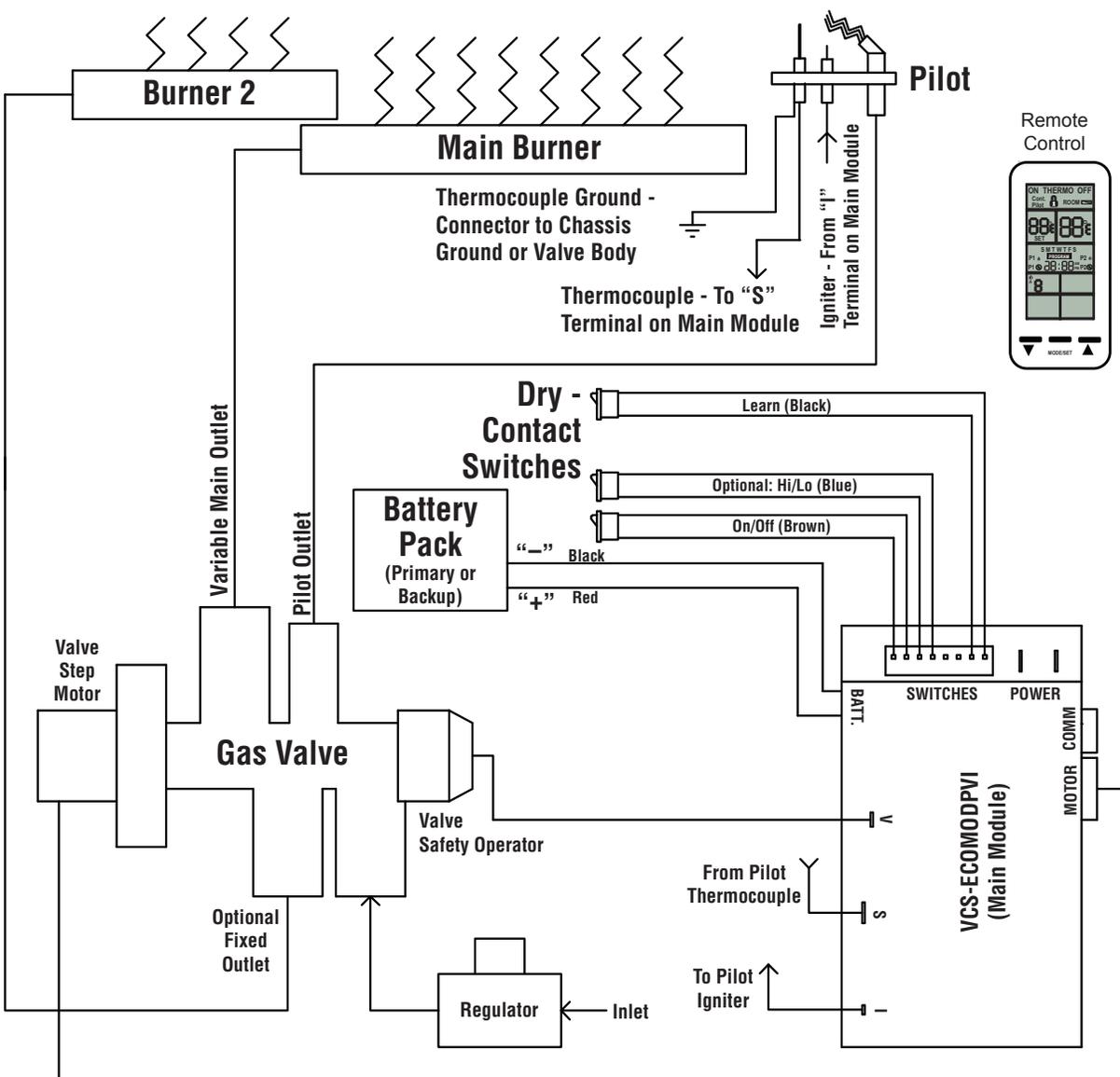


Figure 51 - Pilot Inlet Air Hole (Your pilot may vary from pilot shown)

WIRING DIAGRAM



⚠ CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

SPECIFICATIONS

VRT4032ZEN

- Rating (Variable): 20,000/25,000 Btu/Hr
- Type Gas: Natural
- Ignition: Electronic
- Manifold Pressure: 4.5" W.C.
- Inlet Gas Pressure (in. of water):
Max - 10.5" W.C., Min* - 5" W.C.

VRT4032ZEP

- Rating (Variable): 20,000/25,000 Btu/Hr
- Type Gas: Propane/LP
- Ignition: Electronic
- Manifold Pressure: 8" W.C.
- Inlet Gas Pressure (in. of water):
Max - 14" W.C., Min* - 11" W.C.

VCT4032ZEN

- Rating (Variable): 20,000/25,000 Btu/Hr
- Type Gas: Natural
- Ignition: Electronic
- Manifold Pressure: 4.5" W.C.
- Inlet Gas Pressure (in. of water):
Max - 10.5" W.C., Min* - 5" W.C.

VCT4032ZEP

- Rating (Variable): 17,000/25,000 Btu/Hr
- Type Gas: Propane/LP
- Ignition: Electronic
- Manifold Pressure: 8" W.C.
- Inlet Gas Pressure (in. of water):
Max - 14" W.C., Min* - 11" W.C.

VRT4036ZEN

- Rating (Variable): 22,000/33,000 Btu/Hr
- Type Gas: Natural
- Ignition: Electronic
- Manifold Pressure: 4.5" W.C.
- Inlet Gas Pressure (in. of water):
Max - 10.5" W.C., Min* - 5" W.C.

VRT4036ZEP

- Rating (Variable): 22,000/33,000 Btu/Hr
- Type Gas: Propane/LP
- Ignition: Electronic
- Manifold Pressure: 8" W.C.
- Inlet Gas Pressure (in. of water):
Max - 14" W.C., Min* - 11" W.C.

VCT4036ZEN

- Rating (Variable): 22,000/33,000 Btu/Hr
- Type Gas: Natural
- Ignition: Electronic
- Manifold Pressure: 4.5" W.C.
- Inlet Gas Pressure (in. of water):
Max - 10.5" W.C., Min* - 5" W.C.

VCT4036ZEP

- Rating (Variable): 20,000/33,000 Btu/Hr
- Type Gas: Propane/LP
- Ignition: Electronic
- Manifold Pressure: 8" W.C.
- Inlet Gas Pressure (in. of water):
Max - 14" W.C., Min* - 11" W.C.

*For purpose of input adjustment

REPLACEMENT PARTS

See **Pages 42-46** for a complete replacement parts list. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your IHP distributor or dealer. Parts will be shipped at prevailing prices at time of order.

NEVER USE SUBSTITUTE MATERIALS. USE OF NON-APPROVED PARTS CAN RESULT IN POOR PERFORMANCE AND SAFETY HAZARDS.

SERVICE HINTS

When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- appliance will not produce specified heat
- propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local propane/LP or natural gas supplier.

When ordering repair parts, always give the following information:

1. The model number of the appliance.
2. The serial number of the appliance.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the appliance.

If you encounter any problems or have any questions concerning the installation or application of this appliance, please contact your dealer.

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. Please contact your IHP dealer for any questions or concerns. When contacting your dealer please have your model and serial numbers of your appliance ready. You can also visit our web site at SuperiorFireplaces.us.com.

TROUBLESHOOTING

⚠ WARNING: Turn off heater and let cool before servicing. Only a qualified service person should service and repair heater.

⚠ CAUTION: Never use a wire, needle or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

NOTE: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
<p>Either the remote or touch pad buttons are pressed to start the burner ignition sequence and there is no function or response.</p>	<ol style="list-style-type: none"> 1. Missing or weak batteries at power supply box or remote. Control module may beep 10 times or may not beep at all. LCD display may show "BATTERY ERROR". 2. Unplugged power supply (battery) box 3. Touch pad not plugged in to module or plugged in incorrectly 4. Control valve wiring harness not plugged in or not in proper position 5. Remote not communicating with control module 	<ol style="list-style-type: none"> 1. Check batteries and replace if needed. (Batteries in the power supply box can be tested with a multimeter at the two connections at the back of the battery housing where the red and black wires are connected. Set the multimeter to DC voltage, initiate the ignition sequence, and observe the voltage while the system is lighting (under load). The system will not function under 3.8 volts and batteries should be replaced if the voltage is under 4.0 volts.) 2. Plug power supply box to module. 3. Plug touch pad in module see Page 18, Figure 27. Check to see it is positioned as shown. 4. Check to see that the control valve wiring harness' blue connector is plugged in to the module. Check to see that it is aligned with the mating pins. If any pins are visible, then the connector is not in the correct position. If this is the case, disconnect, align, and reconnect to the module. 5. The remote communicates with the module periodically. It doesn't communicate with the module continuously to conserve battery power.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
<p>Either the remote or touch pad buttons are pressed to start the burner ignition sequence and there is no function or response. <i>(Continued from Page 34).</i></p>	6. LED is blinking	6. This indicates the battery power is low. Replace the batteries in the power supply box.
	7. Igniter cable is not connected	7. Check the igniter connection at both the control module and the ODS pilot. Connect if loose.
	8. Igniter cable pinched or wet	8. Free igniter cable if pinched by any metal or tubing. Keep igniter cable dry.
	9. Broken Igniter cable.	9. Replace wire harness including igniter cable.
	10. Igniter electrode positioned wrong.	10. Replace ODS pilot assembly.
	11. Igniter electrode broken.	11. Replace ODS pilot assembly.
	12. Control module sounds 2 cycles of 3 beeps; LCD display may show ROM ERROR	12. Replace control module
	13. Control module sounds 2 cycles of 5 beeps; LCD display may show SUPPORT ERROR	13. Ground cable from control valve wiring harness is not grounding properly. Reposition spade terminal so that it makes contact with burner chassis metal or valve body.
	14. Bad reception from remote	14. Change batteries in remote. Check reception of signal from a shorter distance. If still not working, try changing the channel in the configuration menu. If this does not fix the problem, reset the channel (<i>see Page 24 Channel Selection</i>) and follow the instructions in Pairing on Page 28 . Replace remote and control module as a final action.
	15. If LED on touch pad is continuously on, the cable is connected the wrong way.	15. Disconnect the touch pad between the long and short cables, turn the short cable with the touch pad over and reconnect.
	16. The control module sounds 2 cycles of 5 beeps. The wiring assembly from the control valve is disconnected or broken.	16. Connect the wiring harness at the control module. Replace the valve assembly if all other cause/remedies fail to correct his problem.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
<p>When igniter button is pressed on the remote or touch pad, the pilot sparks but there is no ignition.</p>	<ol style="list-style-type: none"> 1. Gas supply turned off or equipment shutoff valve closed 2. Air in gas lines. 3. Thermocouple circuit between the control valve and the control module is open. 4. No gas to the ODS pilot 5. Depleted gas supply (propane/LP only) 6. Valve cable is disconnected or broken. 7. ODS pilot is clogged 8. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open equipment shutoff valve. 2. Continue turning the burner system ON and OFF. Repeat igniting operation until air is removed. On first time ignitions, air in the lines is common and it is not uncommon to repeat the ignition sequence 10 to 15 times before enough gas is at the ODS pilot for it to light. 3. Check the thermocouple connection at the control valve and also at the control module. The thermocouple connection at the control valve should be hand tight plus 1/4 to 1/2 turn. You should not be able to loosen the thermocouple at the control valve with your hand. Check the thermocouple terminal connection at the control module. If it is loose, remove it with needle nose pliers, using the pliers, slightly close the terminal's opening and reinstall on to the control module. 4. While the pilot is sparking, check for gas flow at the ODS pilot. If flow is present, try to light the pilot with a long reach lighter. If it will not light but the flame is disturbed, air is in the line. Cycle through the ignition sequence to clear the line of air until gas is present. If no flow is present at the gas valve, check to see all shut off valves are open. Verify proper pressure is supplied to the valve. Excessive pressure can lock out the appliance's regulator. Also check to see that the wiring harness from the control valve is properly connected at the control module. The wiring harness connection housing can be identified by it's blue connector housing. 5. Contact local propane/LP gas company. 6. Connect valve cable correctly 7. Clean ODS pilot (<i>see Cleaning and Maintenance, Page 31</i>) or replace ODS pilot assembly. 8. Replace gas regulator

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
<p>ODS pilot lights but pilot flame goes out before burners light.</p>	<ol style="list-style-type: none"> 1. Equipment shutoff valve not fully open 2. Missing or weak batteries at power supply box or remote. 3. Thermocouple circuit between the ODS pilot and control module is loose or damaged. 4. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure or B) Dirty or partially clogged ODS pilot. 5. Thermocouple damaged 6. Control valve damaged. 	<ol style="list-style-type: none"> 1. Fully open equipment shutoff valve. 2. Check batteries and replace if needed. (Batteries in the power supply box can be tested with a multimeter at the two connections at the back of the battery housing where the red and black wires are connected. Set the multimeter to DC voltage, initiate the ignition sequence, and observe the voltage while the system is lighting (under load). The system will not function under 3.8 volts and batteries should be replaced if the voltage is under 4.0 volts.). 3. Check thermocouple terminal connection at the control module. If it is loose, remove it with needle nose pliers, using the pliers, slightly close the terminal's opening and reinstall on to the control module. 4. A) Contact local natural or propane/LP gas company. B) Clean ODS pilot (<i>see Cleaning and Maintenance, Page 31</i>) or replace ODS pilot assembly. 5. Replace ODS pilot assembly. 6. Replace control valve
<p>Burner system lights from remote but not from touch pad</p>	<ol style="list-style-type: none"> 1. Touch pad cable disconnected or broken 2. Defective touch pad 	<ol style="list-style-type: none"> 1. Connect or replace touch pad and cable. 2. Replace touch pad
<p>Burner system does not ignite the burner while the remote is in the program mode.</p>	<ol style="list-style-type: none"> 1. Program mode does not work if soft start is deactivated. 	<ol style="list-style-type: none"> 1. Activate soft start in the remote.
<p>Burner system shuts off after operating 6 seconds then sounds 5 beeps.</p>	<ol style="list-style-type: none"> 1. Short in touch pad wiring. 	<ol style="list-style-type: none"> 1. Replace touch pad and wiring harness.
<p>Low battery power in remote.</p>	<ol style="list-style-type: none"> 1. Batteries are weak. LOW BATTERY is shown in remote display. 	<ol style="list-style-type: none"> 1. Replace batteries in remote.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Burner system shuts off. Control module sounds 2 cycles of 3 beeps.	1. Faulty control module	1. Replace control module.
Burner system shuts off. Control module sounds 2 cycles of 3 beeps.	1. Remote and control module not communicating properly 2. Faulty control module	1. Follow Pairing instructions on Page 28 to re-pair remote to control module. 2. Replace control module
Burner system shuts off. Control module sounds 20 beeps.	1. Loss of communication between control module and remote after 18 minutes.	1. Either the remote is too far from the burner system or the remote needs new batteries. The remote should work within 20 feet of the burner system. If it does not, replace the batteries in the remote and battery supply box.
Burner system shuts off. Control module sounds 1 long beep.	1. Control module is too hot	1. Check to see the fireplace size meets the minimum requirements. Call technical service.
Burner systems shuts off.	1. The SAFETY temperature setting in the remote has shut the burner system off.	1. The remote includes a shut off that is preset at 40C (104F). If the remote is placed in a location that is at or above this temperature it will shut the burner system off. Placing the remote on a mantel may result in this problem. If it occurs, relocate the remote to a cooler location.
Burner system lights or shuts off without touching the remote.	1. More than one burner system is present and operating on the same frequency.	1. Follow Pairing instructions on Page 28 to re-pair remote to control module.

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Burners do not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Inlet gas pressure is too low 2. Burner orifice(s) clogged 3. Mislocated crossover tube 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company 2. Clean burner(s) (see <i>Cleaning and Maintenance, Page 31</i>) or replace burner orifice(s) 3. Contact qualified service person
Delayed ignition of one or both burners	<ol style="list-style-type: none"> 1. Manifold pressure is too low 2. Burner orifice(s) clogged 3. Mislocated crossover tube 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company 2. Clean burner(s) (see <i>Cleaning and Maintenance, Page 31</i>) or replace burner orifice(s) 3. Contact qualified service person
Burner backfiring during combustion	<ol style="list-style-type: none"> 1. Burner orifice is clogged or damaged 2. Damaged burner 3. Gas regulator defective 	<ol style="list-style-type: none"> 1. Clean burner (see <i>Cleaning and Maintenance, Page 31</i>) or replace burner orifice 2. Replace damaged burner 3. Replace gas regulator
Yellow flame in middle burner during burner combustion	<ol style="list-style-type: none"> 1. Not enough air 2. Gas regulator defective 	<ol style="list-style-type: none"> 1. Check burner(s) for dirt and debris. If found, clean burner(s) (see <i>Cleaning and Maintenance, Page 31</i>) 2. Replace gas regulator
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> 1. Residues from manufacturing processes and logs curing 	<ol style="list-style-type: none"> 1. Problem will stop after a few hours of operation
Heater produces a whistling noise when burners are lit	<ol style="list-style-type: none"> 1. Set the unit to HI by using the remote when burners are cold 2. Air in gas line 3. Air passageways on heater blocked 4. Dirty or partially clogged burner orifice(s) 	<ol style="list-style-type: none"> 1. Set the unit to LO by using the remote and let warm up for a minute 2. Operate burners until air is removed from line. Have gas line checked by local natural or propane/LP gas company 3. Observe minimum installation clearances (see Pages 10-13) 4. Clean burners (see <i>Cleaning and Maintenance, Page 31</i>) or replace burner orifice(s)
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none"> 1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue 	<ol style="list-style-type: none"> 1. Turn heater off when using furniture polish, wax, carpet cleaners or similar products
Moisture/condensation noticed on windows	<ol style="list-style-type: none"> 1. Not enough combustion/ventilation air 	<ol style="list-style-type: none"> 1. Refer to <i>Air for Combustion and Ventilation</i> requirements (Page 7)
Heater produces a clicking/ticking noise just after burners are lit or shut off	<ol style="list-style-type: none"> 1. Metal expanding while heating or contracting while cooling 	<ol style="list-style-type: none"> 1. This is normal with most heaters. If noise is excessive, contact qualified service person

TROUBLESHOOTING

Continued

⚠ WARNING: If you smell gas

- **Shut off gas supply.**
- **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.**

IMPORTANT: Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater produces unwanted odors	<ol style="list-style-type: none"> 1. Heater burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See <i>IMPORTANT</i> statement above) 2. Low fuel supply (propane/LP only) 3. Gas leak. See Warning statement at top of Page 	<ol style="list-style-type: none"> 1. Open window to ventilate room. Stop using odor causing products while heater is running 2. Refill supply tank (propane/LP only) 3. Locate and correct all leaks (see <u><i>Checking Gas Connections, Page 16</i></u>)
Heater shuts off in use (ODS operates)	<ol style="list-style-type: none"> 1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged 	<ol style="list-style-type: none"> 1. Open window and/or door for ventilation 2. Contact local natural or propane/LP gas company 3. Clean ODS/pilot (see <u><i>Cleaning and Maintenance, Page 31</i></u>)
Gas odor even when control knob is in OFF position	<ol style="list-style-type: none"> 1. Gas leak. See Warning statement at top of Page 2. Control valve or gas control defective 	<ol style="list-style-type: none"> 1. Locate and correct all leaks (see <u><i>Checking Gas Connections, Page 16</i></u>) 2. Replace control valve or gas control
Gas odor during combustion	<ol style="list-style-type: none"> 1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement at top of Page 	<ol style="list-style-type: none"> 1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <u><i>Checking Gas Connections, Page 16</i></u>)
Log set cycles to pilot, but room temperature drops to a lower than ideal level before log set comes back on	<ol style="list-style-type: none"> 1. Optional Hand-held remote control is too close to heater 	<ol style="list-style-type: none"> 1. Move hand-held remote control unit farther away from the heater

ACCESSORIES

Purchase these appliance accessories from your local dealer. If they can not supply these accessories, contact IHP at SuperiorFireplaces.us.com for referral information. You can also write to the address listed on the back Page of this manual.

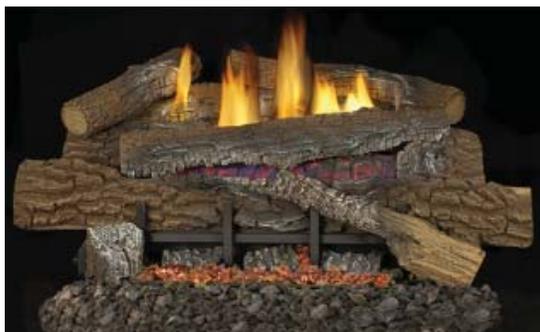
Only kits supplied by IHP shall be used in the installation of this appliance. Use of non-approved accessory/part kit(s) can result in poor performance and safety hazards.

NOTICE: All accessories may not be available for all fireplace models.



VINTAGE FIBER LINER KITS

Cat. No. H9076, Model SBLQ32SVF - 32"
Cat. No. H9077, Model SBLQ36SVF - 36"



LOG SET (REQUIRED ACCESSORY)

(32" Models)

Cat. No. F0053, Model LBG18BM
18" Boulder Mountain, Concrete

(36" Models)

Cat. No. F0054, Model LBG24BM
24" Boulder Mountain, Concrete



Black



Brushed Brass



Platinum

PERIMETER TRIM ACCESSORY

Cat. No. F1039, Model PT32, Black - 32"
Cat. No. F1040, Model PT32B, Brass - 32"
Cat. No. F1041, Model PT32P, Platinum - 32"
Cat. No. F1042, Model PT36, Black - 36"
Cat. No. F1043, Model PT36B, Brass - 36"
Cat. No. F1044, Model PT36P, Platinum - 36"

For all models. Optional with built-in installation. Provides a finished appearance covering rough and/or unfinished mantel or wall opening, edges, etc.



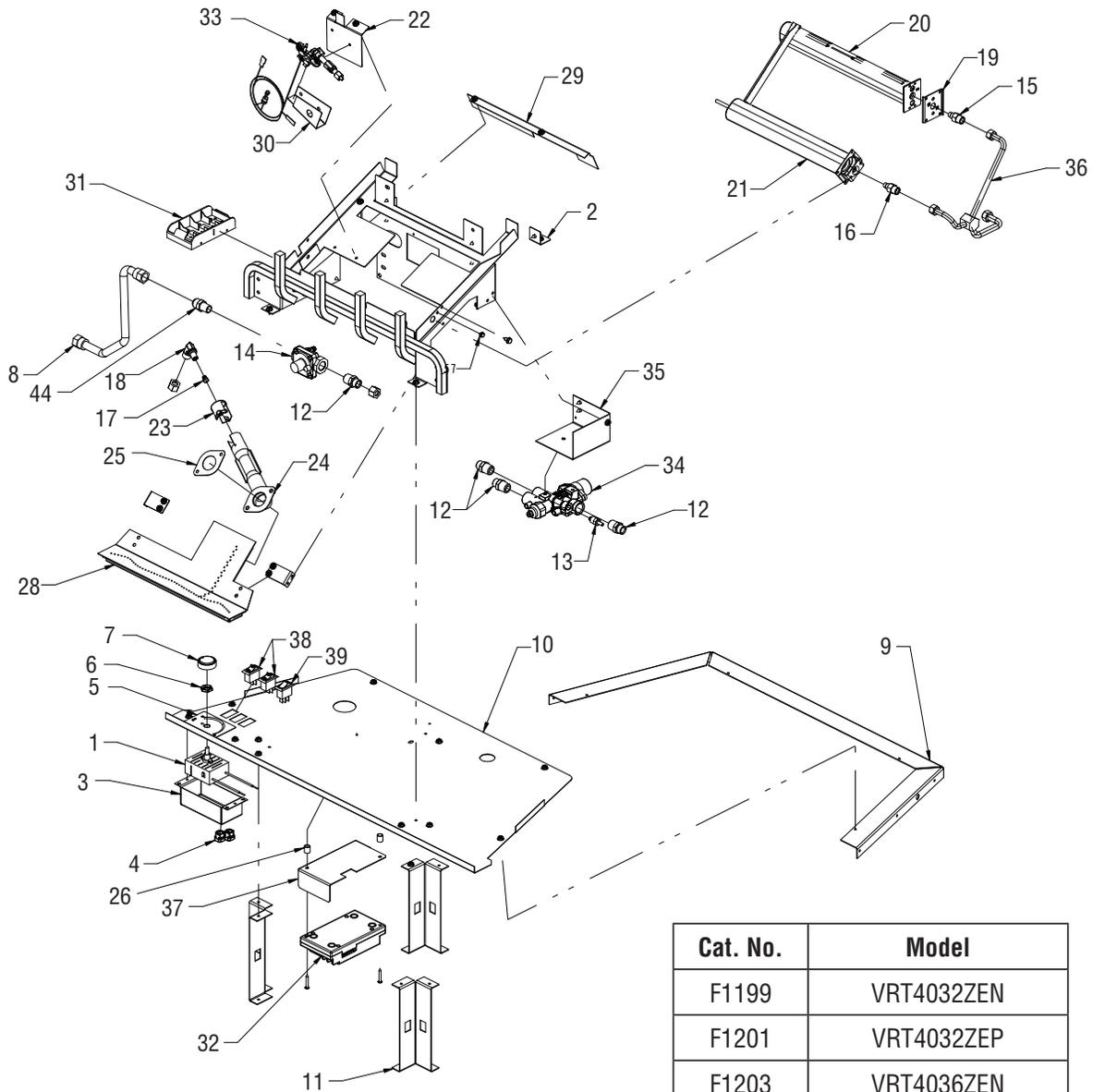
EMBER KITS

Cat. No J6207 - Platinum Embers
Cat. No J6208 - Glowing Embers
(rockwool)

PARTS

LOG BASE ASSEMBLY MODELS VRT4032ZEN, VRT4032ZEP, VRT4036ZEN AND VRT4036ZEP

⚠ WARNING: Contact an IHP dealer to obtain any of these parts. Never use substitute materials not approved by IHP. Use of non-approved parts can result in poor performance and safety hazards.



Cat. No.	Model
F1199	VRT4032ZEN
F1201	VRT4032ZEP
F1203	VRT4036ZEN
F1205	VRT4036ZEP

PARTS

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on **Page 47** of this manual.

KEY NO.	PART NO.	DESCRIPTION					QTY.
			VRT4032ZEN	VRT4032ZEP	VRT4036ZEN	VRT4036ZEP	
1	J3823	Control, Solid State	•	•	•	•	1
2	**	Bracket, Chassis Mounting	•	•	•	•	1
3	F2936	Housing, Speed Control	•	•	•	•	1
4	F2966	Bushing, Strain Relief	•	•	•	•	2
5	F2935	Decal, Control Position	•	•	•	•	1
6	J3825	Nut, Lock	•	•	•	•	1
7	J3824	Knob, Control	•	•	•	•	1
8	J3726	Connector, Flexible	•	•	•	•	1
9	F2946	Bracket, 32" Firebox Support	•	•	•	•	1
10	F2965	Floor, 32" Fireplace System	•	•	•	•	1
11	F2945	Leg, Floor Support	•	•	•	•	1
12	J3562	Connector, Male 3/8 NPTF 3/8 Tube	•	•	•	•	4
13	F2932	Tube, Pilot	•	•	•	•	1
14	J3653	Regulator, Gas	•	•	•	•	1
14	J7603	Regulator, Gas 4.5"	•	•	•	•	1
15	J3672	Orifice, .053 [1,35 mm] Top	•	•	•	•	1
15	J3674	Orifice, .040 [1,02 mm] Top	•	•	•	•	1
15	F3140	Orifice, .063 [1,60 mm] Top	•	•	•	•	1
15	F3137	Orifice, .042 [1,07 mm] Top	•	•	•	•	1
16	F3139	Orifice, .069 [1,752 mm] Middle	•	•	•	•	1
16	F3137	Orifice, .042 [1,07 mm] Middle	•	•	•	•	1
16	J3671	Orifice, .075 [1,90 mm] Middle	•	•	•	•	1
16	J3675	Orifice, .0453 [1,15 mm] Middle	•	•	•	•	1
17	J8079	Orifice, 0.028 [0,711 mm] Pan	•	•	•	•	1
17	F3135	Orifice, 0.052 [1,321 mm] Pan	•	•	•	•	1
17	J3619	Orifice, 0.038 [0,965 mm] Pan	•	•	•	•	1
18	J6127	Orifice Holder, 90 Degree Elbow	•	•	•	•	1
19	F3391	Plate, NG Conversion	•	•	•	•	1
20	J4818	Burner, 18" Ramp Front	•	•	•	•	1
21	J4820	Burner, 18" Ramp Rear	•	•	•	•	1
22	F3142	Bracket, Pilot	•	•	•	•	1
22	F2938	Bracket, Pilot	•	•	•	•	1
23	J4886	Shutter, Air	•	•	•	•	1
24	J5416	Tube, Venturi	•	•	•	•	1
25	J5456	Gasket, Burner	•	•	•	•	1
26	J5918	Spacer, .4375 Aluminum	•	•	•	•	2
28	J6399	Assy, Pan Burner BGE18	•	•	•	•	1
29	**	Shield, Air 18" BGE	•	•	•	•	1
30	J6508	Shield, Pilot	•	•	•	•	1
31	F2958	Battery Pack C - Ecoflow	•	•	•	•	1
32	F2960	Module, Ecoflow ODS RF Control	•	•	•	•	1
33	F2955	Pilot, Ng Elec Copreci 24"	•	•	•	•	1
33	F2956	Pilot, Lp Elec Copreci 24"	•	•	•	•	1
34	F2947	Valve, Gas 2-Out #47 w/15" JFM-22600-151	•	•	•	•	1
34	F2948	Valve, Gas 2-Out #42 w/15" JFM-22600-162	•	•	•	•	1
35	F2954	Bracket, Valve	•	•	•	•	1
36	F2961	Tube, Inlet	•	•	•	•	1
37	F2953	Shield, Control Board	•	•	•	•	1
38	27K30	Switch, Rocker, Burner On/Off	•	•	•	•	1
38	F3456	Switch, Rocker, Burner Hi/Lo	•	•	•	•	1
39	F2964	Switch, Momentary	•	•	•	•	1
41	F2937	Fitting, Brass	•	•	•	•	1

** Not Field Replaceable

PARTS

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on **Page 33** of this manual.

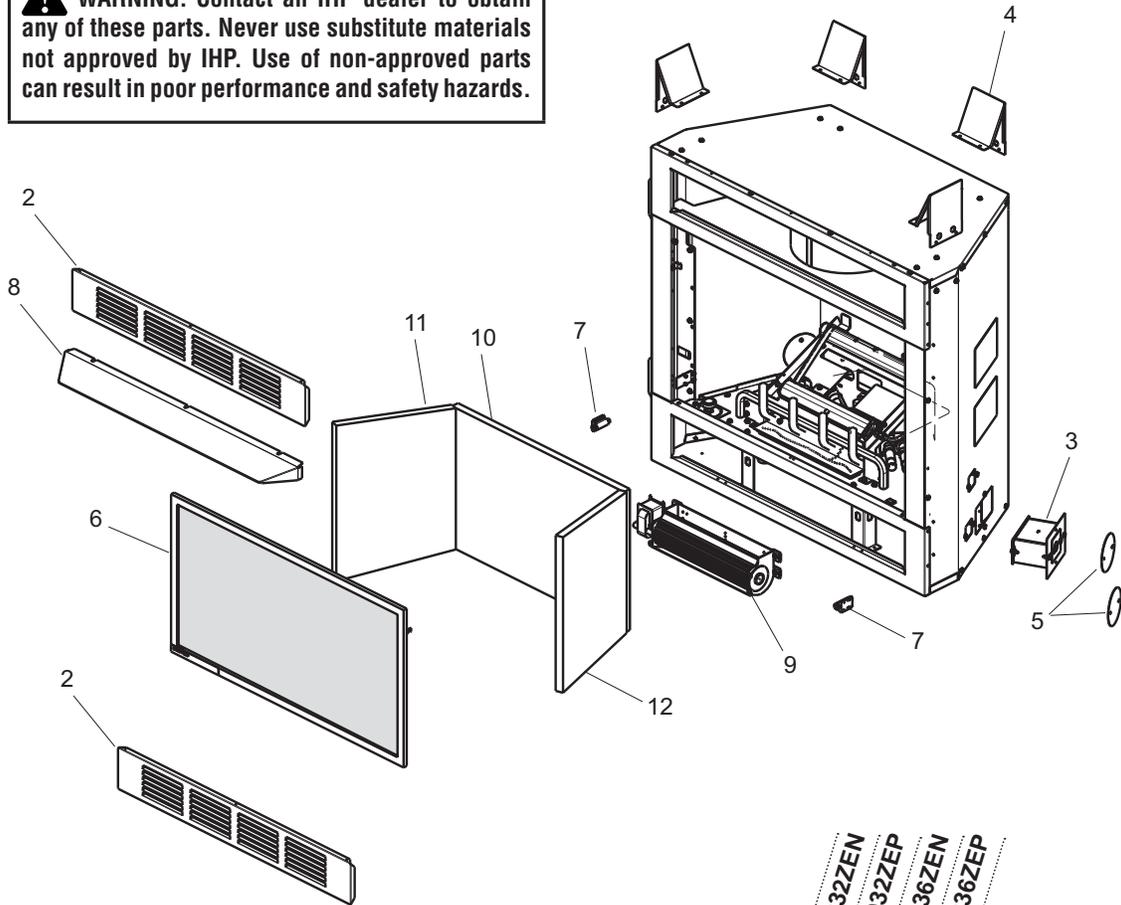
KEY NO.	PART NO.	DESCRIPTION	PARTS AVAILABLE — NOT SHOWN				QTY.
			VRT4032ZEN	VRT4032ZEP	VRT4036ZEN	VRT4036ZEP	
	F2949	ODS Remote Wiring Harness	•	•	•	•	1
	J7933	V-Wire	•	•	•	•	1
	F2934	Harness, Wire	•	•	•	•	1
	F3394	Wire, Harness	•	•	•	•	1
	K2026	Cord, Power Supply	•	•	•	•	1
	J3795	Wire, Harness	•	•	•	•	1
	J3658	Plate, Warning	•	•	•	•	1
	J6207	Kit, Platinum Embers	•	•	•	•	1
	J6208	Kit, Glowing Embers (rockwool)	•	•	•	•	1
	F2950	Remote Control ODS Touchscreen	•	•	•	•	1
	F2957	ODS Spark Wire	•	•	•	•	1
	J6585	Plate, Lighting Instructions	•	•	•	•	1
	J6598	Flex Line, 8" .375 Tube W/Nuts	•	•			1
	J6599	Flex Line, 12" .375 Tube W/Nuts	•	•			1
	J6599	Flex Line, 12" .375 Tube W/Nuts			•	•	2
	J6504	Chunk, Left Ember			•	•	1
	J6505	Chunk, Middle Ember			•	•	1
	J6506	Chunk, Right Ember			•	•	1

PARTS

FIREPLACE MODELS VRT4032ZEN, VRT4032ZEP, VRT4036ZEN AND VRT4036ZEP

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on **Page 33** of this manual.

⚠ WARNING: Contact an IHP dealer to obtain any of these parts. Never use substitute materials not approved by IHP. Use of non-approved parts can result in poor performance and safety hazards.

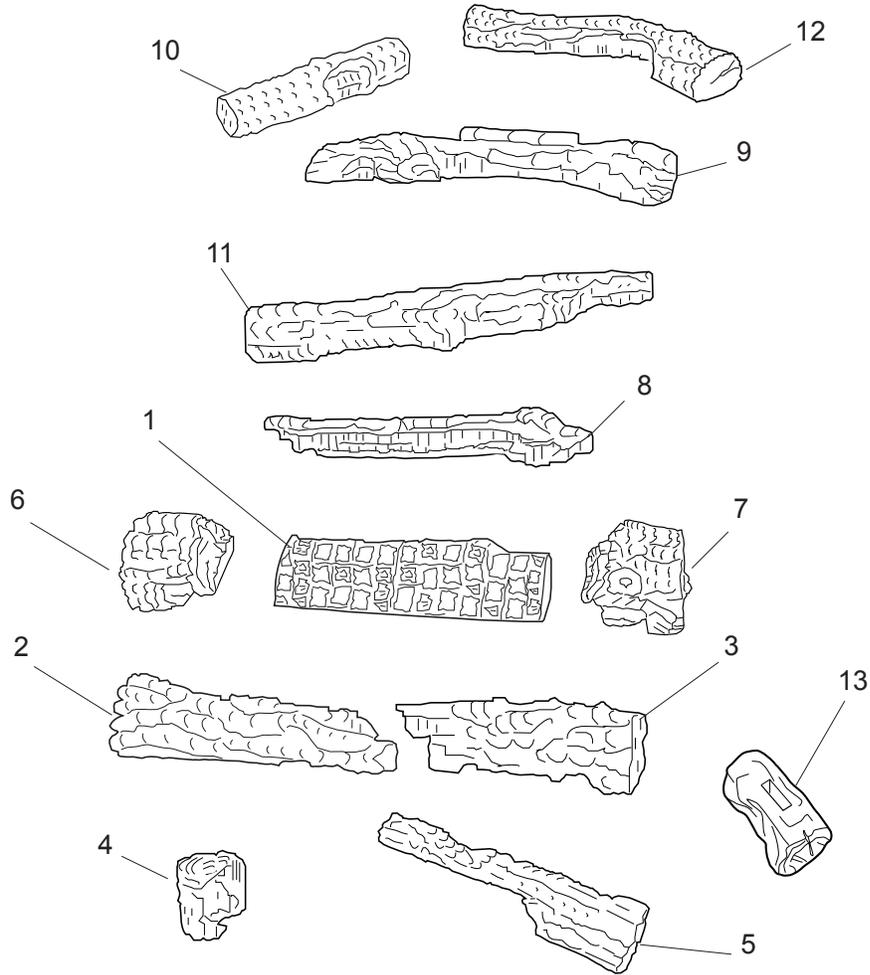


KEY NO.	PART NO.	DESCRIPTION					QTY.
			VRT4032ZEN	VRT4032ZEP	VRT4036ZEN	VRT4036ZEP	
2	J8142	Louver Assembly 32"	•	•			2
	J8141	Louver Assembly 36"			•	•	2
3	J7662	Electrical Duct Assembly	•	•	•	•	1
4	J6918	Spacer, Top	•	•	•	•	4
5	J6934	Cover Gas Conduit Plate	•	•	•	•	5
6	J6775	ASM 32" Fireplace System Screen	•	•			1
	J6776	ASM 36" Fireplace System Screen			•	•	1
7	J6492	Magnet, Door Latch	•	•	•	•	2
8	J6778	Hood 32" Fireplace System	•	•			1
	J6779	Hood 36" Fireplace System			•	•	1
9	J5458	Blower	•	•	•	•	1
10	J6783	Liner Fiber 32" Center Vintage	•	•			1
	H9077	Liner Fiber 36" Center Vintage			•	•	1
11	J6784	Liner Fiber 32" Left Vintage	•	•			1
	H9077	Liner Fiber 36" Left Vintage			•	•	1
12	J6785	Liner Fiber 32" Right Vintage	•	•			1
	H9077	Liner Fiber 36" Right Vintage			•	•	1

PARTS

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under *Replacement Parts* on **Page 33** of this manual.

LBG18BM and LBG24BM (Boulder Mountain) Logs



KEY NO.	PART NUMBER		DESCRIPTION	QTY
	VRT4032 (18BM)	VRT4036 (24BM)		
1	J6631	J6641	Log, Ramp	1
2	J6632	J6642	Log, Left Front	1
3	J6633	J6643	Log, Right Front	1
4	J6634	J6644	Log, Left Front Ember Bed	1
5	J6635	J6645	Log, Right Front Ember Bed	1
6	F2943	J6646	Log, Left Middle	1
7	F2944	K2008	Log, Right Middle	1
8	J6636	J6647	Log, Rear Middle	1
9	J7518	J6648	Log, Rear	1
10	J6637	J6637	Log, Left Top	1
11	J6638	J6650	Log, Middle Crossover	1
12	J6639	J6651	Log, Top Rear	1
13	J6640	J6640	Log, Switch	1

Innovative Hearth Products Superior® Brand Gas Fireplaces, Stoves and Inserts 20 Year Limited Warranty

THE WARRANTY

Innovative Hearth Products ("IHP") 20 Year Limited Warranty warrants your Superior® Brand gas fireplace, Stove or Insert ("Product") to be free from defects in materials and workmanship at the time of manufacture. The product body, firebox and barrier carry the 20 Year Limited Warranty. Ceramic glass carries the 20 Year Limited Warranty against thermal breakage only. After installation, if covered components manufactured by IHP are found to be defective in materials or workmanship during the 20 Year Limited Warranty period and while the Product remains at the site of the original installation, IHP will, at its option, repair or replace the covered components. If repair or replacement is not commercially practical, IHP will, at its option, refund the purchase price or wholesale price of the IHP product, whichever is applicable. IHP will also pay IHP prevailing labor rates, as determined in its sole discretion, incurred in repairing or replacing such components for up to five years. THERE ARE EXCLUSIONS AND LIMITATIONS to this 20 Year Limited Warranty as described herein.

COVERAGE COMMENCEMENT DATE

Warranty coverage begins on the date of purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product by an independent IHP dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from IHP, regardless of the installation or occupancy date.

EXCLUSIONS AND LIMITATIONS

This 20 Year Limited Warranty applies only if the Product is installed in the United States or Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through a listed supplier of IHP and proof of purchase must be provided. The product body, firebox and barrier carry the 20 Year Limited Warranty from the date of installation. Vent components, trim components and paint are excluded from this 20 Year Limited Warranty. The following do not carry the 20 Year Limited Warranty but are warranted as follows:

- Burner** – Repair or replacement for one year from the date of installation
- Gas components** – Repair or replacement for one year from the date of installation
- Gaskets** – Repair or replacement for one year from the date of installation
- Logs** – Replacement for one year from the date of installation against thermal breakage only
- Optional blowers & remote controls** – Repair or replacement for one year from the date of installation
- Optional glass doors** – Repair or replacement for 90 days from the date of installation
- Tempered glass** - Replacement for one year from the date of installation
- Labor coverage** – Prevailing IHP labor rates apply for the warranty period of the component

Parts not otherwise listed carry a 90 day warranty from the date of installation.

Whenever practicable, IHP will provide replacement parts, if available, for a period of 10 years from the last date of manufacture of the Product.

IHP will not be responsible for: (a) damages caused by normal wear and tear, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance (The Product must be subjected to normal use. The Product is designed to burn either natural or propane gas only. Burning conventional fuels such as wood, coal or any other solid fuel will cause damage to the Product, will produce excessive temperatures and could result in a fire hazard.); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

IHP is not responsible for inadequate fireplace system draft caused by air conditioning and heating systems, mechanical ventilation systems, or general construction conditions which may generate negative pressure in the room in which the appliance is installed. Additionally IHP assumes no responsibility for drafting conditions caused by venting configurations, adjoining trees or buildings, adverse wind conditions or unusual environmental factors and conditions that affect the operation of the unit.

This 20 Year Limited Warranty covers only parts and labor as provided herein. In no case shall IHP be responsible for materials, components or construction, which are not manufactured or supplied by IHP or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking IHP factory.

LIMITATION ON LIABILITY

It is expressly agreed and understood that IHP's sole obligation and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall IHP be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after repair or replacement, and whether such damage is caused by IHP's negligence. IHP has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

IHP makes no expressed warranties except as stated in this 20 Year Limited Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this 20 Year Limited Warranty or to create for IHP any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this 20 Year Limited Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

IHP reserves the right to investigate any and all claims against this 20 Year Limited Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this 20 Year Limited Warranty, the appliance must be installed and repaired by a licensed contractor approved by IHP.

Contact IHP at the address provided herein to obtain a listing of approved dealers/distributors. **IHP shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining IHP's prior written consent.**

HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this warranty to be valid, you must contact the IHP dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify IHP in writing. IHP must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the IHP Warranty Department at 1769 East Lawrence Street; Russellville, AL 35654 or visit our website at WWW.SUPERIORFIREPLACES.US.COM.

SuperiorFireplaces.us.com

Record the following important information about your appliance:

Appliance model number	
Appliance serial number	
Date appliance was Installed	
Type of gas appliance uses	
Dealer name	

IHP reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

