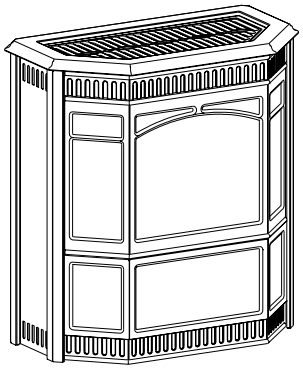
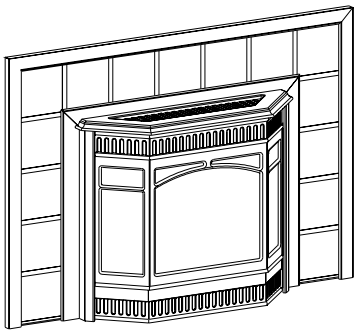
INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL



FREESTANDING



INSERT

FREESTANDING AND INSERT VENT-FREE FIREPLACE

MODEL BWVF-30-1

EFFECTIVE DATE APRIL, 2003

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.

WARNINGS

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

– **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.**
- **Immediately call your gas supplier from 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.**

Installer: Please leave these instructions with the consumer.

Consumer: Please retain these instructions for future use.

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 page 4.

WARNING: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 5.

TABLE OF CONTENTS

WARNING: This appliance is for installation only in a solid-fuel burning masonry or *UL 127* factory-built fireplace or in a listed ventless firebox enclosure. It has been design certified for these installations. Exception: DO NOT install this appliance in a factory-built fireplace that includes instructions stating it has not been tested or should not be used with unvented gas logs.

THIS IS A HEATING APPLIANCE

DO NOT OPERATE THIS APPLIANCE WITHOUT GLASS FRAME ASSEMBLY INSTALLED.

- **An unvented room heater having an input rating of more than 6,000 Btu per hour shall not be installed in a bathroom.**
- **An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom or bathroom.**
- **WARNING:** ANY CHANGE TO THIS HEATER OR ITS CONTROLS CAN BE DANGEROUS.
  Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.
- **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
- **Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.**
- **Young children should be carefully supervised when they are in the same room with the appliance.**
- **Do not place clothing or other flammable material on or near the appliance.**
- **Keep burner and control compartment clean.**
- **Installation on Rugs and Tile**
  If this appliance is to be installed directly on carpeting, 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.
  The base referred to above does not mean the fire-proof base as used on wood stoves. The protection is primarily for rugs that may be extremely thick and light-color tile that can discolor.
- **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 materials, etc. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.**
- **DO make a periodic visual check of pilot and burners. Clean and replace damaged parts.**
- **DO NOT use this unvented room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.**
- **Due to high surface temperatures, keep children, clothing and furniture away.**
- **Under no circumstances should any solid fuels (wood, coal, paper or cardboard etc.) be used in this appliance.**
- **The flow of combustion and ventilation air must not be obstructed in any way.**
- **Keep appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.**

WARNING

When used without adequate combustion and ventilation air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

Do not install heater until all necessary provisions are made for combustion and ventilation air. Consult the written instructions provided with the heater for information concerning combustion and ventilation air. In the absence of instructions, refer to the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the heater if not enough fresh air is available.

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If heater shuts off, do not relight until you provide fresh air.

If heater keeps shutting off, have it serviced. Keep burner and control compartment clean.

CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, heater may not be working properly. Get fresh air at once! Have heater serviced.

Some people — pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol , those at high altitudes — are more affected by carbon monoxide than others.

The pilot light safety system senses the depletion of oxygen at its location. If this heater is installed in a structure having a high vertical dimension, the possibility exists that the oxygen supply at the higher levels will be less than that at the heater. In this type of application, a fan to circulate the structure air will minimize this effect. The use of this fan will also improve the comfort level in the structure. When a fan is used to circulate air, it should be located so that the air flow is not directed at the burner.

SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas. That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- **Finally,** let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical stench put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in LP-Gas also are subject to oxidation. This fading can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- **Learn to recognize the odor of LP-gas.** Your local LP-Gas Dealer can give you a "Scratch and Sniff" pamphlet. Use it to find out what the propane odor smells like. If you suspect that your LP-Gas has a weak or abnormal odor, call your LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. **If you have any question about the gas odor, call your LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.**
- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

Specifications

Model		BWVF-30
Input	BTU/HR Maximum (LP/Nat)	32,000
	BTU/HR Minimum (LP/Nat)	23,000
	Firebox Opening	
	Insert	Freestanding
Height	23 1/8"	30 3/4"
Width	28"	28 1/4"
Depth	11"	18 1/2"
Gas Inlet (Pipe)	3/8"	3/8"
Insert Installation (Requires a Firebox.)		
BWIS-1	Bay Window Insert Kit	
Accessories for Insert		
BWIB-1	Bay Window Insert Blower Kit	
Stone Kit for Insert Surround and Cast Top		
SKI-EG	Empress Green	
SKI-HJ	Hunan Jade	
SKI-GB	Gray Botticino	
SKI-AZ	Azul	
SKI-SA	Salome	
SKI-BS	Black Swan	
Freestanding Pedestal (Requires a Firebox)		
BWFK-1	Bay Window Freestanding Kit	
Accessories for Freestanding Fireplace		
BWFB-1	Bay Window Freestanding Blower Kit	
Stone Kit for Firepalce Sides and Cast Top		
SKF-EG	Empress Green	
SKF-HJ	Hunan Jade	
SKF-GB	Gray Botticino	
SKF-AZ	Azul	
SKF-SA	Salome	
SKF-BS	Black Swan	
Controls for Freestanding and Insert		
GWSG-T	750 Millivolt Wall Thermostat	
FRBC-1	Battery Operated Remote Control	
FRBTC-1	Battery Operated Remote Control w/Thermostat	
FREC-1	Electric Remote Control	
FWS-1	Wall Switch	

Introduction

Always consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of an unvented room heater.

This appliance may be installed in an aftermarket* permanently located, manufactured (mobile) home, where not prohibited by state or local codes.

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

This appliance is only for use with the type of gas indicated on the rating plate.

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with unvented fireplace.
3. Installer should show owner how to start and operate unvented fireplace.

General Information

This BWVF-30 is design certified in accordance with American National Standards Institute Z21.11.2b-2002 by the Canadian Standards Associaton as an Unvented Room Heater and should be installed according to these instructions.

Attention: During initial use of ceramic log you will detect an odor as the ceramic log is cured. Also, during the curing process the ceramic log will burn with a yellow flame.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Important

All correspondence should refer to complete Model No., Serial No. and type of gas.

Notice: During initial firing of this unit, its paint will bake out, and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1/NFPA 54.**
**Available from the American National Standards Institute, Inc., 11 West 42nd St., New York, N.Y. 10036.*

Solid-fuels shall not be burned in a masonry or *UL 127* factory-built fireplace in which an unvented room heater is installed. WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

High Altitudes

For altitudes/elevations above 2,000 feet (610m), ratings should be reduced at the rate of 4 percent for each 1,000 feet (305m) above sea level. Contact the manufacturer or your gas company before changing spud/orifice size.

Provisions for Adequate Combustion and Ventilation Air

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The *National Fuel Gas Code, ANSI Z223.1* defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour ($4.8m^3$ 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 ($4.8m^3$ 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.

The following example is for determining the volume of a typical area in which the BWVF-30 may be located and for determining if this area fits the definition of an unconfined space.

The maximum input of the BWVF-30 is 32,000 Btu per hour. Based on the 50 cubic feet per 1,000 Btu per hour formula, the **minimum** area that is an unconfined space for installation of the BWVF-30 is 1,600 cubic feet, 50 cubic feet x 32 = 1,600 cubic feet. To determine the cubic feet of the area in which the BWVF-30 is to be installed, measure the length, width and height of the area. Example: The area measures 20 feet in length, 11 feet in width and 8 feet in height, the area is 1,760 cubic feet. The BWVF-30 can be installed in this unconfined space with no requirement to provide additional combustion and ventilation air.

Warning: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1*, Section 5.3 or applicable local codes.

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 or less with openings gasketed or sealed, and
b. Weatherstripping 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 the BWVF-30 heater is installed in a building of unusually tight construction, adequate air for combustion, ventilation and dilution of flue gases shall be provided in accordance with ANSI Z223.1/NFPA54.

Water Vapor: A By-Product of Unvented Room Heaters

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Unvented room heaters are recommended as supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat applications, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

1. Be sure the heater is sized properly for the application, including ample combustion air and circulation air.
2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
3. Do not use an unvented room heater as the primary heat source.

Clearances for Freestanding Fireplace

(Figures 1, 2, 3 and 4)

When facing the front of the appliance the following minimum clearances to combustible construction must be maintained.

Top of Appliance (ceiling)	36 inches
Rear Wall without Blower	2 inches
Rear Wall with Blower	4 inches
Side Wall	6 inches
Heater Corners (45° angle) to Wall	4 inches
Floor	0 inches

Provide adequate clearances around air openings.

Adequate accessibility clearances for purposes of servicing and proper operation must be provided.

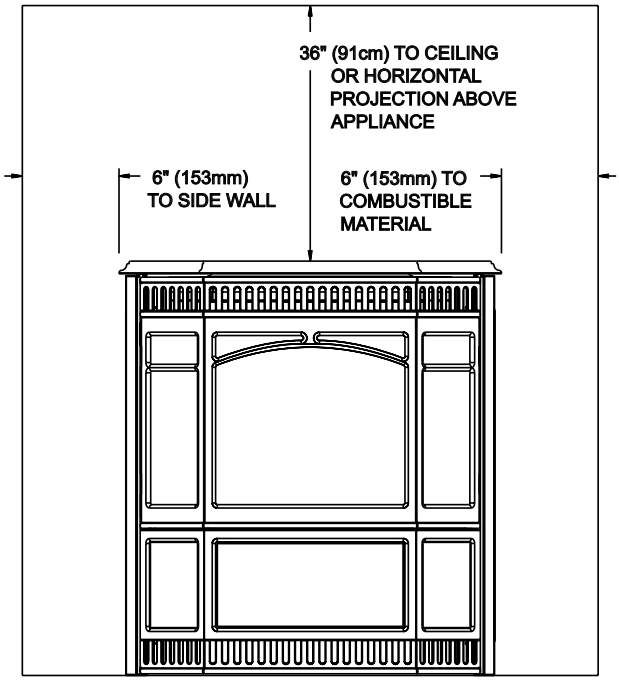


Figure 1

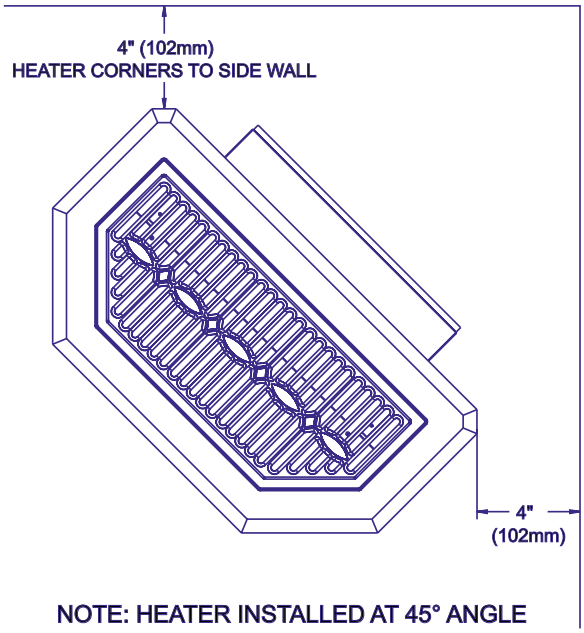


Figure 2

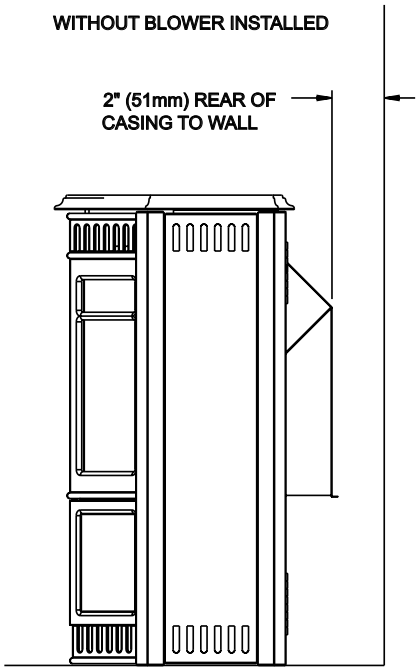


Figure 3

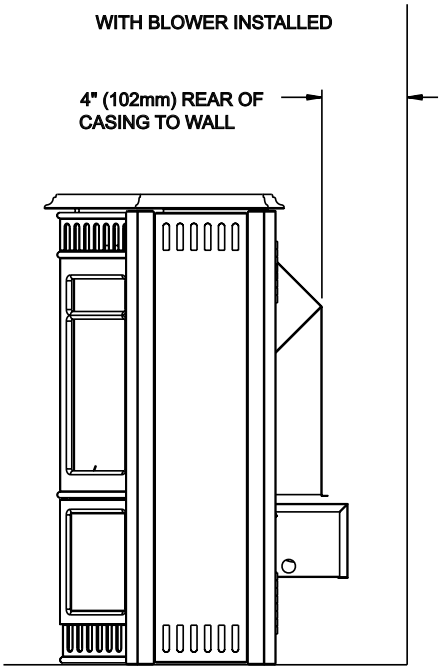


Figure 4

Minimum Fireplace Opening For Fireplace Insert

(Figure 5)

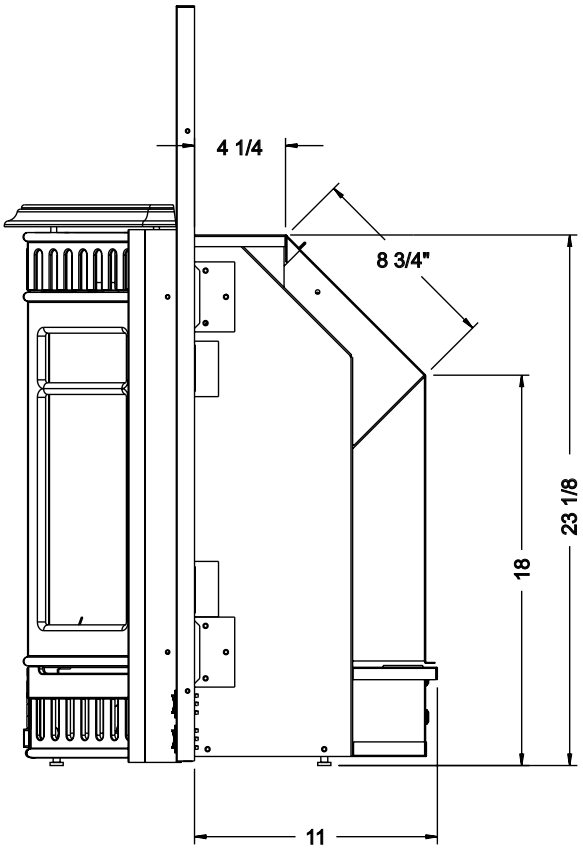


Figure 5

Mantel Clearances for Fireplace Insert (Figure 6)

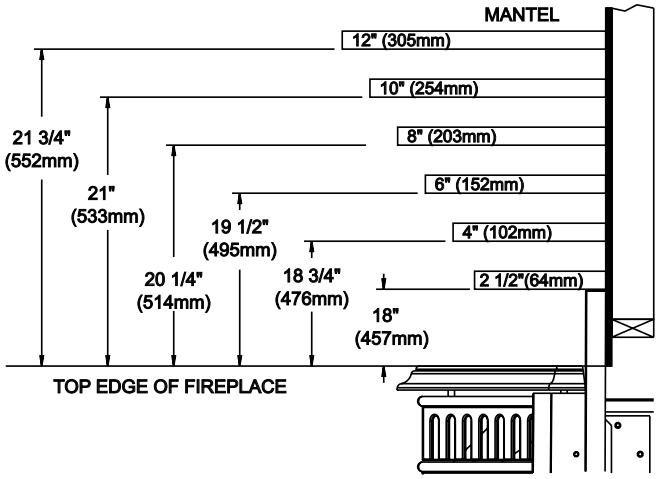


Figure 6

Combustible Material (Figure 7)

No greeting cards, stockings or ornamentation of any type should be placed on or attached to the fireplace. The flow of heat can ignite combustibles.

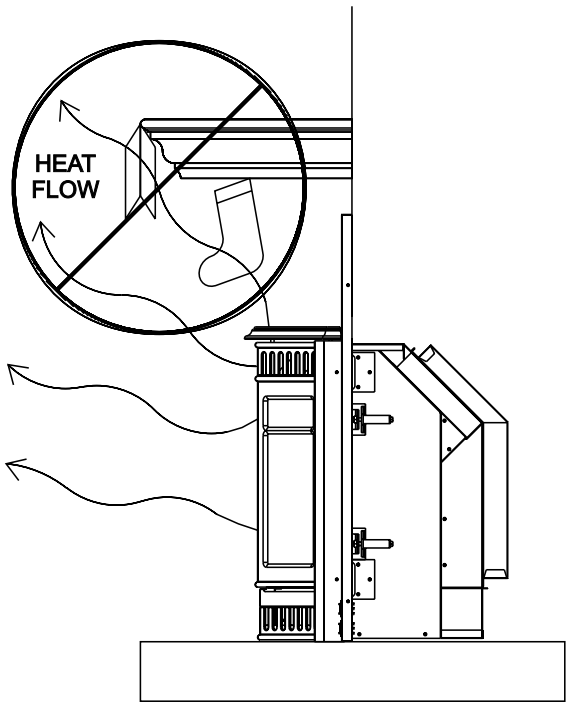


Figure 7

Gas Supply / Leak Testing (Figure 8)

Check all local codes for requirements, especially for the size and type of gas supply line required.

Recommended Gas Pipe Diameter

Pipe Length (Feet)	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	Nat.	L.P.	Nat.	L.P.
0-10	1/2" 1.3 cm	3/8" 1.0 cm	1/2" 1.3 cm	3/8" 1.0 cm
10-40	1/2" 1.3 cm	1/2" 1.3 cm	5/8" 1.6 cm	1/2" 1.3 cm
40-100	1/2" 1.3 cm	1/2" 1.3 cm	3/4" 1.9 cm	1/2" 1.3 cm
100-150	3/4" 1.9 cm	1/2" 1.3 cm	7/8" 2.2 cm	3/4" 1.9 cm

Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

Note: Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

Installing a New Main Gas Cock

Each appliance should have its own manual gas cock.

A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip line be installed near the gas inlet. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

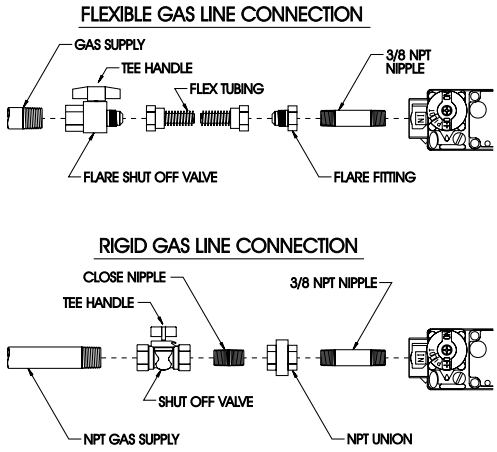


Figure 8

Method of Installing a Tee Fitting Sediment Trap

The use of the following gas connectors is recommended:

— ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings

— ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction.

Pressure Testing of the Gas Supply System

1. To check the inlet pressure to the gas valve, a 1/8" (3mm) N.P.T. plugged tapping, accessible for test gauge connection, must be placed immediately upstream of the gas supply connection to the appliance.
2. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
3. The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

Attention! If one of the above procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the appliance gas valve, it will result in a hazardous condition.

Freestanding Hardware Package Parts List

Part Description	Part Number	Quantity Supplied
1/4-20 x 1" Hex Washer Head Slotted Screw (Zinc)	R-3276	2
1/4-20 x 5/8" Hex Head Screw (Zinc)	R-2508	2
No. 10 x 1/2" Hex Washer Head Screw (Black)	R-2737	38
No. 8-18 x 1/2" Phillips Truss Head Screw (Black)	R-3580	2
No. 1/4-20 x 1-3/4" Phillips Head Machine Screw (Black)	R-5453	4
Not Shown Nylon Washer	R-5458	10

Freestanding Hardware Package (Figure 9)

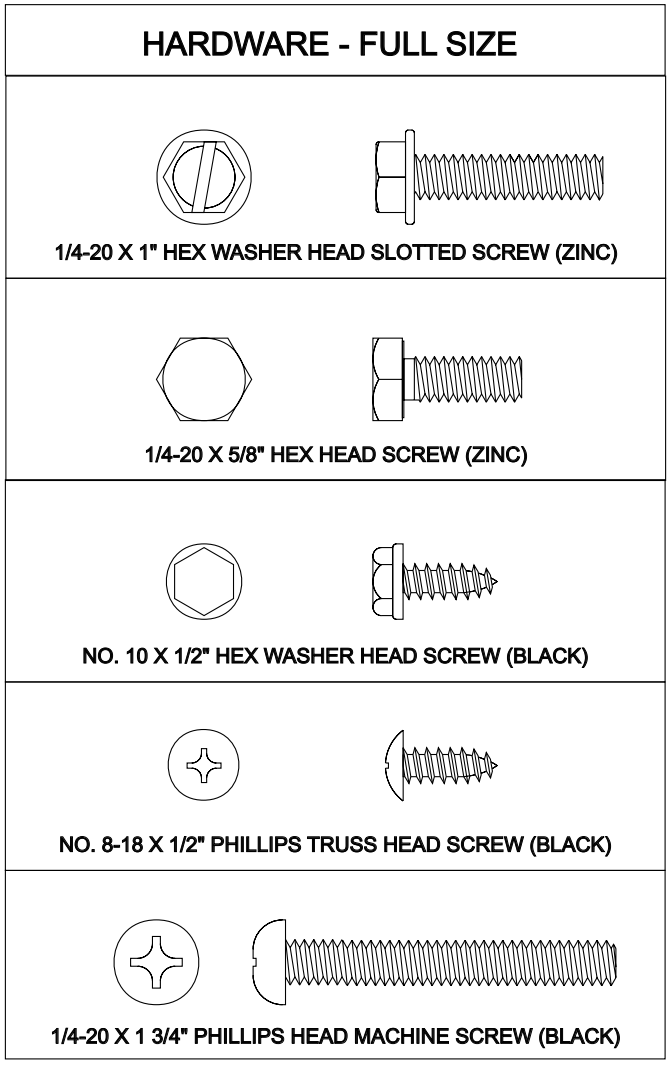


Figure 9

Freestanding Fireplace Assembly Instructions

(Figures 10, 11, 12, 13, 14, 15 and 16)
Figure 10

Attention: Remove screen from fireplace. See Screen Removal and Replacement, Page 18. Remove ceramic logs and protective packaging from interior of firebox.

1. Thread two (2) 1/4 - 20 x 5/8" leveling bolts into front, bottom of base and two (2) 1/4 - 20 x 1" leveling bolts into rear, bottom of base.
2. Attach chassis side, right and left to base. Use three (3) 10 x 1/2" screws for each chassis side.

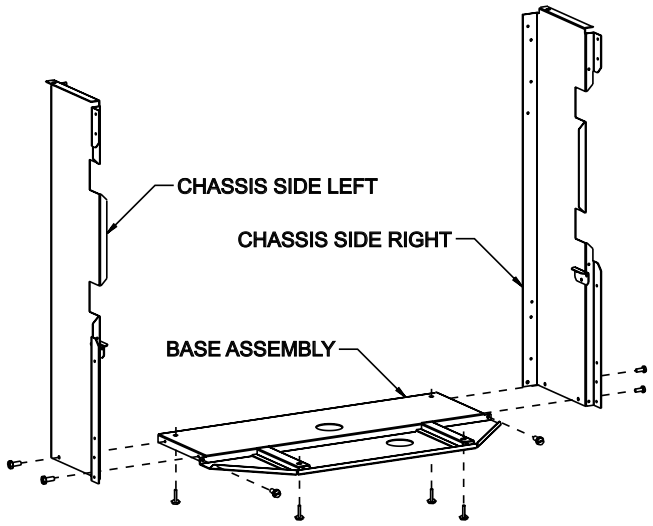


Figure 10

Figure 11

3. Attach one (1) additional 10 x 1/2" screw through rear, bottom of each chassis side and into base.
4. Attach chassis rear support to 1" flange on chassis side, right and left. Use two (2) 10 x 1/2" screws. The clearance hole in middle of chassis rear support must be positioned downward, toward the floor. The clearance hole provides clearance for a screw that is used when installing the optional free standing blower kit.
5. Attach side panel, right and left to chassis side, right and left. Use four (4) 10 and 1/2" screws for each side panel.

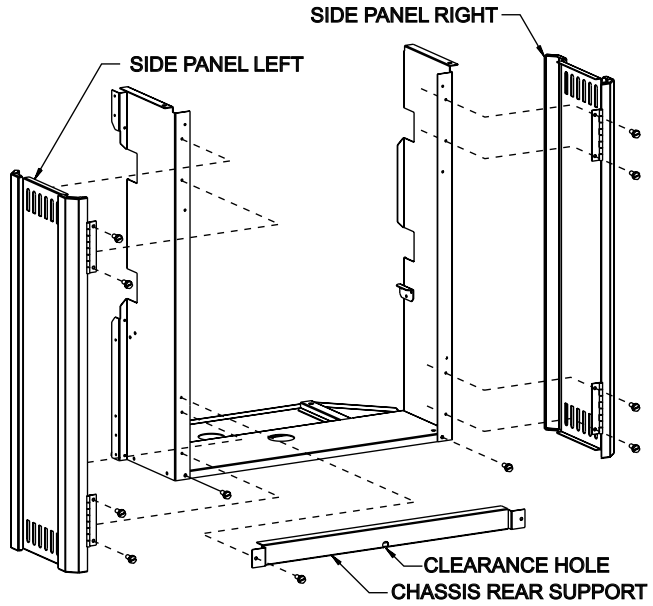


Figure 11

Figure 12

6. Attach recirculating baffle to log shelf assembly with two (2) 10 x 1/2" screws. The recirculating baffle is located inside Owner's Envelope.

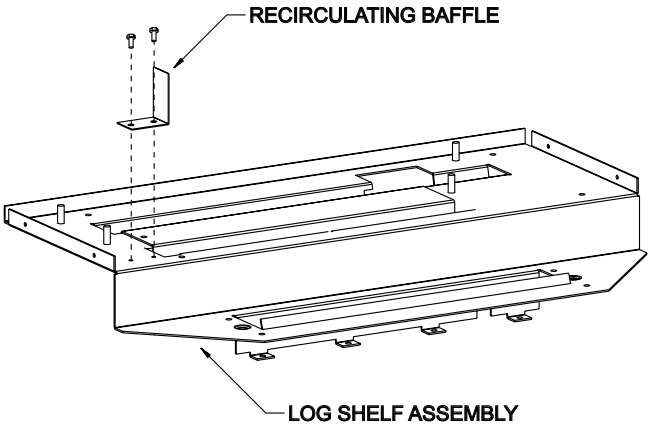


Figure 12

Figure 13

7. Insert firebox into outer casing.
8. Attach firebox to chassis side, right and left. Use two (2) 10 x 1/2" screws for each chassis side.
9. **Install logs into firebox. See Page 14 for Log Placement Instructions.**
10. Attach screen onto firebox. See Screen Removal and Replacement, Page 18.

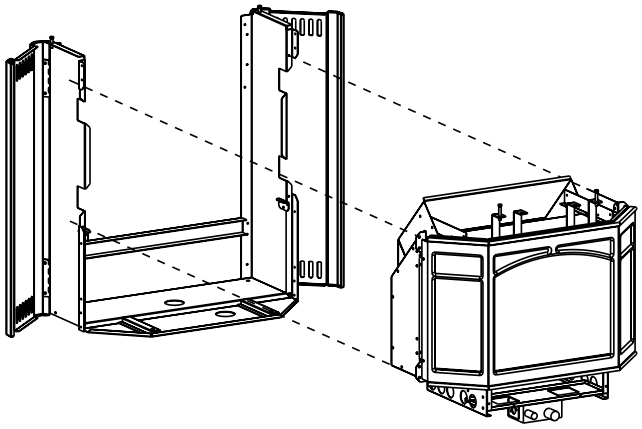


Figure 13

Figure 14

11. Attach front door to lower, front panel by inserting two (2) pins on front door into two (2) mounting notches on lower front panel.
12. Attach lower, front panel to chassis side, right and left. Use three (3) fiber washers and three (3) 10 x 1/2" screws for each chassis side.
13. Attach upper, front trim to chassis side, right and left. Use two (2) fiber washers and two (2) 10 x 1/2" screws for each chassis side.

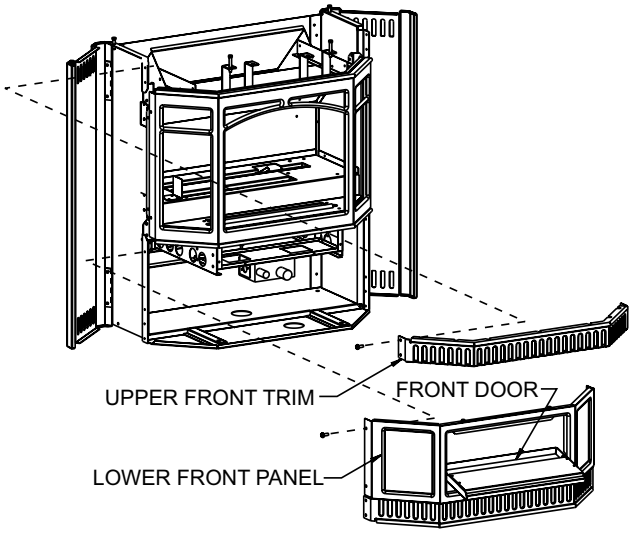


Figure 14

Figure 15

14. Attach rear cover to chassis side, right and left. Use two (2) 10 x 1/2" screws for each chassis side.
15. Thread two (2) 1/4 - 20 x 1-3/4" leveling bolts into outer, front mounting tabs on firebox top. Thread two (2) 1/4 - 20 x 1-3/4" leveling bolts into chassis side, right and left.
16. Place casing top onto four (4) 1/4 - 20 x 1-3/4" leveling bolts. **Attention: Adjust leveling bolts in order to allow side panels to open and close.**

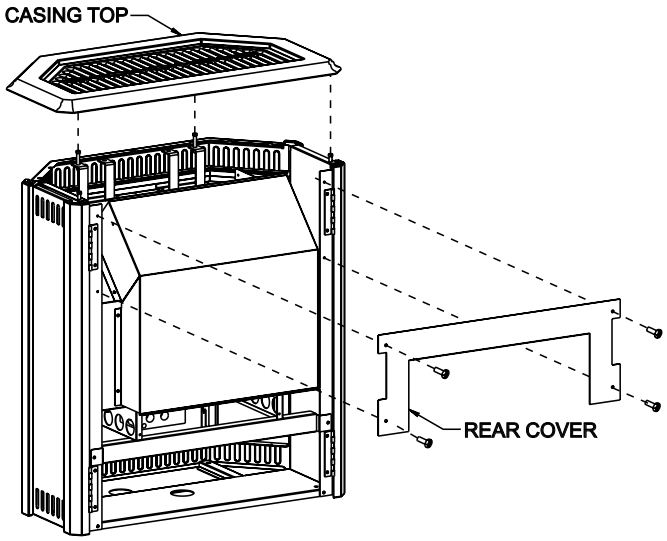


Figure 15

Figure 16

17. Remove brown, black, green/black wires from On/Off/Remote switch. Snap On/Off/Remote switch into left slot on valve cover plate. Attach brown wire onto Remote male tab, green/black wire onto On male tab and black wire onto Off male tab on On/Off/Remote switch.
18. Place valve cover plate over control knobs on gas valve. Attach valve cover plate to firebox with two (2) 8 x 1/2" screws.
19. **Attention:** Located in your Owner's Envelope are four (4) magnets. The magnets are used to keep the side panels in the closed position. Place two (2) magnets on front trim upper left and lower front panel left and two (2) magnets on front trim upper right and lower front panel right. Refer to drawing for magnet placement.
20. Assembly of freestanding fireplace is completed.

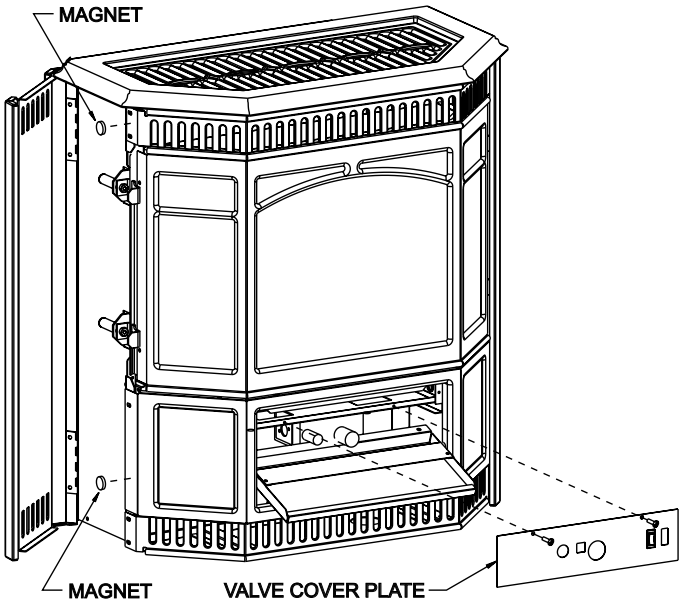


Figure 16

Insert Hardware Package Parts List

Part Description	Part Number	Quantity Supplied
1/4-20 x 1" Hex Washer Head Slotted Screw (Zinc)	R-3276	2
1/4-20 x 5/8" Hex Head Screw (Zinc)	R-2508	2
No. 10 x 1/2" Hex Washer Head Screw (Black)	R-2737	38
No. 10-24 x 1/2" Phillips Head Machine Screw (Zinc)	R-3154	8
No. 8 x 1/4" Phillips Truss Head Screw (Black)	R-2125	8
No. 8-18 x 1/2" Phillips Truss Head Screw (Black)	R-3580	13
No. 10-24 Serrated Washer Head Nut (Zinc)	R-3156	8
No. 10-24 x 3/8" Hex Washer Head Screw (Black)	R-3879	4
1/4-20 x 1-3/4" Phillips Head Machine Screw (Black)	R-5453	4
Not Shown Nylon Washer	R-5458	4

Insert Hardware Package (Figure 17)

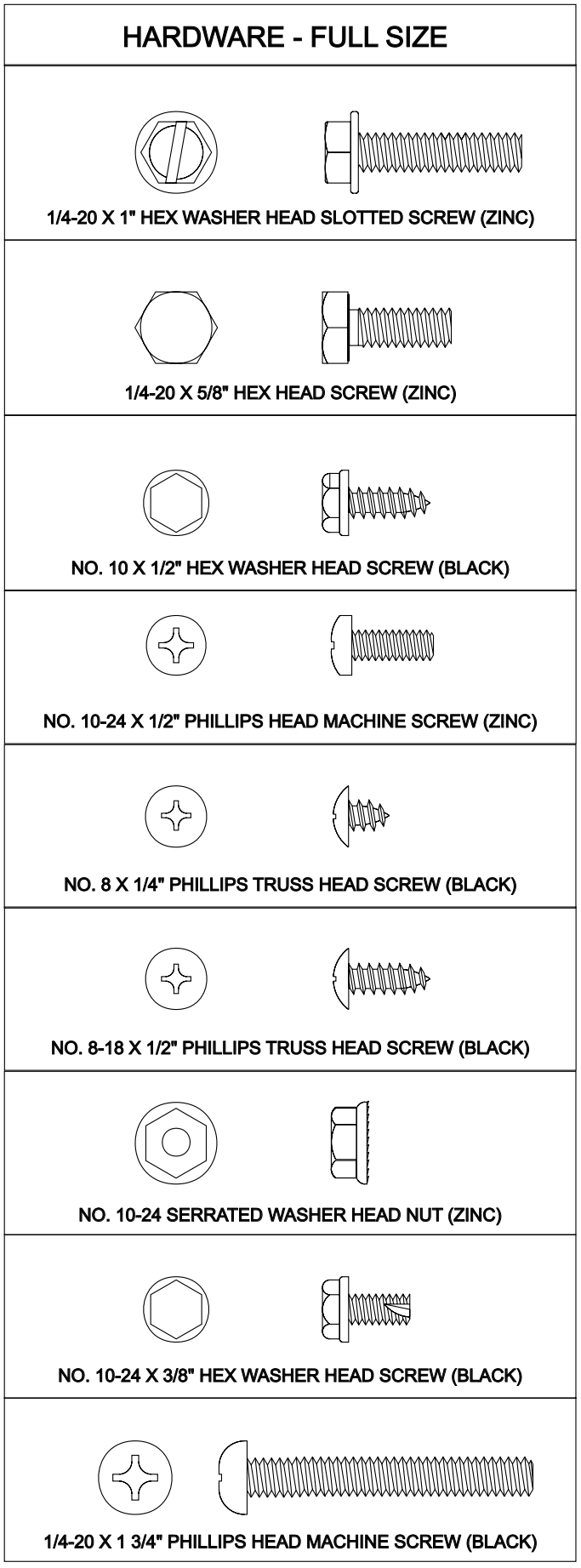


Figure 17

Fireplace Insert Assembly Instructions

(Figures 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30)

Attention: Remove screen from fireplace. See Screen Removal and Replacement, Page 18. Remove ceramic logs and protective packaging from interior of firebox.

Attention: You must install optional BWIB-1 blower into chassis before proceeding to Step 9 in Fireplace Insert Assembly Instructions.

Figures 18 and 19

1. When facing firebox remove green and black wires from gas valve. Remove complete wire harness from firebox.
2. Thread two (2) 1/4-20 x 1-3/4" leveling bolts into two (2) outside top casting supports.
3. Raise valve bracket on firebox **lower** (freestand model) position to **upper** (insert model) position. Remove four (4) 10 x 1/2" screws from **lower** position and replace four (4) 10 x 1/2" screws into **upper** position.

FREESTAND MODEL

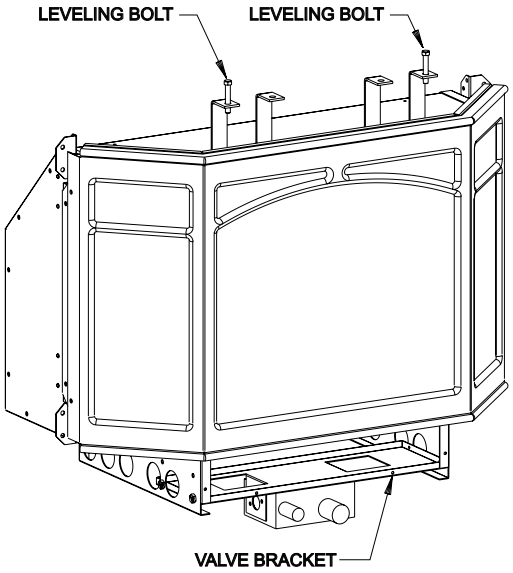


Figure 18

INSERT MODEL

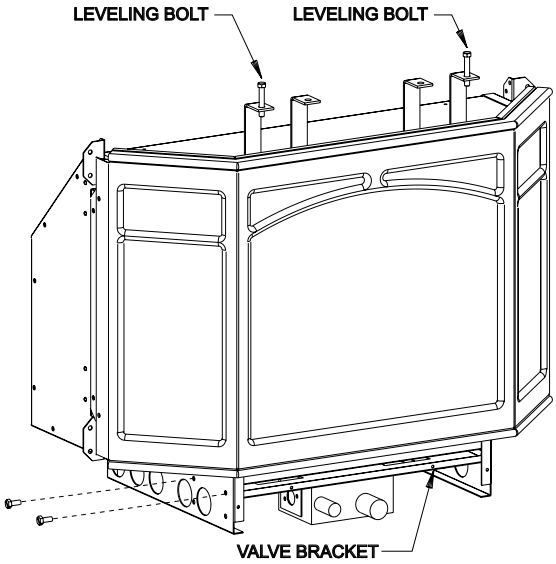


Figure 19

Figure 20

4. When facing firebox route green and black wires through 1/2" extruded hole on right support rail. Attach green wire onto TH terminal and black wire onto TPTH terminal on gas valve.
5. The brown, black and green/black wires on wire harness and stripped and bare brown and black/red wires will remain to the outside of right support rail.

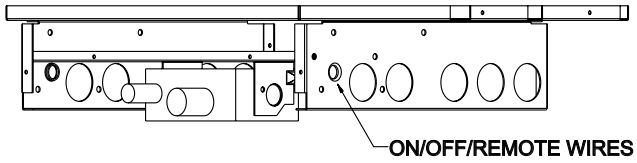


Figure 20

Figure 21

6. Thread two (2) 1/4 - 20 x 5/8" leveling bolts into front, bottom of base and two (2) 1/4 - 20 x 1" leveling bolts into rear, bottom of base.
7. Attach chassis side, right and left to base. Use four (4) 10 x 1/2" screws for each chassis side.
8. Attach two (2) surround mounting brackets to each chassis side. Use three (3) 10 x 1/2" screws for each surround mounting bracket.

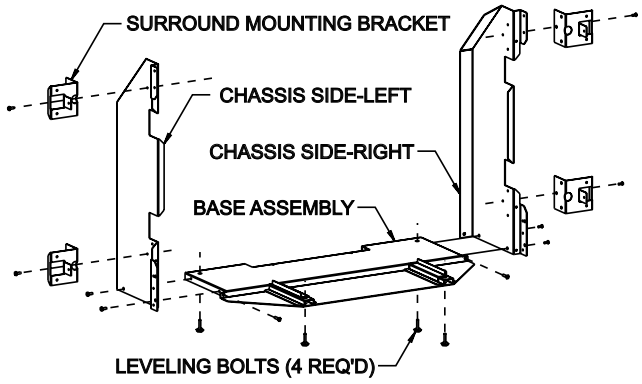


Figure 21

Figure 22

9. Insert firebox into chassis.
10. Attach firebox to chassis side, right and left. Use two (2) 10 x 1/2" screws for each chassis side.
11. Thread two (2) 1/4 - 20 x 1-3/4" leveling bolts onto top heat shield. Refer to Figure 22 for locating leveling bolts.
12. Place top heat shield onto two leveling bolts on firebox.

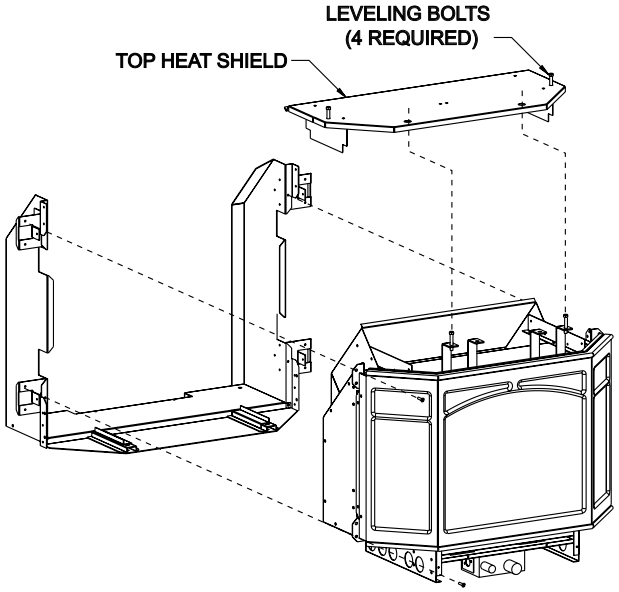


Figure 22

Figure 23

13. Attach front lower casting assembly and front lower casting - right to chassis side left and right. Use four (4) 10-24 x 3/8" screws. With front lower casting assembly open, attach two (2) 10 x 1/2" screws into firebox support rails.
14. Attach front trim-upper to chassis side, right and left. Use two (2) fiber washers and two (2) 10 x 1/2" screws for each chassis side.

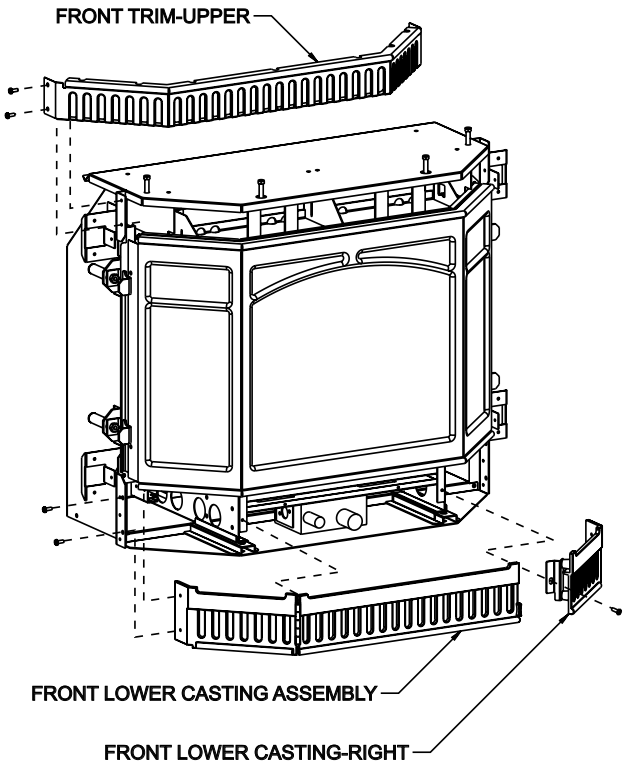


Figure 23

Installation of BWIS-1 Insert Surround in Raised Panel Configuration

Figure 24

15. Place surround top, surround side 1 and surround side 2 on a non-abrasive work surface. The raised panel configuration on surround top, surround side 1 and surround side 2 must be facing upward.
16. Align surround side 1 and surround side 2 with notches in surround top.
17. Place two (2) upper corner braces into recessed upper corners on raised panel. Align six (6) clearance holes on upper corner braces with six (6) clearance holes on upper corners. Insert four (4) 10 - 24 x 1/2" bolts from recessed panel side into four (4) clearance holes on upper corner braces. **Attention:** Leave center clearance holes open on upper corner braces. Use four (4) 10 - 24 x 1/2" bolts and four (4) 10 - 24 nuts to attach each upper corner brace to surround top, surround side 1 and surround side 2. **Attention: At this time, do not completely tighten nuts onto bolts.**

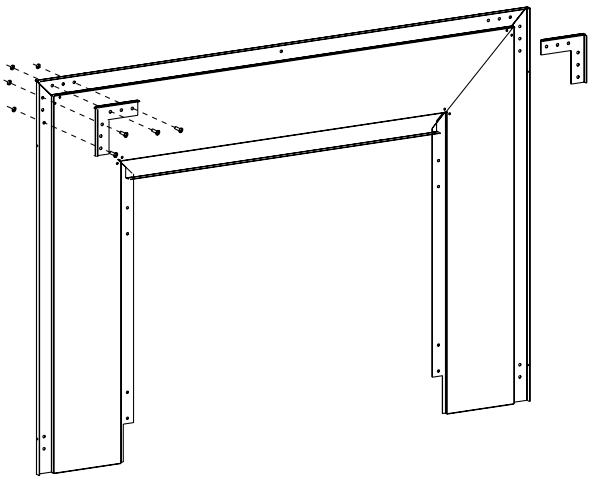


Figure 24

Figure 25

18. Place surround supports into upper left and right corners on recessed panel insert surround. Align and fit together surround top to surround side 1 and surround side 2. Use four (4) 8 x 1/4" screws for attachment of each surround support. Complete tightening of nuts onto bolts from Step 17.

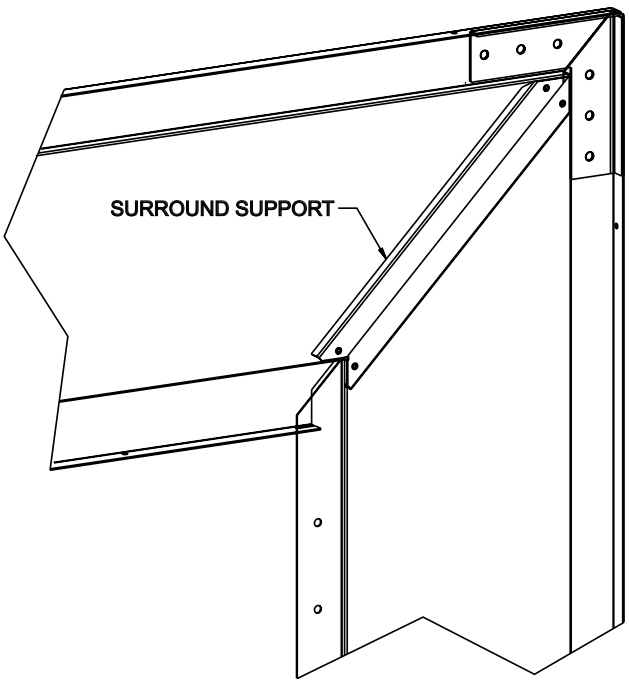


Figure 25

Figure 26

19. Attach surround inner trim top to surround top with two (2) 8 x 1/2" Phillips screws.

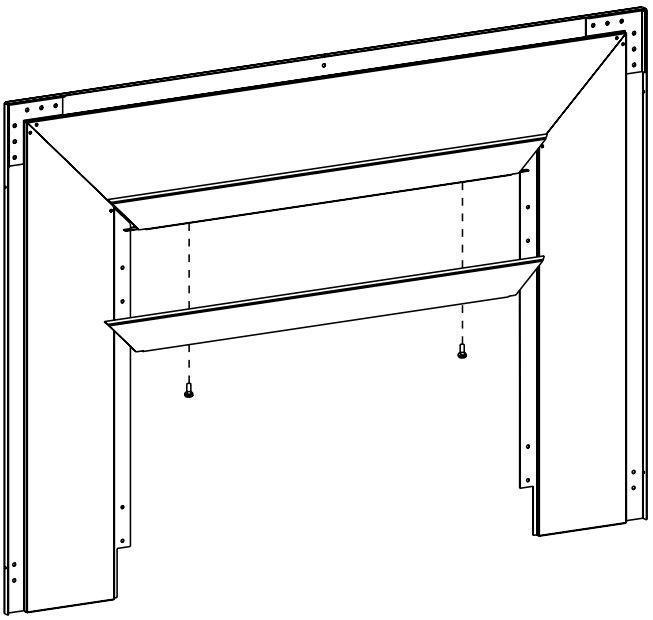


Figure 26

Figure 27

20. Attach recirculating baffle to log shelf assembly with two (2) 10 x 1/2" screws. The recirculating baffle is located inside Owner's Envelope.

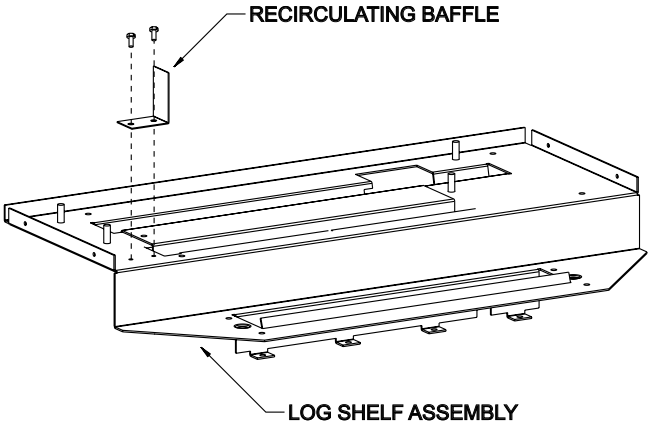


Figure 27

Figure 28

21. Insert firebox into fireplace opening. Level firebox by adjusting four leveling bolts.
22. Attach insert surround to four (4) inner brackets. Use two (2) 10 x 1/2" screws to attach insert surround to each inner bracket. **Attention:** The raised panel configuration must be facing into the room.
23. Attach upper left corner, center and upper right corner on insert surround to wall surface. Use an anchor bolt or screw appropriate for wall material. The lower left corner and lower right corner on insert surround can also be attached to wall surface.
24. **Install logs into firebox. See Page 14 for Log Placement Instructions.**
25. Attach screen onto firebox. See Screen Removal and Replacement, Page 18.

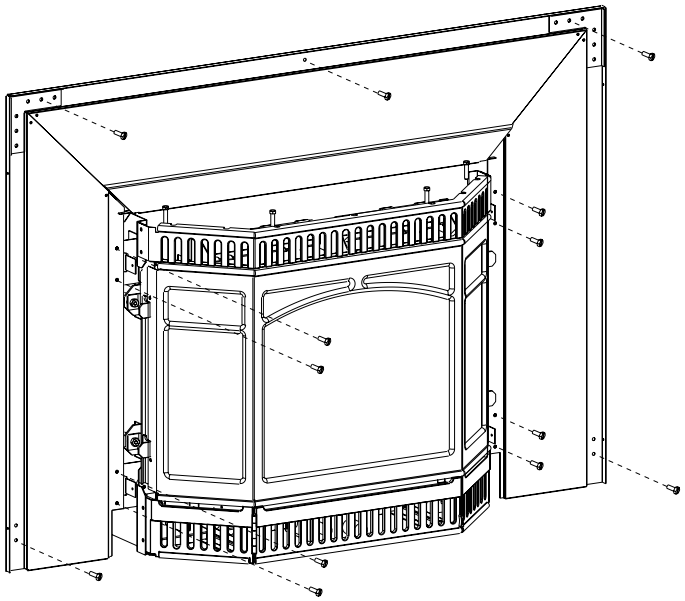


Figure 28

Figure 29

26. Attach surround outer trim top to surround top with three (3) 8 x 1/2" Phillips screws.
27. Attach surround right and left outer trim to surround side 1 and 2. Use two (2) 8 x 1/2" Phillips screws for each surround right and left outer trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left outer trim with surround outer trim top. Complete tightening screws for surround right and left outer trim.

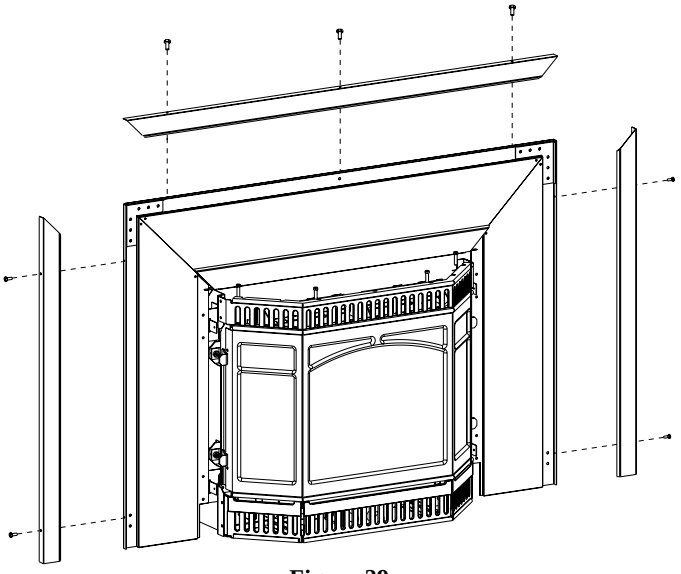


Figure 29

Figure 30

28. Remove brown, black, green/black wires from On/Off/Remote switch. Snap On/Off/Remote switch into bottom slot on surround right inner trim. Attach brown wire onto Remote male tab, green/black wire onto On male tab and black wire onto Off male tab on On/Off/Remote switch.
29. Attach surround right and left inner trim to surround mounting brackets. Use two (2) 8 x 1/2" Phillips screws for each surround inner trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left inner trim with surround inner trim top. Complete tightening screws for surround right and left inner trim.
30. Place casting top onto four (4) leveling bolts on top of firebox.
31. Installation of BWIS-1 insert surround is completed.

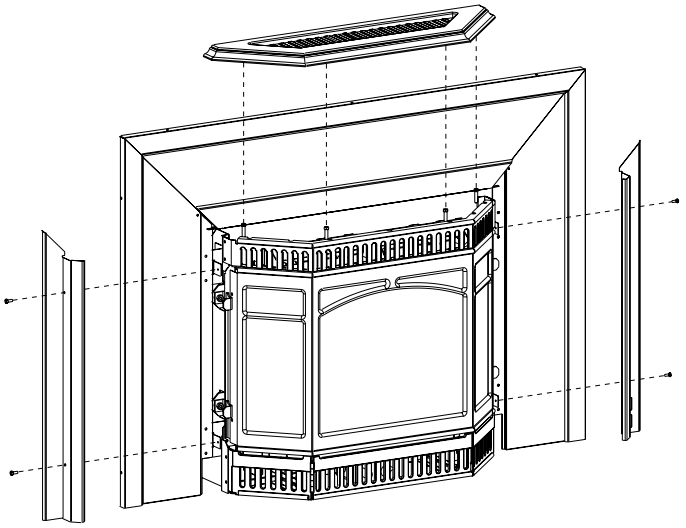


Figure 30

Log Placement (Figure 31)

1. Remove four (4) 10 x 1/2" screws from screen frame assembly.
2. Remove screen frame assembly from firebox.
3. Remove logs from interior of firebox. Remove all protective packaging from logs and interior of firebox.
4. Place rear (#1) log onto two rear pins on log support.
5. Place middle (#2) log onto two front pins on log support.
6. Place front (#3) log onto front section of log support.
7. Place rear crossover (#4) log onto two pins on rear log. The tip of rear crossover log will lay on middle log.
8. Place front crossover (#5) log onto pin on front log. The tip of front crossover log will lay on middle log.
9. Place ember (#6) plaque onto front section of log support.
10. Place screen frame assembly onto firebox.
11. Use four (4) 10 x 1/2" screws from Step 1 to attach screen frame assembly onto firebox.
12. Installation of logs is completed.

Refer to Figure 31 for the following warning.

Warning: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

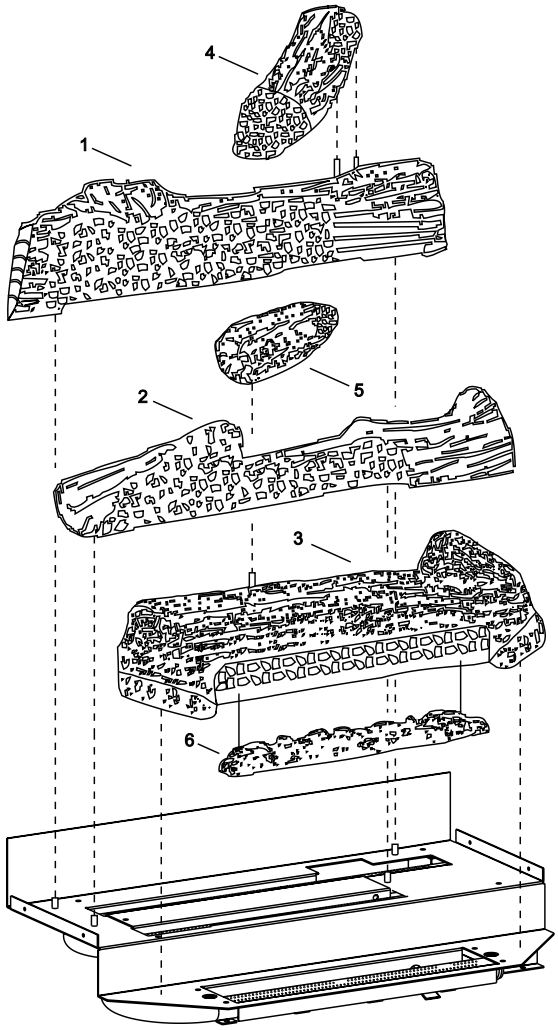


Figure 31

Checking Manifold Pressure

Natural gas will have a manifold pressure of approximately 3.5" w.c. (.871kPa) for maximum input or 1.7" w.c. (.423kPa) for minimum input at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 5.0" w.c. (1.245kPa) for the purpose of input adjustment to a maximum of 10.5" w.c. (2.614kPa). Propane gas will have a manifold pressure approximately 10.0"w.c. (2.49kPa) for maximum input or 4.9"w.c. (1.220kPa) for minimum input at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 11.0"w.c. (2.739kPa) for the purpose of input adjustment to a maximum of 13.0"w.c. (3.237kPa).

NOTE: The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

A test gauge connection is located downstream of the gas appliance pressure regulator for measuring gas pressure. The connection is a 1/8 inch 3mm) N.P.T. plugged tapping.

Standing Pilot Operating Instructions

The standing pilot (750 millivolt system) is a continuous burning pilot. The pilot remains ON even when main burner is OFF.

750 Millivolt System

When you ignite the pilot, the thermocouple produces millivolts (electrical current) which energizes the magnet in the gas valve. After 30 seconds to 1 minute time period you can release the gas control knob and the pilot will stay ON. Allow your pilot flame to operate an additional one (1) to two (2) minutes before you turn the gas control knob from the PILOT position to the ON position. This time period allows the thermopile millivolts (electrical current) to build-up to a sufficient level allowing the gas control to operate properly.

1. Follow the SAFETY and LIGHTING INSTRUCTIONS for standing pilot controls found in this manual and on labels found attached to the appliance.

   CAUTION: During the initial purging and subsequent lightings, never allow the gas valve control knob to remain depressed in the "pilot" position without pushing the piezo ignitor button at least once every second.

2. During the heating season, leave the control valve knob in the "ON" position. This will allow the pilot flame to remain lit. Turn the burner flame on or off with the appliance ON/OFF rocker switch, wall switch, remote control kits or 750 millivolt wall thermostat.

NOTE: The gas control valve allows you to increase or decrease the height of the main burner flame. The control valve has a pressure regulator with a knob as shown in Figure 32. Rotate the knob clockwise to "HI" to increase the flame height and counterclockwise to "LO" to decrease the flame height.

3. When the heating season is over, turn the on/off switch to "OFF" and the control valve to "OFF". The system, including the pilot flame, will be shut down.

Initial Lighting (Figure 32)

Upon completing the gas line or turning the gas valve "ON" after it has been in the "OFF" position, a small amount of air will be in the lines. When first lighting the fireplace, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the fireplace will light and operate satisfactorily.

Subsequent lightings of the fireplace will not require such purging if the gas valve is not turned to "OFF."

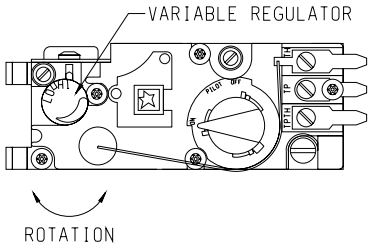


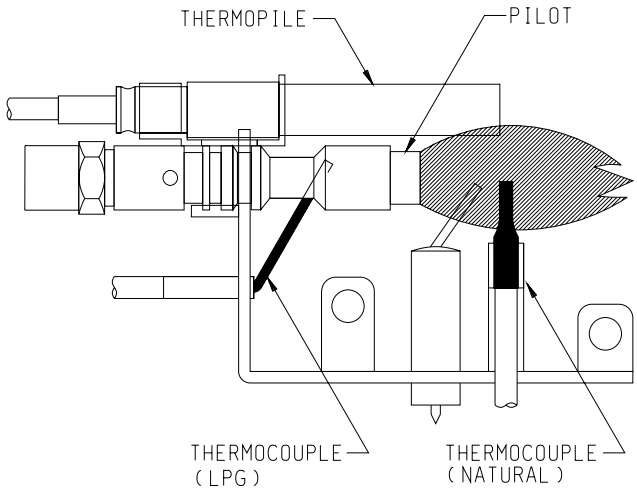
Figure 32

Maximum and Minimum Input

The gas valve on the appliance allows the input to adjust between a maximum input of 32,000 Btuh for Natural gas and Propane gas to a minimum input of 23,000 Btuh for Natural and Propane gas. The maximum input provides the greatest amount of yellow flame and ember glow on the log set. The minimum input substantially decreases the yellow flame and ember glow on the log set.

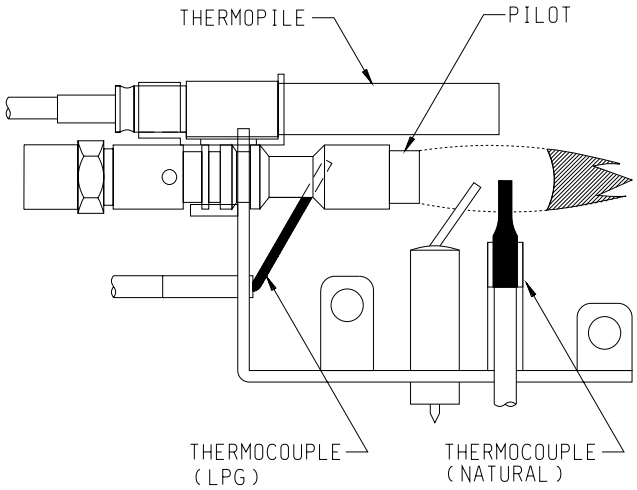
Pilot Flame Pattern (Figures 33 and 34)

Figure 33 shows a correct pilot flame pattern. The correct flame will be blue and will extend beyond the thermocouple and thermopile. The flame will surround the thermocouple and thermopile just below the tip. A slight yellow flame may occur where the pilot flame and main burner flame meet. Figure 34 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple or thermopile. This will cause the thermocouple or thermopile to cool. When the thermocouple cools, the heater will shut down.



Correct Pilot Flame

Figure 33



Incorrect Pilot Flame

Figure 34

If pilot flame pattern is incorrect, as shown in Figure 34

- See Troubleshooting, page 20.

Cleaning and Maintenance/Pilot

Oxygen Depletion Sensor Pilot (Figure 35)

When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open wrench.
2. Blow air pressure through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Tighten nut B also by grasping nut A.

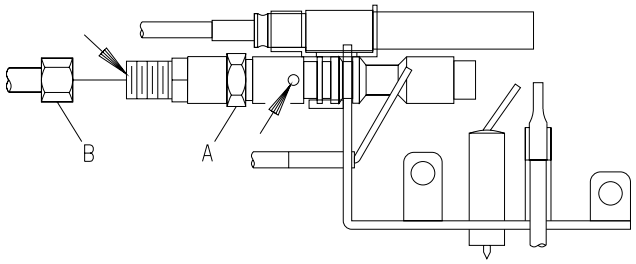
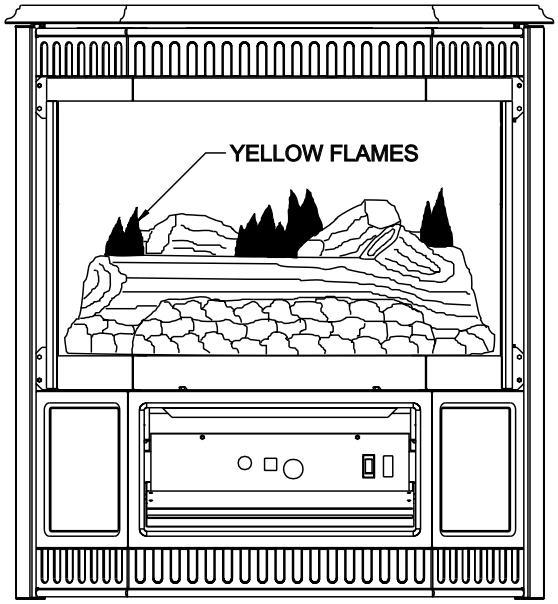


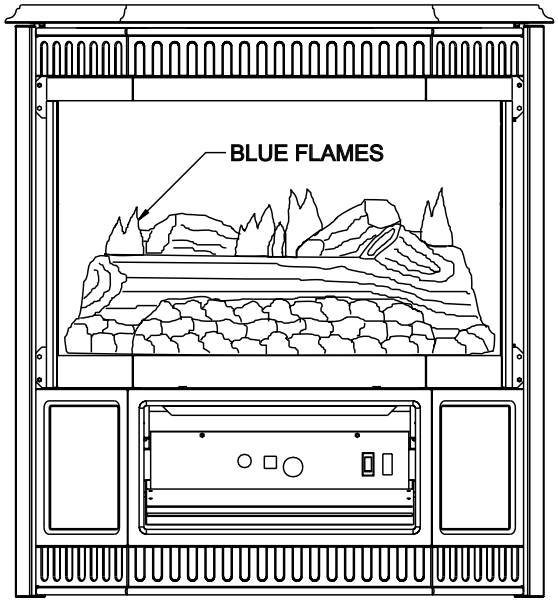
Figure 35

Main Burner Flame Pattern (Figures 36 and 37)

Figure 36 shows a correct main burner flame pattern. The main burner flame will have yellow flames. Figure 37 shows an incorrect main burner flame pattern. The incorrect main burner flame will have hazy, blue flames.



Correct Main Burner Flame
Figure 36



Incorrect Main Burner Flame
Figure 37

Freestanding Air Shutter Adjustment

1. Open side panels.
2. Remove lower front panel (6 screws).
3. An air shutter adjusting screw is located on the right side of firebox bottom.
4. Screw air shutter adjusting screw **OUT** to close air shutter top (increase yellow flame).
5. Screw air shutter adjusting screw **IN** to open air shutter top (decrease yellow flame).

If main burner flame pattern is incorrect, as shown in Figure 37

- See Troubleshooting, page 20.

Insert Air Shutter Adjustment

1. Remove front lower casting - right (3 screws).
2. An air shutter adjusting screw is located on the right side of firebox bottom.
3. Screw air shutter adjusting screw **OUT** to close air shutter top (increase yellow flame).
4. Screw air shutter adjusting screw **IN** to open air shutter top (decrease yellow flame).

If main burner flame pattern is incorrect, as shown in Figure 37

- See Troubleshooting, page 20.

Operating Instructions

ON/OFF/REMOTE Switch

BWVF-30 is equipped with an ON/OFF/REMOTE switch. A wire harness is attached to the ON/OFF/REMOTE switch. The brown, black and green (wires) female push-ons attach to the ON/OFF/REMOTE switch. At the opposite end of the wire harness, the black and green (wires) female push-ons attach to the gas valve. An additional brown wire and the black/red wire, which are stripped and bare, will attach to the 750 millivolt wall thermostat accessory, or, to one of the other accessories that can be purchased for use with your fireplace.

Operation of ON/OFF/REMOTE Switch with no Accessories

To ignite main burner, turn the control knob on the gas valve from the PILOT position to the ON position. Turn the ON/OFF/REMOTE switch from the OFF position to the ON position. The additional brown wire and black/red wire, which are stripped and bare are not used.

Operation of ON/OFF/REMOTE Switch with Accessories

750 Millivolt Wall Thermostat, GWSG-T

Connect the brown and black/red , stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wall thermostat. Turn the ON/OFF/REMOTE switch to the REMOTE position. Set the wall thermostat to the desired temperature.

It is important to use wire of a gauge proper for the length of the wire:

RECOMMENDED WIRE GAUGES

Maximum Length	*Wire Gauge*
1' to 10'	18
10' to 25'	16
25' to 35'	14

Wall Switch, FWS-1

Connect the brown and black/red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wall switch. Turn the ON/OFF/REMOTE switch to the REMOTE position. Pivot the rocker switch on the FWS-1 to the ON position.

Battery Operated Remote Control, FRBC-1 and FRBTC-1

Connect the brown and black/red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the remote receiver that is a component in the FRBC-1 and FRBTC-1. Turn the ON/OFF/REMOTE switch to the REMOTE position. Follow instructions in the FRBC-1 and FRBTC-1 to complete installation.

Note: If batteries fail in FRBC-1 or FRBTC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch from the REMOTE position to the ON position.

Electric (120 volt) Operated Remote Control, FREC-1

Connect the brown and black/red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the wires on remote receiver that is a component in the FREC-1. Turn the ON/OFF/REMOTE switch to the REMOTE position. Follow instructions in the FREC-1 to complete installation.

Note: If electric (120 volt) fails in FREC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch from the REMOTE position to the ON position.

Wiring of ON/OFF/REMOTE Switch with 750 Millivolt Wall Thermostat Accessory and Another Accessory

Connect the brown and black/red, stripped and bare, wires on the ON/OFF/REMOTE switch wire harness to the 750 millivolt wall thermostat AND to the remote receiver that is a component in the FRBC-1, FRBTC-1, FREC-1 OR to the FWS-1, wall switch.

1. Connect (1) wire from the 750 millivolt wall thermostat and (1) wire from appropriate accessory to the BROWN, stripped and bare wire from the ON/OFF/REMOTE wire harness.
2. Connect (1) wire from the 750 millivolt wall thermostat and (1) wire from appropriate accessory to the BLACK/RED, stripped and bare wire from the ON/OFF/REMOTE wire harness.
   Note: When the appliance is in the MANUAL mode and the batteries fail in the FRBC-1 or FRBTC-1 or if the electric (120 volt) fails in the FREC-1, and immediate heat is desired, turn the ON/OFF/REMOTE switch from the REMOTE position to the ON position.

Manual Operation

1. Turn ON/OFF/REMOTE switch to REMOTE position.
2. Turn wall thermostat OFF.
3. Turn accessory, FRBC-1, FRBTC-1, FREC-1 or FWS-1, ON. Appliance is now in the manual mode. You must turn the appliance ON or OFF with appropriate accessory.

Wall Thermostat Operation

1. Turn the ON/OFF/REMOTE switch to REMOTE position.
2. Turn accessory, FRBC-1, FRBTC-1, FREC-1 or FWS-1, OFF.
3. Turn wall thermostat ON and set appropriate temperature. Wall thermostat will cycle the appliance ON and OFF.

Installation of Remote Receiver

Freestanding only, remove front door and valve cover plate (2 screws). Place remote receiver on base, adjacent to gas valve.

Insert only, remove front lower casting - right (3 screws). Place remote receiver on base assembly.

Attention: The velcro loop and hook are not necessary in this installation but can be used to secure remote receiver.

Refer to remote control installation and operating instructions for more details on remote control.

Wiring Diagram (Figure 38)

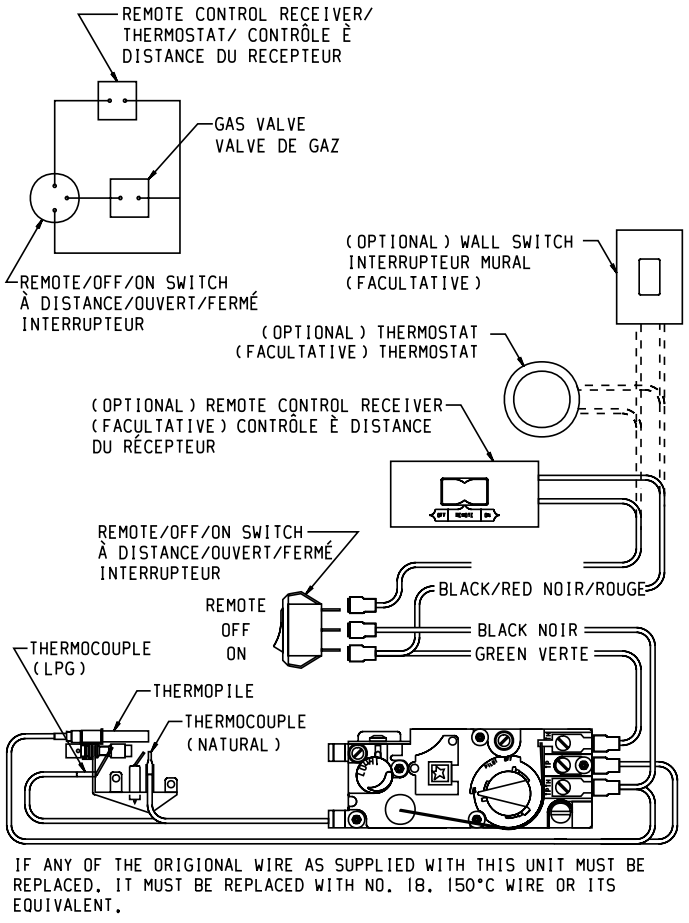


Figure 38

Maintenance & Service

IMPORTANT: Turn off gas before servicing fireplace. It is recommended that a qualified service technician perform these check-ups at the beginning of each heating season.

- **DO NOT put anything around the heater that will obstruct the flow of combustion and ventilation air. See clearances.**
- **DO examine venting system periodically. Clean and replace damaged parts. Examinations should be made at the start of the heating season and also in mid heating season under average conditions.**
- **Clean Burner and Control Compartment**
  Keep the control compartment, logs, and burner areas surrounding the logs clean by vacuuming or brushing at least twice a year.

Cleaning Procedure

1. Let the unit cool if it has been operating.
2. Shut off gas supply.
3. Remove four (4) 10 x 1/2" screws from screen frame assembly.
4. Remove screen frame assembly from firebox.
5. Vacuum burner compartment especially around orifice/primary air openings.
6. The main burner can be cleaned by applying air pressure to the ports on the main burner.
7. Place screen frame assembly onto firebox.
8. Use four (4) 10 x 1/2" screws from Step 3 to attach screen frame assembly onto firebox.
9. Ignite pilot. (See Lighting/Operating Section of Manual)
10. Operate the main burner and visually check to make sure the flame pattern appears similar to the pictorial illustration shown for correct main burner flame, Figure 36. If there ia an incorrect main burner flame, Figure 37, call a qualified service technician.

Cleaning Logs and Firebox

During the annual inspection and maintenance appointment, the service person should clean dust, lint, and any light accumulation from the logs and the firebox area. An extra-soft brush should be used on the logs as they are extremely fragile; a vacuum cleaner may be used on the firebox. If, at any time the logs cannot be removed or installed without forcing, the cause must be found. The logs must never be forced.

CAUTION: The ceramic logs are durable when handled and installed properly. However, they are delicate and may be damaged easily if not handled with care. Handling damage to the ceramic logs is not covered by warranty.

DO NOT HANDLE LOGS WHILE THEY ARE HOT. ALLOW PLENTY OF TIME FOR THE APPLIANCE TO COOL COMPLETELY BEFORE HANDLING.

ATTENTION

It is normal for appliances fabricated of steel to give off some expansion and/or contraction noised during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

Screen Removal and Replacement (Figure 39)

1. Remove four (4) 10 x 1/2" screws from screen frame assembly.
2. Remove screen frame assembly from firebox.
3. Place screen frame assembly onto firebox.
4. Use four (4) 10 x 1/2" screws from Step 1 to attach screen frame assembly onto firebox.

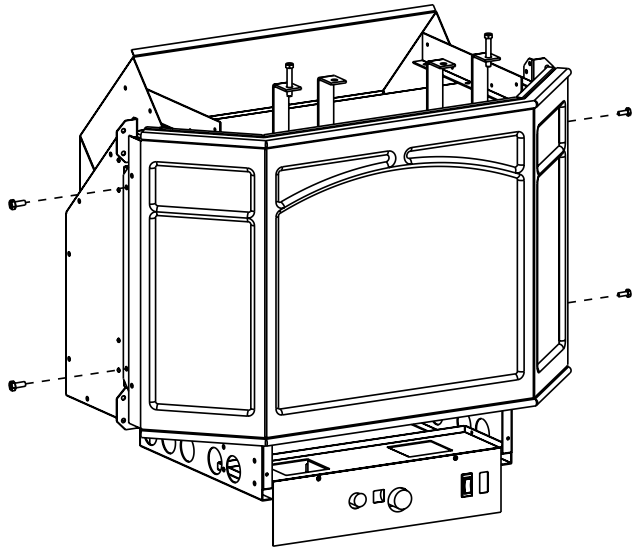


Figure 39

FOR YOUR SAFETY READ BEFORE LIGHTING

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

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

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

WHAT TO DO IF YOU SMELL GAS

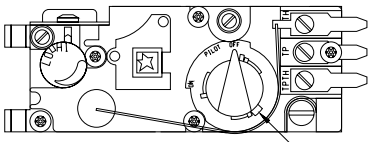
- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

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

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

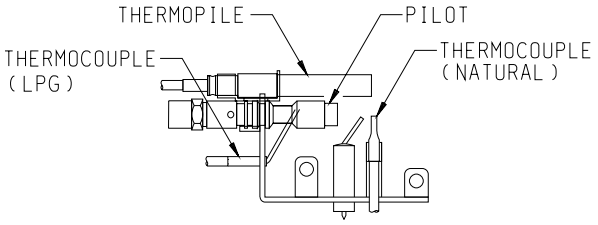
LIGHTING INSTRUCTIONS

1. **STOP! Read the safety information above.**
2. **Set the thermostat to lowest setting.**
3. **Turn off all electric power to the appliance (if applicable).**
4. **Lower front door.**
5. **Push in gas control knob slightly and turn clockwise to "OFF".**



GAS CONTROL KNOB SHOWN IN "OFF" POSITION.

6. **Wait ten (10) 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 above. If you don't smell gas, go to the next step.**
7. **Find pilot - The pilot is attached to the main burner behind the middle log.**



8. **Turn knob on gas control counterclockwise to "PILOT."**
9. **Push in gas control knob all the way and hold in. Repeatedly push the piezo ignitor button until pilot is lit. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.**
   - **If knob does not pop up when released, stop and immediately call your service technician or gas supplier.**
   - **If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.**
10. **Attention! Gas control has an INTERLOCK latching device. When the pilot is initially lit and the safety magnet is energized (pilot stays "ON") the INTERLOCK latching device becomes operative. If the gas control is turned to the "OFF" position or gas flow to the appliance is shut off, the pilot cannot be relighted until the safety magnet is de-energized (approximately 60 seconds). There will be an audible "click" when the safety magnet in the gas control is de-energized. Pilot can now be relighted. Repeat steps 5 through 9.**
11. **Turn gas control knob counterclockwise to "ON".**
12. **Raise front door.**
13. **Turn on all electric power to the appliance (if applicable).**
14. **Set thermostat to desired setting.**

TO TURN OFF GAS TO APPLIANCE

1. **Set the thermostat to lowest setting.**
2. **Turn off all electric power to appliance if service is to be performed (if applicable).**
3. **Lower front door.**
4. **Push in gas control knob slightly and turn clockwise to "OFF". Do not force.**
5. **Raise front door.**

TROUBLE-SHOOTING

SYMPTOMS - POSSIBLE CAUSES AND CORRECTIONS

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.

1. **When ignitor button is pressed, there is no spark at ODS/ pilot.**
   a. Ignitor electrode positioned wrong - Replace ignitor.
   b. Ignitor electrode broken - Replace ignitor.
   c. Ignitor electrode not connected to ignitor cable - Reconnect ignitor cable.
   d. Ignitor cable pinched or wet - Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry.
   e. Broken ignitor cable - Replace ignitor cable.
   f. Bad piezo ignitor - Replace piezo ignitor.
2. **When ignitor button is pressed, there is spark at ODS/pilot, but no ignition.**
   a. Gas supply turned off or manual shutoff valve closed - Turn on gas supply or open manual shutoff valve.
   b. Control knob not in PILOT position - Turn gas control knob to PILOT position.
   c. Control knob not pressed in while in PILOT position - Press in control knob while in PILOT position.
   d. Air in gas lines when installed - Continue holding down control knob. Repeat igniting operation until air is removed.
   e. Depleted gas supply - Contact local gas company.
   f. ODS/pilot is clogged - Clean ODS/pilot or replace ODS/pilot assembly.
   g. Gas regulator setting is not correct - Replace gas regulator.
3. **ODS/pilot lights but flame goes out when control knob is released.**
   a. Control knob not fully pressed in - Press in control knob fully.
   b. Control knob not pressed in long enough - After ODS/pilot lights, keep control knob pressed in 30 seconds.
   c. Safety interlock system has been triggered (thermostat models only) - Wait one minute for safety interlock system to reset. Repeat ignition operation.
   d. Manual Shutoff valve not fully open - Fully open manual shutoff valve.
   e. Thermocouple connection loose at control valve - Hand tighten until snug, then tighten 1/4 turn more.
   f. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either **1) low gas pressure** - Contact local gas company or **2) dirty or partially clogged ODS/pilot** - Clean ODS/pilot or replace ODS/pilot assembly.
   g. Thermocouple damaged - Replace thermocouple.
   h. Control valve damaged - Replace control valve.
4. **Main burner does not light after ODS/pilot is lit.**
   a. Main burner orifice clogged - Clean main burner or replace main burner orifice.
   b. Main burner orifice diameter is too small - Replace main burner orifice.
   c. Inlet gas pressure is too low - Contact local gas company.
5. **Pilot burning, no gas to burner, valve knob "ON", on/off switch "ON."**
   a. "On/Off" switch, wall switch, remote control or wires defective - Check "on/off" switch and wires for proper connections. Place jumper wires across terminal at switch - if burner comes on, replace defective switch. If OK, place jumper wires across switch wires at gas valve-if burner comes on, wires are faulty or connections are bad.
   b. Thermopile may not be generating sufficient millivolts - If the pilot flame is not close enough physically to the thermopile, clean the ODS/pilot.
   - Be sure the wire connections from the thermopile at the gas valve terminals are tight and the thermopile is fully inserted into the pilot bracket.
   - Check the thermopile with a millivolt meter. Take the reading at TH-TP & TP terminals of the gas valve. The meter should read 350 millivolts minimum, while holding the valve knob depressed in the PILOT position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum.
   - With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 350 millivolts minimum. Replace the thermopile if the reading is below the minimum.
   c. Defective valve - Turn valve knob to "ON." Place ON/OFF switch to "ON." Check with millivolt meter at thermopile terminals. Millivolt meter should read greater than 200 millivolts. If the reading is okay and the main burner does not ignite, replace the gas valve
   d. Plugged main burner orifice - Check main burner orifice for blockage and remove.
6. **Delayed ignition of main burner.**
   a. Manifold pressure is too low - Contact local gas company.
   b. Main burner orifice clogged - Clean main burner and main burner orifice.
7. **Main burner backfiring during combustion.**
   a. Main burner orifice is clogged or damaged - Clean main burner and main burner orifice or replace main burner orifice.
   b. Damaged main burner - Replace damaged main burner.
   c. Gas regulator defective - Replace gas regulator.
8. **Yellow flame in front section of main burner during main burner combustion.**
   a. Not enough air - Check main burner for dirt and debris. If found, clean main burner.
   b. Gas regulator defective - replace gas regulator.
9. **Slight smoke or odor during initial operation.**
   a. Residues from manufacturing processes and logs curing - Problem will stop after a few hours of operation.
10. **Heater produces a whistling noise when main burner is lit.**
    a. Turning control knob to HI position when main burner is cold - Turn control knob to LO position and let warm up for a minute.
    b. Air in gas line - Operate main burner until air is removed from line. Have gas line checked by local gas company.
    c. Air passageways on heater blocked - Observe minimum installation clearances (see page 5).
    d. Dirty or partially clogged main burner orifice - Clean main burner and main burner orifice or replace main burner orifice.
11. **Heater produces a clicking/ticking noise just after main burner is lit or shut off.**
    a. Metal expanding while heating or contracting while cooling - This is common with most heaters. If noise is excessive, contact service person.
12. **Heater produces unwanted odor.**
    a. Heater burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. - Open window to ventilate room. Stop using odor causing products while heater is operating.
    b. Low fuel supply - Refill supply tank.
    c. Gas leak - Locate and correct all leaks.
13. **Heater shuts off in use (ODS operates).**
    a. Not enough fresh air is available - Open window and/or door for ventilation.
    b. Low line pressure - Contact local gas company.
    c. ODS/pilot is partially clogged - Clean ODS/pilot.
14. **Gas odor even when control knob is in OFF position.**
    a. Gas leak - Locate and correct all leaks.
    b. Control valve defective - Replace control valve.
15. **Gas odor during combustion.**
    a. Foreign matter between logs and main burner - remove foreign matter.
    b. Gas leak - Locate and correct all leaks.

ATTENTION: When ordering parts, it is very important that **part number** and **description** of part coincide.

Parts List for BWVF-30 Firebox

Index No.	Part Number	Description
1	R-5292	CROSSOVER LOG - REAR (LOG #5)
2	R-5290	REAR LOG (LOG #3)
3	R-5291	CROSSOVER LOG - FRONT (LOG #4)
4	R-5289	MIDDLE LOG (LOG #2)
5	R-5347	FRONT LOG (LOG #1)
6	R-5348	EMBER STRIP
7	11042	RECIRCUILATION BAFFLE
8	11493	LOG SHELF CHANNEL (NAT ONLY)
8	11051	LOG SHELF CHANNEL (LPG ONLY)
9	11104	LOG SHELF WELDED ASSEMBLY
10	R-5053	REAR BURNER
11	R-3624	PILOT (NAT ONLY) WITHOUT CLIPS
11	R-3623	PILOT (LPG ONLY) WITHOUT CLIPS
NOT SHOWN	R-5403	U-CLIPS (2 REQUIRED) (FOR MOUNTING BRACKET TO PILOT)
12	11492	PILOT BRACKET
13	11067	MANIFOLD
14	P-260-55B	FRONT BURNER ORIFICE (NAT ONLY)
14	P-260-67C	FRONT BURNER ORIFICE (LPG ONLY)
14	P-88-42B	REAR BURNER ORIFICE (NAT ONLY)
14	P-88-1.55C	REAR BURNER ORIFICE (LPG ONLY)
15	R-5363	FRONT BURNER
16	10371	BURNER BRACKET - LEFT
17	10372	BURNER BRACKET - FRONT (2 REQUIRED)
18	11057	AIR SHUTTER - TALL
19	11103	BURNER BRACKET - RIGHT
20	11106	SCREEN FRAME
21	10384	FRONT WINDOW
22	10992	BLOWER DUCT
23	11055	TOP STIFFNER (2 REQUIRED)
24	11065	TOP CASTING SUPPORT (2 REQUIRED)
25	10817	FIREBOX BODY
26	11094	FIREBOX SIDE - RIGHT
27	11093	FIREBOX SIDE - LEFT
28	10332	FIREBOX TOP FLANGE
29	11097	FIREBOX BOTTOM
30	10365	FIREBOX BOTTOM FLANGE
31	11059	BOTTOM SUPPORT RAIL - RIGHT
32	11058	BOTTOM SUPPORT RAIL - LEFT
33	10379	VALVE BRACKET
34	R-4323	GAS VALVE (NAT ONLY)
34	R-4324	GAS VALVE (LPG ONLY)
35	11107	VALVE COVER SUPPORT (BWFK-1 ONLY)
36	R-5211	VALVE COVER (BWFK-1 ONLY)
37	R-3436	REMOTE/OFF/ON SWITCH
NOT SHOWN	R-2792	IGNITOR WIRE
NOT SHOWN	M-166	MANIFOLD GASKET
NOT SHOWN	R-5286	FLEXIBLE GAS LINE
NOT SHOWN	11066	PILOT TUBING
NOT SHOWN	R-3758	AIR SHUTTER BOLT
NOT SHOWN	R-3769	LOCK NUT
NOT SHOWN	R-5358	WIRE ASSEMBLY
NOT SHOWN	11041	REAR COVER
NOT SHOWN	10872	HARDWARE PACKAGE
NOT SHOWN	M-172	ORIFICE GASKET

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH.

How To Order Repair Parts . . .

Parts can be ordered **only** through your **service person or dealer.** For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following appropriate illustration and list. Be sure to give all this information . . .

Fireplace Model Number_____ Part Description _____

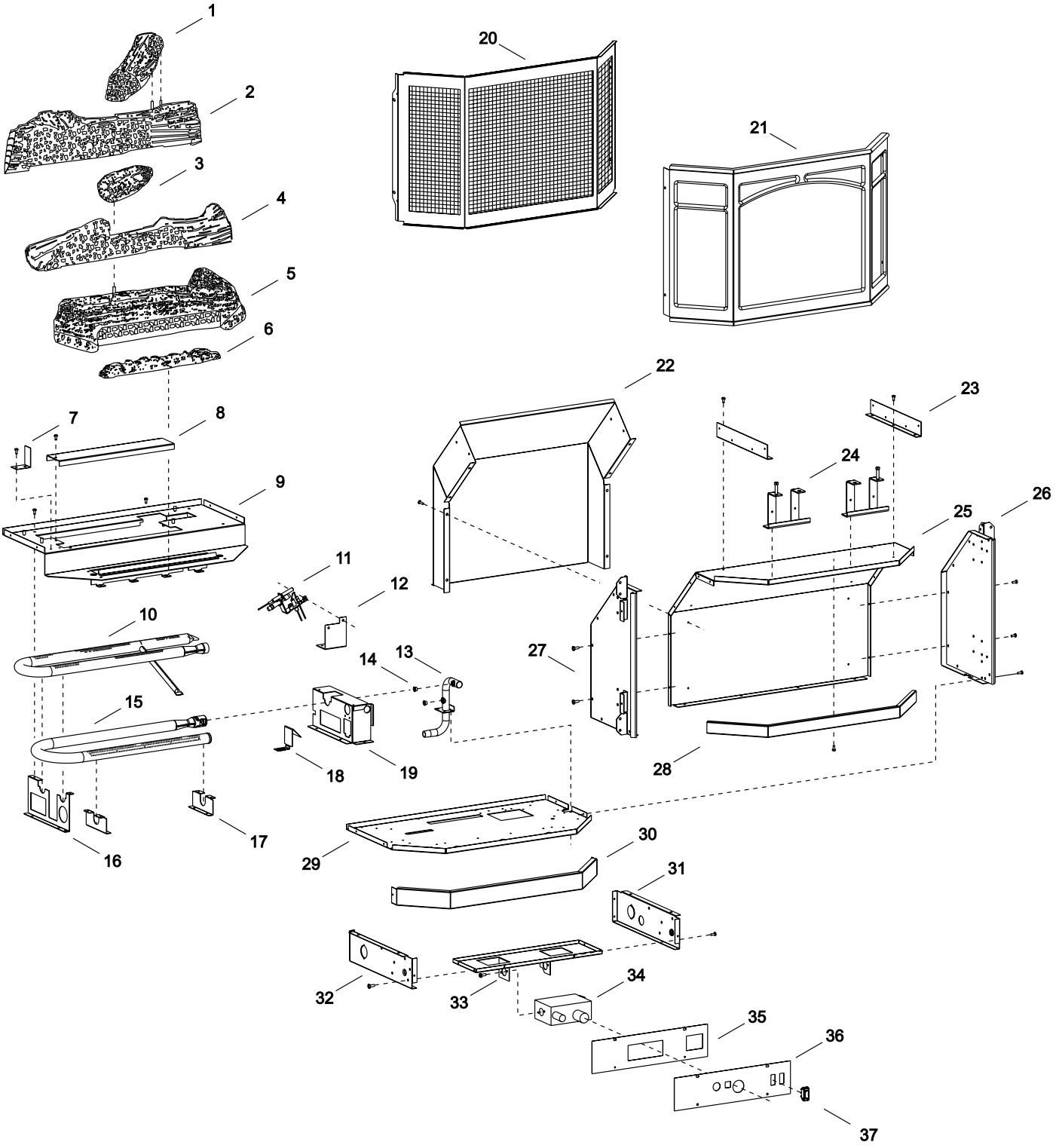
Fireplace Serial Number_____ Type of Gas (Propane or Natural) _____

Part Number _____

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.

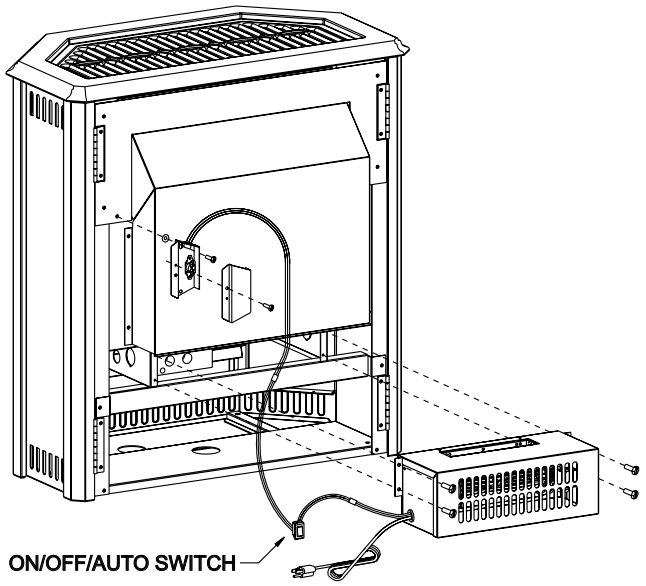
BWVF-30


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

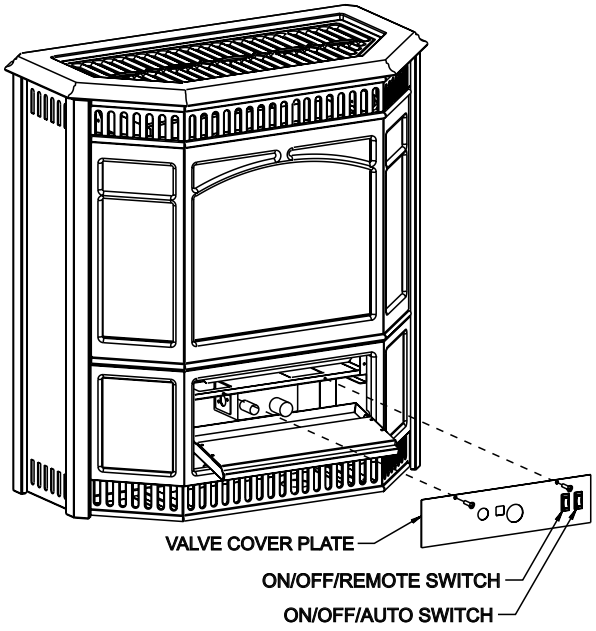
OPTIONAL BAY WINDOW FREESTANDING BLOWER BWFB-1
Vent-Free Fireplace Heater BWVF-30

Installing Optional BWFB-1 Blower

1. Attach blower assembly to rear of firebox with four (4) 10 x 1/2" screws. With fan control wires facing upward, place 3/16" spacer behind oblong clearance hole on switch box. Attach 3/16" spacer and switch box to left, rear of firebox with one (1) 8 x 3/4" screw. Attach switch box cover to switch box with one (1) 8 x 1/4" screw.



2. If installed, remove valve cover from firebox (2 screws).
3. Insert ON/OFF/AUTO switch into right slot on valve cover plate.
4. Attach 1/4" push-on terminal from white wire on fan control to ON tab on switch.
5. Attach 1/4" push-on terminal from black wire to OFF tab on switch.
6. Attach 1/4" push-on terminal from red wire on fan control to AUTO tab on switch.
7. Place valve cover plate over control knobs on gas valve. Attach valve cover plate to firebox with two (2) 10 x 1/2" screws.
8. Installation for optional BWFB-1 freestanding blower is completed.



Fan Control

The fan control is a non-adjustable automatic type. The fan control will require between 5 and 10 minutes of main burner operation before the fan control "closes" and activates the blower. The blower will continue to run between 5 and 10 minutes after the main burner shuts off, before the fan control "opens" and deactivates the blower.

Whenever you want a quicker response from optional blower, use the manual ON/OFF position.

Wiring

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70 or Canadian Electrical Code, CSA C22.1,* if an external electrical source is utilized. **This appliance is equipped with a three-prong [grounding] plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.** For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screws. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

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

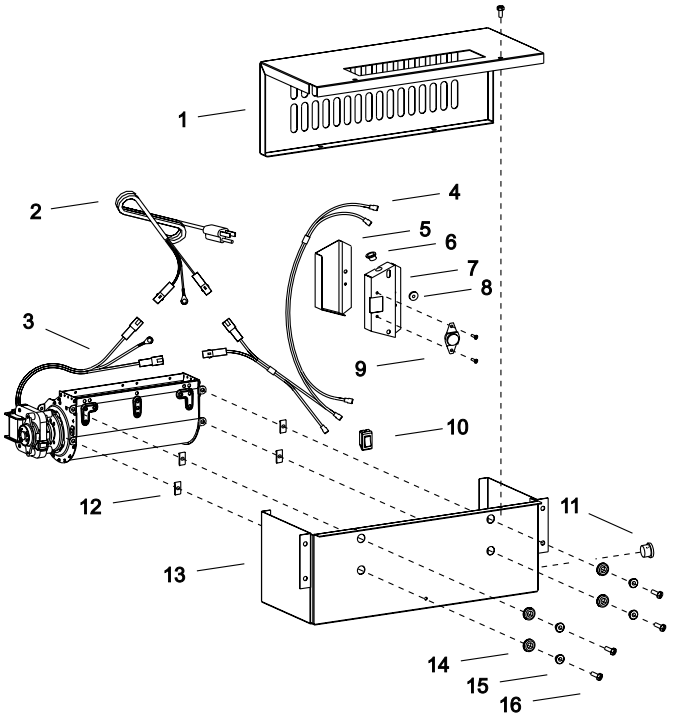
WARNING:
Unplugging of blower accessory will not stop the heater from cycling. To shut heater off: Turn temperature dial or thermostat to lowest setting. Turn knob on gas control to "OFF", depressing slightly. Do not force.

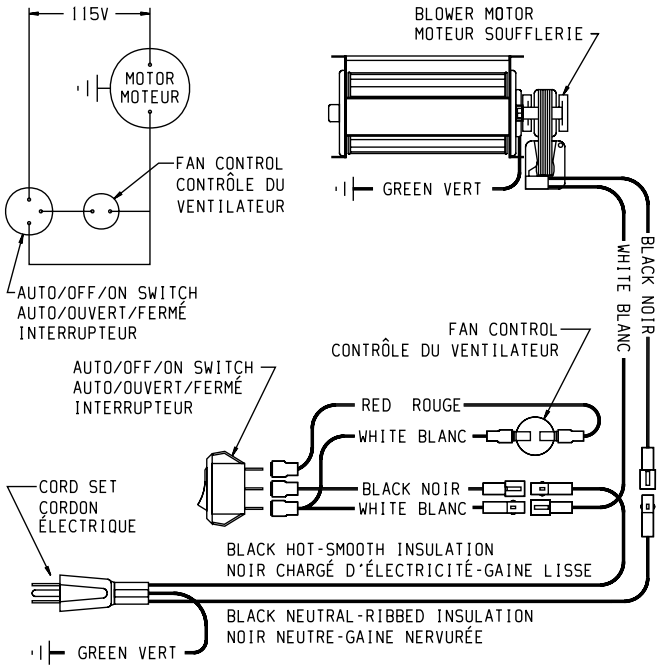
Blower Motor

The blower motor does not have oiling holes. Do not attempt to oil the blower motor.

Blower Wheel

The blower will collect lint and could require periodic cleaning. If the air output decreases or the noise level increases, it indicates a dirty blower wheel. Remove all lint and dirt from the blades on blower wheel.





IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THIS UNIT MUST BE REPLACED. IT MUST BE REPLACED WITH NO. 18, 150°C WIRE OR ITS EQUIVALENT.

PARTS LIST

Index No.	Part No.	Description
1	10864	BLOWER HOUSING COVER
2	R-2099	CORD SET
3	R-5372	BLOWER ASSEMBLY
4	R-5361	WIRE ASSEMBLY
5	11235	SWITCH BOX COVER
6	872087	BUSHING
7	11234	SWITCH BOX
8	R-2113	SPACER
9	R-2515	FAN CONTROL
10	R-2805	AUTO/OFF/ON SWITCH
11	872056	STRAIN RELIEF BUSHING
12	R-1517	TINNERMAN CLIP
13	10863	BLOWER HOUSING
14	8520141	GROMMET (4 REQUIRED)
15	8520142	BRASS BUSHING (4 REQUIRED)
16	R-1497	SCREW (4 REQUIRED)
NOT SHOWN	11128	HARDWARE PACKAGE (INCLUDES R-2113 AND DV-807)

OPTIONAL BAY WINDOW INSERT BLOWER
BWIB-1
Vent-Free Fireplace Heater BWVF-30

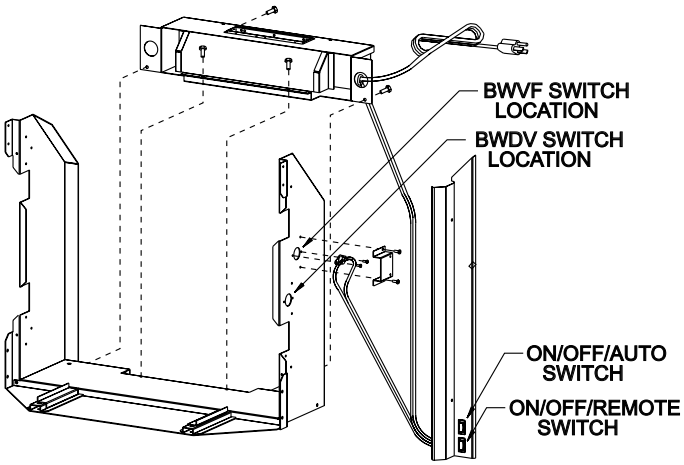
Attention: The BWIB-1 optional blower must be installed into chassis before placement of firebox into chassis.

If installed, remove firebox from chassis and chassis from fireplace.

New installation, assemble chassis according to Installation Instructions and Owner's Manual.

Installing Optional BWIB-1 Blower

1. Attach blower assembly to rear of chassis with four (4) 10 x 1/2" screws.
2. Remove knock-out from surround right inner trim. Lay surround right inner trim on a flat surface to remove knock-out.
3. Insert ON/OFF/AUTO switch into top slot on surround right inner trim.
4. Attach 1/4" push-on terminal from white wire on fan control to ON tab on switch.
5. Attach 1/4" push-on terminal from black wire to OFF tab on switch.
6. Attach 1/4" push-on terminal from red wire on fan control to AUTO tab on switch.
7. Insert and attach fan control in **top** hole on chassis side with two (2) 8 x 1/4" screws.
8. Place and attach fan control shield over fan control with two (2) 10 x 1/2" screws.
9. Installation of optional BWIB-1 insert blower is completed.



Fan Control

Whenever you want a quicker response from optional blower, use the manual ON/OFF position.

Wiring

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the *National Electrical Code, ANSI/NFPA 70*, if an external electrical source is utilized. **This appliance is equipped with a three-prong [grounding] plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.** For an ungrounded receptacle, an adapter, which has two prongs and a wire for grounding, can be purchased, plugged into the ungrounded receptacle and its wire connected to the receptacle mounting screws. With this wire completing the ground, the appliance cord plug can be plugged into the adapter and be electrically grounded.

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

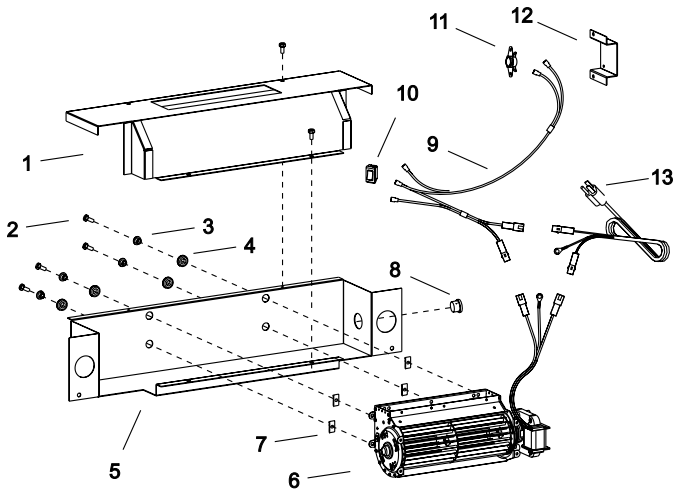
WARNING:
Unplugging of blower accessory will not stop the heater from cycling. To shut heater off: Turn temperature dial or thermostat to lowest setting. Turn knob on gas control to "OFF", depressing slightly. Do not force.

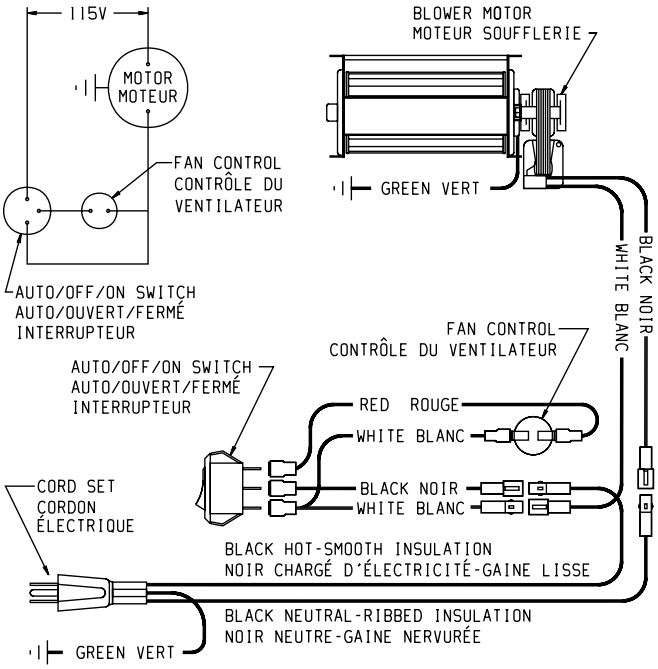
Blower Motor

The blower motor does not have oiling holes. Do not attempt to oil the blower motor.

Blower Wheel

The blower will collect lint and could require periodic cleaning. If the air output decreases or the noise level increases, it indicates a dirty blower wheel. Remove all lint and dirt from the blades on blower wheel.





IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THIS UNIT MUST BE REPLACED. IT MUST BE REPLACED WITH NO. 18, 150°C WIRE OR ITS EQUIVALENT.

PARTS LIST

Index No.	Part No.	Description
1	10864	BLOWER HOUSING COVER
2	R-1497	SCREW (4 REQUIRED)
3	8520142	BRASS BUSHING (4 REQUIRED)
4	8520141	GROMMET (4 REQUIRED)
5	11123	BLOWER HOUSING BODY
6	R-5372	BLOWER ASSEMBLY
7	R-1517	TINNERMAN CLIP (4 REQUIRED)
8	872056	STRAIN RELIEF BUSHING
9	R-5362	WIRE ASSEMBLY
10	R-2805	AUTO/OFF/ON SWITCH
11	R-2515	FAN CONTROL
12	11232	SWITCH COVER
13	R-2099	CORD SET
NOT SHOWN	11126	BLOWER GASKET (2 REQUIRED)
NOT SHOWN	11125	HARDWARE PACKAGE

Optional SKI, Stone Kit
Installation Instructions

Fireplace Insert Surround and Cast Top

Optional Stone Kit		Fireplace Model Numbers
SKI-EG	Empress Green (Dark Green Marble)	BWVF-30
SKI-HJ	Hunan Jade (White w/Green Vein Marble)	BWDV-40
SKI-GB	Gray Botticino (Gray/Cream Marble)	
SKI-AZ	Azul (Black/Gray/Blue Granite)	
SKI-SA	Salome (Reddish Gray Marble)	
SKI-BS	Black Swan (Ebony Polished Stone)	

Initial installation of BWIS-1, insert surround with SKI, stone kit:

Attention: Assemble chassis and firebox parts according to appropriate Installation Instructions and Owner's Manual.

Figure 1

1. Place surround top, surround side 1 and surround side 2 on a non-abrasive work surface. The raised panel configuration on surround top, surround side 1 and surround side 2 must be facing upward.
2. Align surround side 1 and surround side 2 with notches in surround top.
3. Place two (2) upper corner braces into recessed upper corners on raised panel. Align six (6) clearance holes on upper corner braces with six (6) clearance holes on upper corners. Insert four (4) 10 - 24 x 1/2" bolts from recessed panel side into four (4) clearance holes on upper corner braces. **Attention:** Leave center clearance holes open on upper corner braces. Use four (4) 10 - 24 x 1/2" bolts and four (4) 10 - 24 nuts to attach each upper corner brace to surround top, surround side 1 and surround side 2. **Attention: At this time, do not completely tighten nuts onto bolts.**

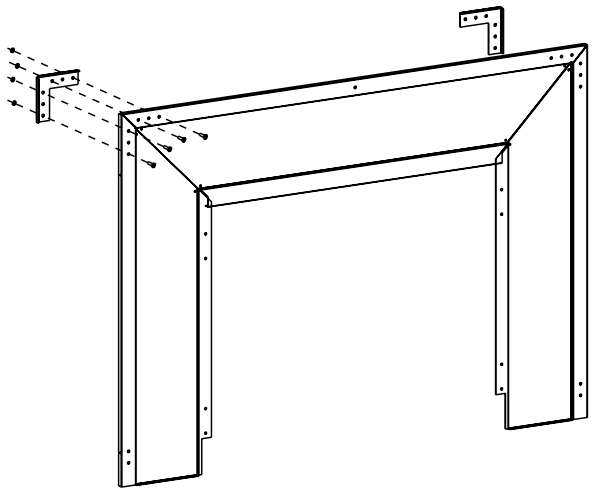


Figure 1

Figure 2

4. Attach a surround bottom to surround side 1 and surround side 2. Use two (2) Phillips screws for each surround bottom.

Attention: The two (2) surround bottoms are included in SKI, stone kit.

5. Attach surround inner trim top to surround top with two (2) 8 x 1/2" Phillips screws.

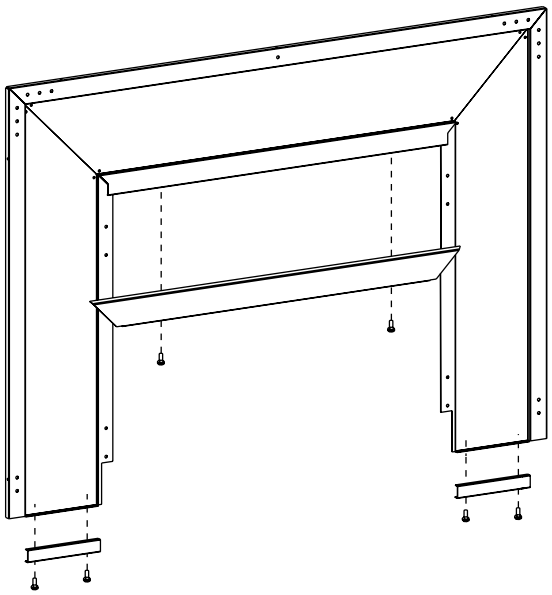
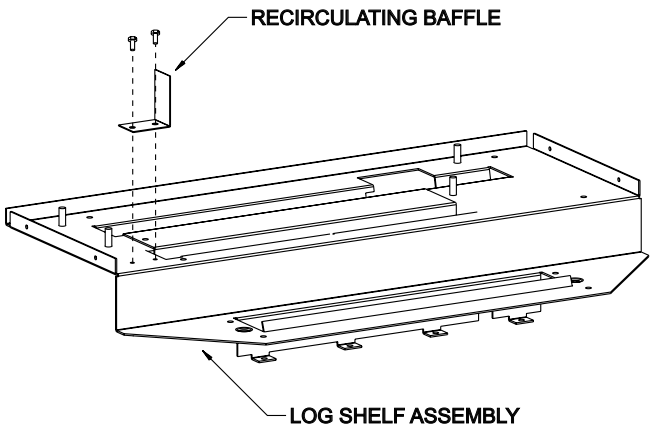


Figure 2

Figure 3

6. **For BWVF-30 only**, attach recirculating baffle to log shelf assembly with two (2) 10 x 1/2" screws. The recirculating baffle is located inside Owner's Envelope.



BWVF-30
Figure 3

Figure 4

7. Insert firebox into fireplace opening. Level firebox by adjusting four leveling bolts.
8. Attach insert surround to four (4) inner brackets. Use two (2) 10 x 1/2" screws to attach insert surround to each inner bracket. **Attention:** The recessed panel configuration must be facing into the room.
9. Attach upper left corner, center and upper right corner on insert surround to wall surface. Use an anchor bolt or screw appropriate for wall material. The lower left corner and lower right corner on insert surround can also be attached to wall surface.
10. **Install logs into firebox. See appropriate Installation Instructions and Owner's Manual.**
11. Attach front window/screen onto firebox. See Glass/Screen Removal and Replacement in appropriate Installation Instructions and Owner's Manual.

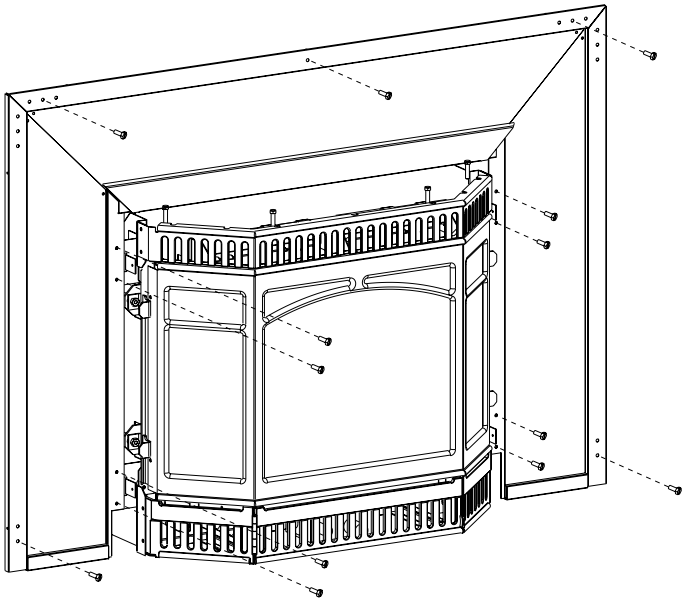


Figure 4

Figure 5

12. Attach surround outer trim top to surround top with three (3) 8 x 1/2" Phillips screws.
13. Attach surround right and left outer trim to surround side 1 and 2. Use two (2) 8 x 1/2" Phillips screws for each surround right and left outer trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left outer trim with surround outer trim top. Complete tightening screws for surround right and left outer trim.

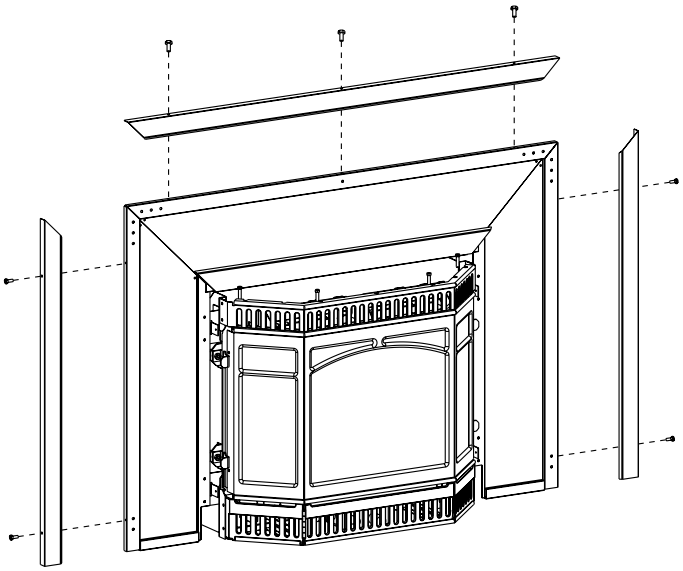


Figure 5

Figure 6

14. Starting from bottom of either surround side 1 or surround side 2 insert a stone into surround side. Push stone upward until you can insert stone behind the surround inner and outer trim top. Push stone toward opposite surround side. Evenly space four (4) additional stones behind surround inner and outer trim top.

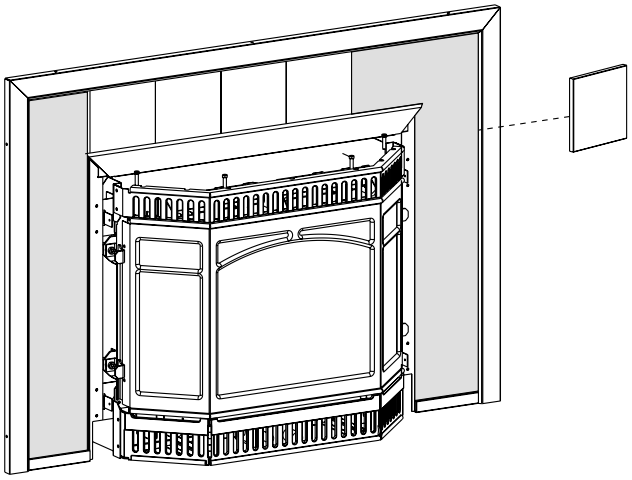


Figure 6

Figure 7

15. On either surround side 1 or surround side 2, insert three (3) stones behind surround outer trim. Push stones upward until top stone is level with five (5) top stones from Step 14. Hold three (3) stones as you insert two (2) remaining stones. Insert fourth stone behind surround outer trim and surround bottom. Insert fifth stone on top of bottom stone.
16. Repeat Step 15 to insert five (5) additional stones into opposite surround side.

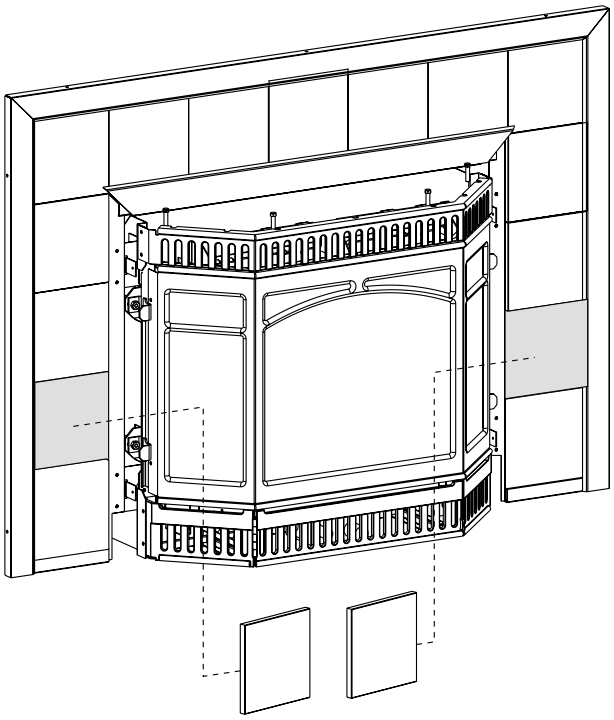


Figure 7

Figure 8

17. Remove brown, black, green/black wires from On/Off/Remote switch. Snap On/Off/Remote switch into bottom slot on surround right inner trim. Attach brown wire onto Remote male tab, green/black wire onto On male tab and black wire onto Off male tab on On/Off/Remote switch.
18. Attach surround right and left inner trim to surround mounting brackets. Use two (2) 8 x 1/2" Phillips screws for each surround inner trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left inner trim with surround inner trim top. Complete tightening screws for surround right and left inner trim.
19. Place casting top onto four (4) leveling bolts on top of firebox.
20. Place two (2) stones into casting top.
21. Installation of BWIS-1, insert surround with SKI, stone kit is completed.

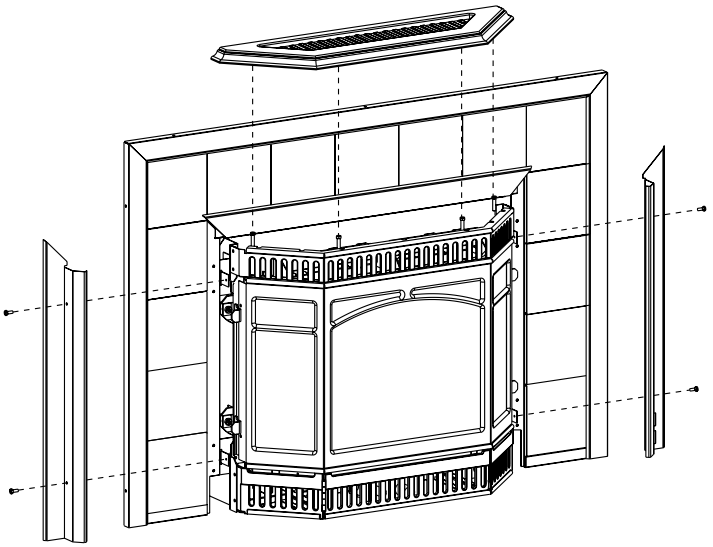


Figure 8

SKI-EG Parts List

Part Number	Description	Quantity Supplied
R-5460	Top Stone Inlay - Right (Empress Green)	1
R-5466	Top Stone Inlay - Left (Empress Green)	1
R-5472	Stone Inlay (Empress Green)	15

SKI-HJ Parts List

Part Number	Description	Quantity Supplied
R-5461	Top Stone Inlay - Right (Hunan Jade)	1
R-5467	Top Stone Inlay - Left (Hunan Jade)	1
R-5473	Stone Inlay (Hunan Jade)	15

SKI-GB Parts List

Part Number	Description	Quantity Supplied
R-5462	Top Stone Inlay - Right (Gray Botticino)	1
R-5468	Top Stone Inlay - Left (Gray Botticino)	1
R-5474	Stone Inlay (Gray Botticino)	15

SKI-AZ Parts List

Part Number	Description	Quantity Supplied
R-5463	Top Stone Inlay - Right (Azul)	1
R-5469	Top Stone Inlay - Left (Azul)	1
R-5475	Stone Inlay (Azul)	15

SKI-SA Parts List

Part Number	Description	Quantity Supplied
R-5464	Top Stone Inlay - Right (Salome)	1
R-5470	Top Stone Inlay - Left (Salome)	1
R-5476	Stone Inlay (Salome)	15

SKI-BS Parts List

Part Number	Description	Quantity Supplied
R-5465	Top Stone Inlay - Right (Black Swan)	1
R-5471	Top Stone Inlay - Left (Black Swan)	1
R-5477	Stone Inlay (Black Swan)	15

Installation of SKI, stone kit when BWIS-1, insert surround is in the raised panel configuration (insert surround is already installed).

Attention: In order to install SKI, stone kit the raised panel configuration must be reversed to the recessed panel configuration.

1. Remove surround inner trim top from surround top. Remove two (2) 8 x 1/2" Phillips screws.
2. Remove surround right and left inner trim from inner brackets. Remove two (2) 8 x 1/2" Phillips screws for each surround inner trim.
3. Remove surround top, right and left outer trim from surround top, surround side 1 and surround side 2. Remove two (2) 8 x 1/2" Phillips screws for surround right and left outer trim. Remove three (3) 8 x 1/2" Phillips screws for surround top outer trim.
4. Remove anchor bolts or screws which attach surround top, right and left to wall surface.
5. Remove eight (8) 10 x 1/2" screws which attach surround side 1 and surround side 2 to four (4) inner brackets.
6. Grasp surround and rotate surround from the raised panel configuration to the recessed panel configuration.

Figure 1

7. Remove and discard surround supports located in upper left and right corner on recessed panel insert surround. Remove four (4) 8 x 1/4" screws from each surround support.

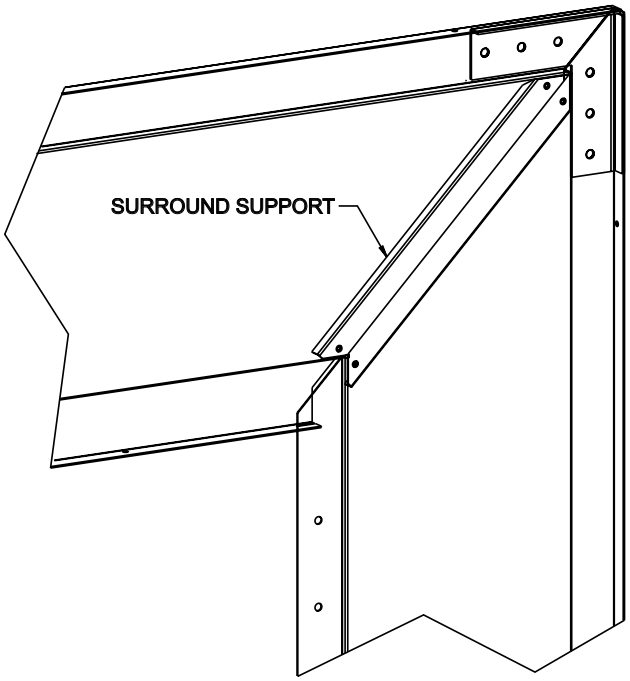


Figure 1

Figure 2

8. Attach a surround bottom to surround side 1 and surround side 2. Use two (2) Phillips screws for each surround bottom.

Attention: The two (2) surround bottoms are included in SKI, stone kit.

9. Attach surround inner trim top to surround top with two (2) 8 x 1/2" Phillips screws.

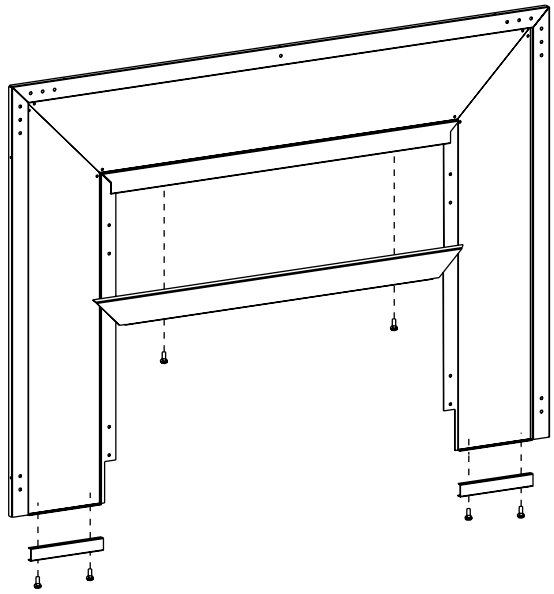


Figure 2

Figure 3

10. Attach insert surround to four (4) inner brackets. Use two (2) 10 x 1/2" screws to attach insert surround to each inner bracket. **Attention:** The raised panel configuration must be facing into the room.
11. Attach upper left corner, center and upper right corner on insert surround to wall surface. Use an anchor bolt or screw appropriate for wall material. The lower left corner and lower right corner on insert surround can also be attached to wall surface.

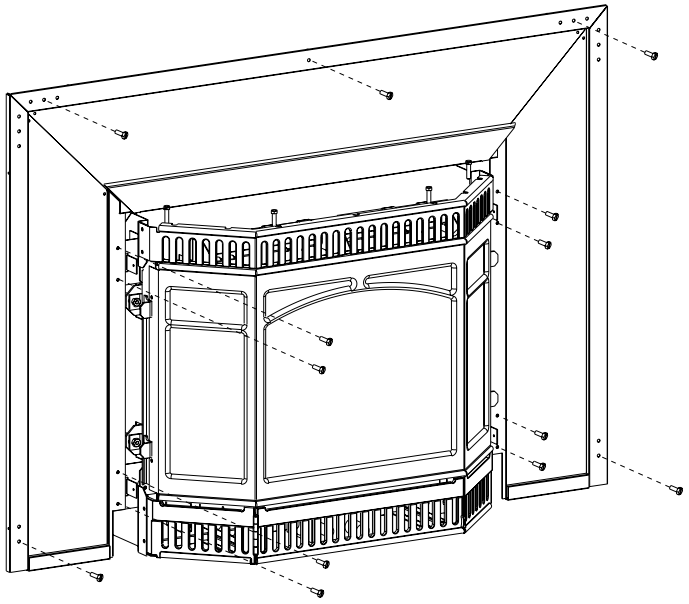


Figure 3

Figure 4

12. Attach surround outer trim top to surround top with three (3) 8 x 1/2" Phillips screws.
13. Attach surround right and left outer trim to surround side 1 and 2. Use two (2) 8 x 1/2" Phillips screws for each surround right and left outer trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left outer trim with surround outer trim top. Complete tightening screws for surround right and left outer trim.

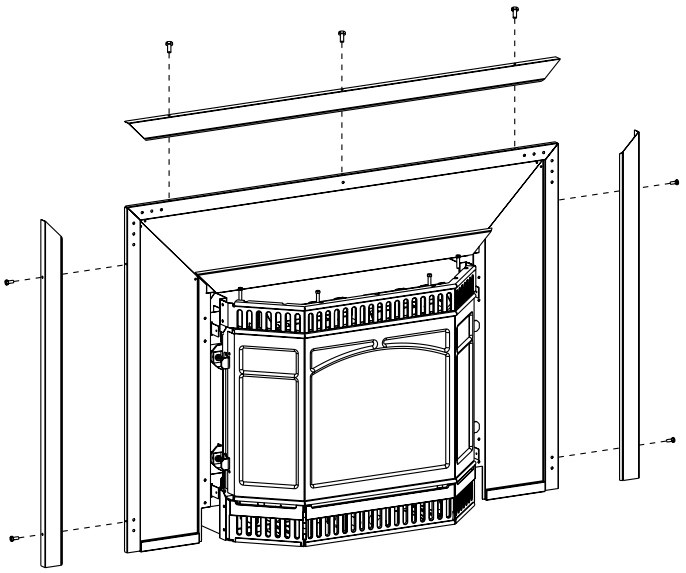


Figure 4

Figure 5

14. Starting from bottom of either surround side 1 or surround side 2 insert a stone into surround side. Push stone upward until you can insert stone behind the surround inner and outer trim top. Push stone toward opposite surround side. Evenly space four (4) additional stones behind surround inner and outer trim top.

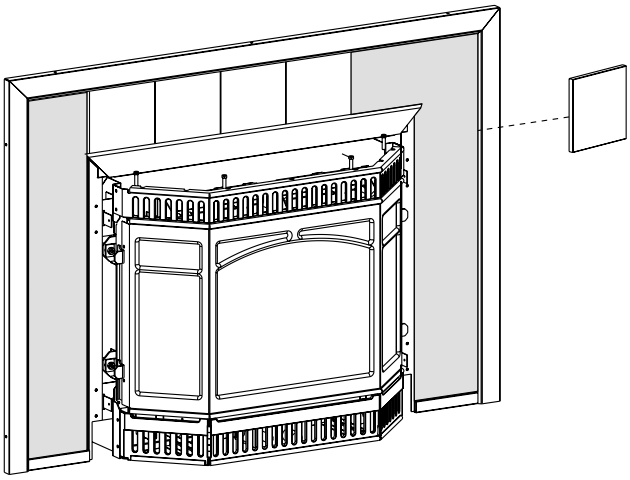


Figure 5

Figure 6

15. On either surround side 1 or surround side 2, insert three (3) stones behind surround outer trim. Push stones upward until top stone is level with five (5) top stones from Step 14. Hold three (3) stones as you insert two (2) remaining stones. Insert fourth stone behind surround outer trim and surround bottom. Insert fifth stone on top of bottom stone.
16. Repeat Step 15 to insert five (5) additional stones into opposite surround side.

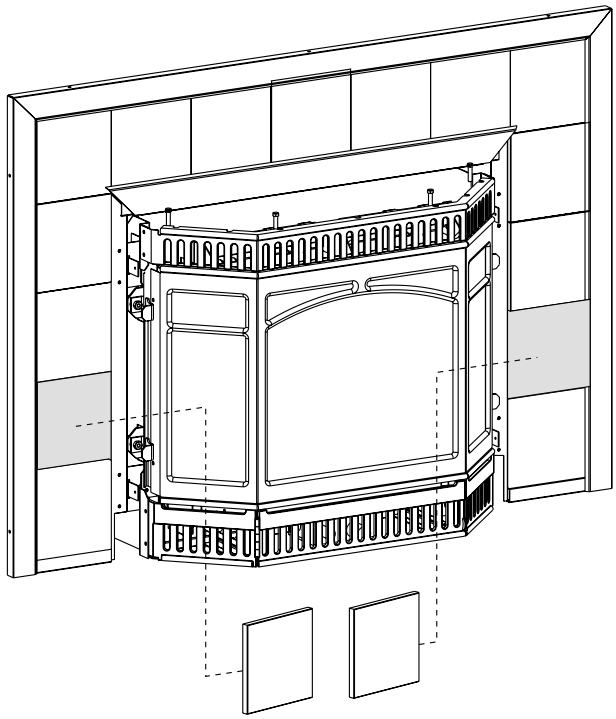


Figure 6

Figure 7

17. Remove brown, black, green/black wires from On/Off/Remote switch. Snap On/Off/Remote switch into bottom slot on surround right inner trim. Attach brown wire onto Remote male tab, green/black wire onto On male tab and black wire onto Off male tab on On/Off/Remote switch.
18. Attach surround right and left inner trim to surround mounting brackets. Use two (2) 8 x 1/2" Phillips screws for each surround inner trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left inner trim with surround inner trim top. Complete tightening screws for surround right and left inner trim.
19. Place casting top onto four (4) leveling bolts on top of firebox.
20. Place two (2) stones into casting top.
21. Installation of BWIS-1, insert surround with SKI, stone kit is completed.

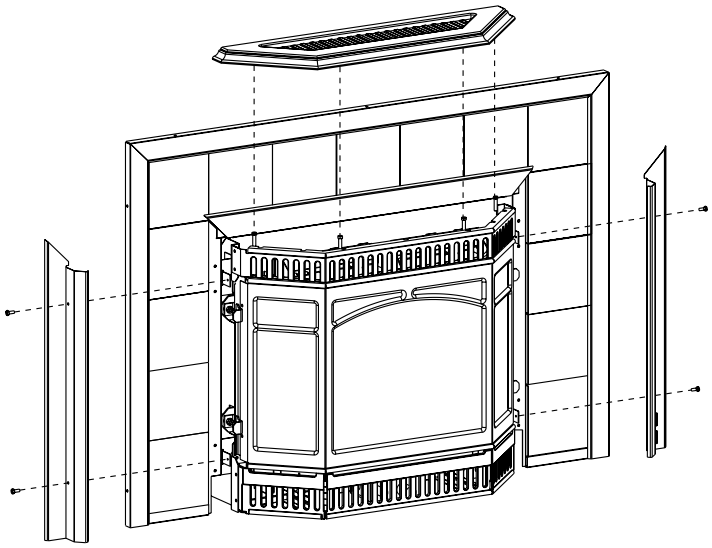


Figure 7

Custom Stone or Tile

Installation of BWIS-1 Insert Surround in Recessed Panel Configuration

Attention: Assemble chassis and firebox parts according to appropriate Installation Instructions and Owner's Manual.

Figure 1

Dimensions of stone or tile to be installed into insert surround are the following:

Surround Top	Surround Side 1 and 2
Maximum Thickness of Stone or Tile 3/8"	Maximum Thickness of Stone or Tile 3/8"

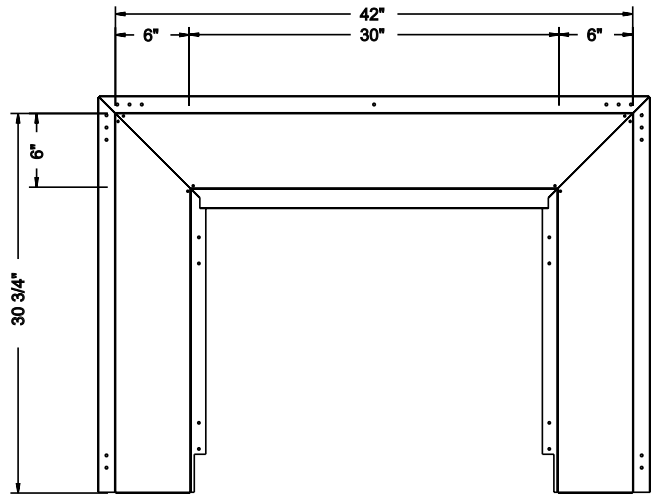


Figure 1

Figure 2

1. Place surround top, surround side 1 and surround side 2 on a non-abrasive work surface. The raised panel configuration on surround top, surround side 1 and surround side 2 must be facing upward.
2. Align surround side 1 and surround side 2 with notches in surround top.
3. Place two (2) upper corner braces into recessed upper corners on raised panel. Align six (6) clearance holes on upper corner braces with six (6) clearance holes on upper corners. Insert four (4) 10 - 24 x 1/2" bolts from recessed panel side into four (4) clearance holes on upper corner braces. **Attention:** Leave center clearance holes open on upper corner braces. Use four (4) 10 - 24 x 1/2" bolts and four (4) 10 - 24 nuts to attach each upper corner brace to surround top, surround side 1 and surround side 2. **Attention: At this time, do not completely tighten nuts onto bolts.**

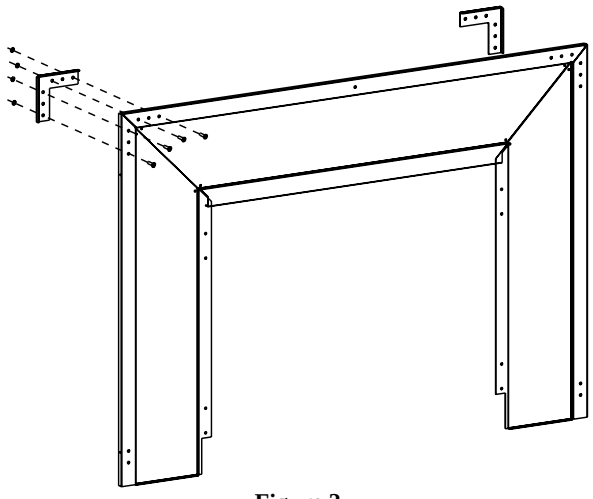


Figure 2

Figure 3

4. Attach surround inner trim top to surround top with two (2) 8 x 1/2" Phillips screws.

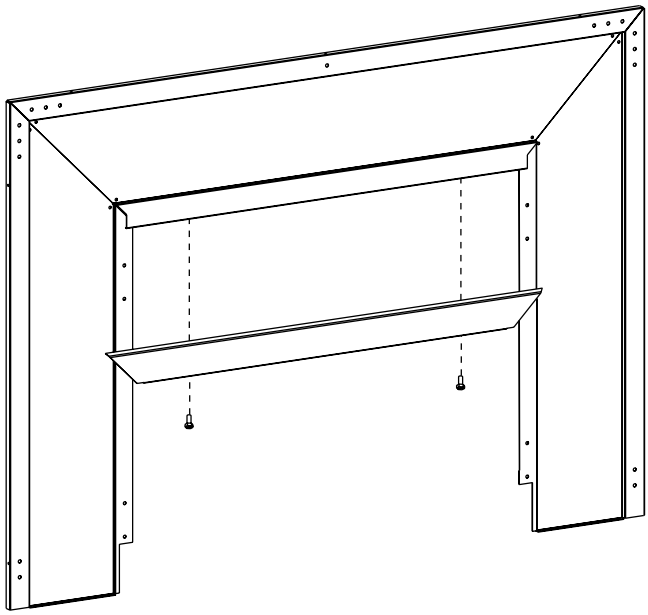
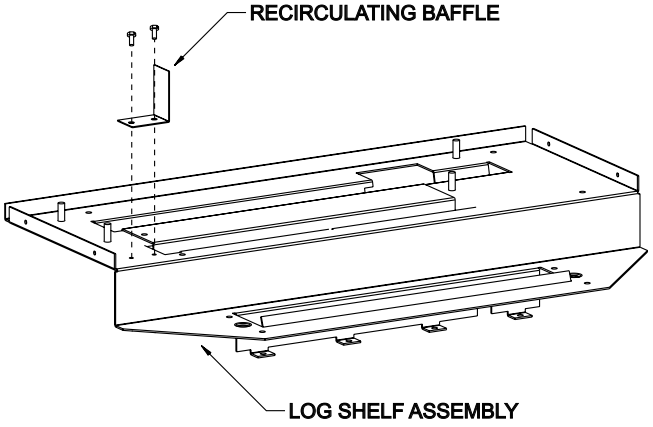


Figure 3

Figure 4

5. **For BWVF-30 only**, attach recirculating baffle to log shelf assembly with two (2) 10 x 1/2" screws. The recirculating baffle is located inside Owner's Envelope.



BWVF-30
Figure 4

Figure 5

6. Insert firebox into fireplace opening. Level firebox by adjusting four leveling bolts.
7. Attach insert surround to four (4) inner brackets. Use two (2) 10 x 1/2" screws to attach insert surround to each inner bracket. **Attention:** The recessed panel configuration must be facing into the room.
8. Attach upper left corner, center and upper right corner on insert surround to wall surface. Use an anchor bolt or screw appropriate for wall material. The lower left corner and lower right corner on insert surround can also be attached to wall surface.
9. **Install logs into firebox. See appropriate Installation Instructions and Owner's Manual.**
10. Attach front window/screen onto firebox. See Glass/Screen Removal and Replacement in appropriate Installation Instructions and Owner's Manual.

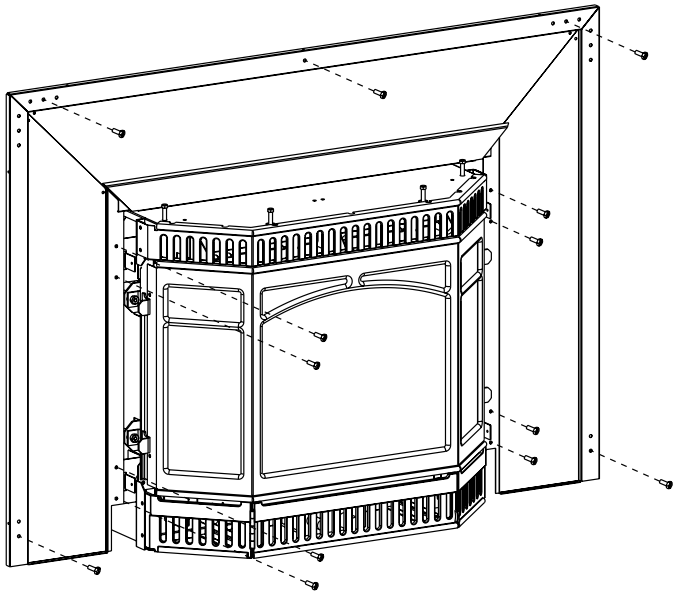


Figure 5

Figure 6

11. Insert stone(s) behind surround inner trim top.
12. Attach surround outer trim top to surround top with three (3) 8 x 1/2" Phillips screws.

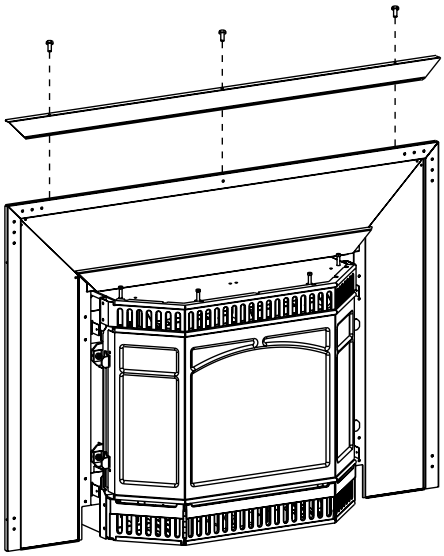


Figure 6

Figure 7

13. Remove brown, black, green/black wires from On/Off/Remote switch. Snap On/Off/Remote switch into bottom slot on surround right inner trim. Attach brown wire onto Remote male tab, green/black wire onto On male tab and black wire onto Off male tab on On/Off/Remote switch.
14. Attach surround right and left inner trim to surround mounting brackets. Use two (2) 8 x 1/2" Phillips screws for each surround inner trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left inner trim with surround inner trim top. Complete tightening screws for surround right and left inner trim.

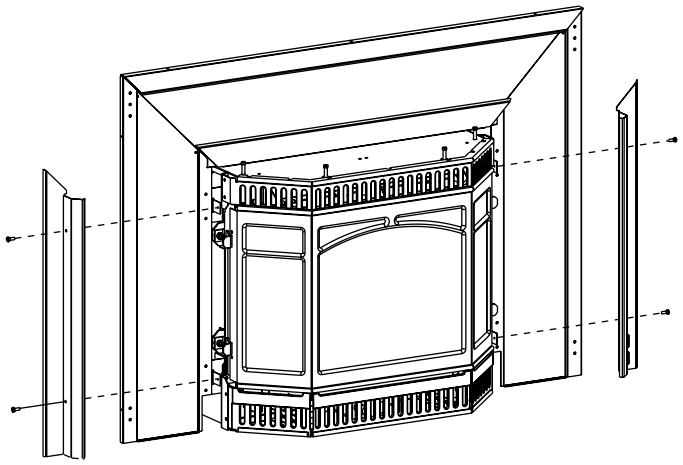


Figure 7

Figure 8

15. Insert stone(s) into surround side 1 and surround side 2.
16. Attach surround right and left outer trim to surround side 1 and 2. Use two (2) 8 x 1/2" Phillips screws for each surround right and left outer trim. **Attention: At this time, do not completely tighten screws.** Align and fit together surround right and left outer trim with surround outer trim top. Complete tightening screws for surround right and left outer trim.
17. Place casting top onto four (4) leveling bolts on top of firebox.
18. Installation of custom stone or tile is completed.

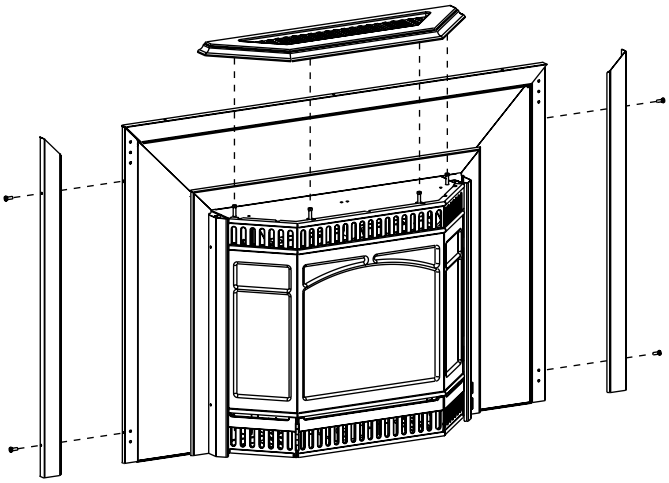


Figure 8

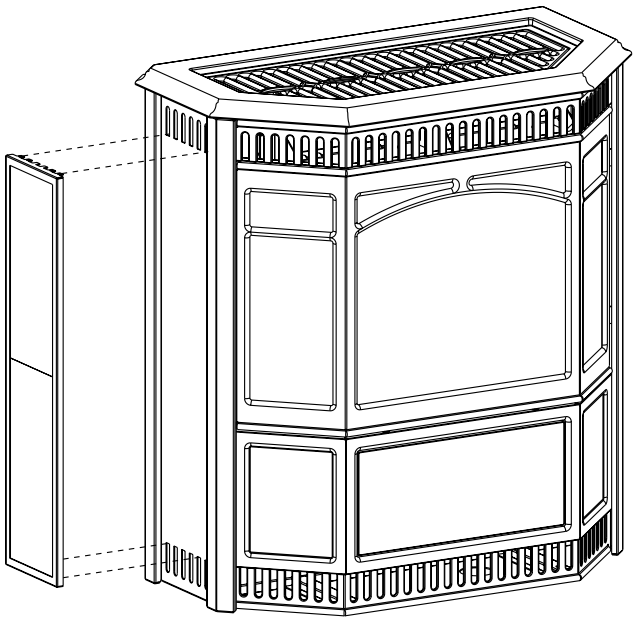
Optional SKF, Stone Kit Installation Instructions

Freestanding Fireplace Sides and Cast Top

Optional Stone Kit		Fireplace Model Numbers
SKF-EG	**Empress Green (Dark Green Marble)**	**BWVF-30**
SKF-HJ	**Hunan Jade (White w/Green Vein Marble)**	**BWDV-40**
SKF-GB	**Gray Botticino (Gray/Cream Marble)**	**BWBV-40**
SKF-AZ	**Azul (Black/Gray/Blue Granite)**	
SKF-SA	**Salome (Reddish Gray Marble)**	
SKF-BS	**Black Swan (Ebony Polished Stone)**	

Installation of SKF, Stone Kit into Fireplace Sides and Cast Top

1. Remove cast top from fireplace.
2. Place the cast top on a non-abrasive surface. The top (recessed area) of cast top should be facing the non-abrasive surface.
3. Attach the heat shield to underside of cast top with two (2) 10 - 24 screws.
4. Place cast top onto fireplace.
5. Place two (2) stones into cast top.
6. The two (2) stone side frames have six (6) curved tabs (top of frame) and six (6) flat tabs (bottom of frame).
7. Place two (2) stones into a stone side frame.
8. You must hold stones in frame as you insert six (6) curved tabs into six (6) top louvers on casing side and snap six (6) flat tabs into six (6) bottom louvers on casing side.
9. Repeat Steps 7 and 8 for second stone side frame.
10. Installation of SKF, stone kit is completed.



SKF-EG Parts List

Part Number	Description	Quantity Supplied
R-5478	Top Stone Inlay - Right (Empress Green)	1
R-5484	Top Stone Inlay - Left (Empress Green)	1
R-5490	Side Stone Inlay (Empress Green)	4

SKF-HJ Parts List

Part Number	Description	Quantity Supplied
R-5479	Top Stone Inlay - Right (Hunan Jade)	1
R-5485	Top Stone Inlay - Left (Hunan Jade)	1
R-5491	Side Stone Inlay (Hunan Jade)	4

SKF-GB Parts List

Part Number	Description	Quantity Supplied
R-5480	Top Stone Inlay - Right (Gray Botticino)	1
R-5486	Top Stone Inlay - Left (Gray Botticino)	1
R-5492	Side Stone Inlay (Gray Botticino)	4

SKF-AZ Parts List

Part Number	Description	Quantity Supplied
R-5481	Top Stone Inlay - Right (Azul)	1
R-5487	Top Stone Inlay - Left (Azul)	1
R-5493	Side Stone Inlay (Azul)	4

SKF-SA Parts List

Part Number	Description	Quantity Supplied
R-5482	Top Stone Inlay - Right (Salome)	1
R-5488	Top Stone Inlay - Left (Salome)	1
R-5494	Side Stone Inlay (Salome)	4

SKF-BS Parts List

Part Number	Description	Quantity Supplied
R-5483	Top Stone Inlay - Right (Black Swan)	1
R-5489	Top Stone Inlay - Left (Black Swan)	1
R-5495	Side Stone Inlay (Black Swan)	4

Service Notes

Service Notes

Empire Comfort Systems, Inc.
Nine Eighteen Freeburg Ave.
Belleville, Illinois 62220-2623

PH: 1-800-851-3153
FAX: 1-800-443-8648
E-MAIL: info@empirecomfort.com
WEB SITE: www.empirecomfort.com