A REAL AND	<b>OUADRALIRE</b> North America's Best		
Ass roe of the	COLUMBIA BAY DIRECT VENT GAS INSERT		
	This appliance has been retired. Service parts pages within have been removed. For replacement parts, please refer to the individual service parts list located on the brand websites.		
Insta	lation, Venting, Operation & Maintenance Manual		
	SAVE THESE INSTRUCTIONS		
If the information in	WARNING! these instructions is not followed exactly a fire or explosion may result causing property damage, personal injury or loss of life.		
FOR YOUR SAFETY 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 electric switch. Do not use any telephone 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.			
Installation and se	ervice must be performed by a qualified installer, service agency, or the gas supplier.		
not prohibited by local This appliance is	ay be installed in an aftermarket permanently located, manufactured (mobile) home where codes. only for use with the type of gas indicated on the rating plate. This appliance is not other gases, unless a certified kit is used.		
Prior to first fire: Clean	gold surfaces with a glass cleanser and soft cloth to prevent staining from fingerprint oils.		



1445 North Highway Colville, WA 99114

Part #250-6240 03/28/01

ahpfireup.com aladdinhearth.com

eaverton egon USA

Tested an Listed by



**NELCOME** 

#### WELCOME

ALADDIN HEARTH PRODUCTS welcomes you to our tradition of excellence! In choosing a Quadra-Fire appliance, you have our assurance of commitment to quality, durability, and performance.

This commitment begins with our research of the market, including 'Voice of the Customer' contacts, ensuring we make products that will satisfy your needs. Our Research and Development facility then employs the world's most advanced technology to achieve the optimum operation of our stoves, inserts and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. During manufacturing each unit is meticulously fabricated and gold surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection. Additionally, we feel it is important to offer you several finishing options and accessories to compliment your home's décor, individualize the use of your appliance, and provide financial options in acquiring a quality hearth appliance. Ask your Quadra-Fire Dealer for information on these options. From design, to fabrication, to shipping: Our guarantee of quality is more than a word, it's Quadra-Fire tradition, and we proudly back this tradition with a Lifetime Warranty.

Prior to installation, we ask you to take a few moments to read this manual. It has been our experience that your overall enjoyment of your new appliance will be greatly enhanced by becoming familiar with its' installation, operation and maintenance requirements. We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. Thank you for choosing Quadra-Fire.

With warm regards,

President

Western Sales Manager

Manufacturing Eng. Manager

entral Sales Manager

Sr. Purchasing Agent

Operations Manager

Eastern Sales Manager

V.P. Sales & Marketing

aniel S. Henry P. Research & Development

Fechnical Support Manager

Human Resources Supervisor

im Cotter

Customer Support Manager



COLUMBIA BAY INSERT WITH GOLD DOOR CROWN ACCESSORY

## **CUSTOMER NOTES**

	QUADRA FIRE COLUMBIA BAY INSERT	
SERIAL NUMBER		
DATE PURCHASED		

After completing your warranty card, attach receipt and warranty stub here.

DEALERSHIP WHERE PURCHASED

DEALER PHONE	

ADDITIONAL INFORMATION REGARDING THE INSTALLATION OF YOUR FIREPLACE:



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WARK	ANTY	DAUN UUVER

# SAFETY NOTICES

Many of the components within this gas insert are designed specifically for safety purposes. It is therefore imperative that only certified gas service technicians install and service this insert

#### Main Burner Operation:

A millivolt system controls the operation of this fireplace. The thermopile and thermocouple generate electricity when heated by the pilot flame. This electricity is used to operate the gas valve. Without enough electricity, the gas valve will not turn on. That is why when starting the pilot the gas control knob has to be pressed in long enough for the thermocouple to heat up and generate enough electricity. The thermopile provides power for the ON/OFF switch, remote control, or thermostat. Because the thermopile generates the electricity needed to turn the fireplace on and off, this fireplace can be operated when the power is out (although the blower will not run).

#### Gas Buildup Prevention Feature:

This appliance's utilization of a high-technology gas valve in conjunction with a pilot flame ensures that no gas builds up inside the firebox.

The thermocouple (next to the pilot) senses when the pilot flame is lit. If the pilot flames goes out, this thermocouple no longer generates electricity, causing the gas valve to automatically shut off all gas to the heater, preventing the pilot from spilling gas into the firebox.

- Strict adherence to the instructions in this manual must be followed. Improper installation will void the warranty and safety listing.
- This appliance is manufactured to operate on natural gas (NG). It is field convertible to propane (LP) with the manufacturers' conversion kit included with insert. Burning incorrect fuel voids the warranty and safety listing and may cause an extreme safety hazard.
- Contact local building officials to obtain a permit and information on installation restrictions or requirements in your locale. It is also important to notify your homeowner's insurance company of the installation of this appliance as well.
- Do not store or use gasoline or other flammable liquids in the vicinity of the appliance.
- If the flame becomes sooty, dark orange in color, or extremely tall, DO NOT operate the appliance. Contact your dealer and arrange for servicing immediately.
- DO NOT operate the appliance if it is not operating properly in any manner. Contact your dealer for assistance.
- DO NOT operate the appliance if any portion was submerged in water or if any corrosion occurs.
- Do not place clothing or other flammable items on or near the appliance at any time. Due to thermostatic control, the possibility exists for the appliance to turn on, igniting any items on or near it.
- Open viewing glass for servicing only.
- Operate the appliance in accordance with the instructions contained in this manual.
- If the main burners do not start correctly, turn the gas off at the gas control valve and contact your dealer for service.

- This unit is not for use with solid fuel. DO NOT place anything inside the firebox other than the brickset, logset, and mineral wool included with the insert.
- If the logs become damaged refer to Parts and Accessories page of this manual for replacement.
- Face surfaces can become extremely hot during operation. Instruct your family and guests of this danger and supervise young children when they are in the same room as the heater.
- Instruct everyone in the house how to shut the gas off to the appliance and also at the main gas shut-off valve. The gas main shut-off valve is usually next to the gas meter or propane tank and requires a wrench to shut off. The manual shut-off valve will be installed by your installer in a location near the insert.
- Use the built-in piezo igniter to light the appliance. Do not use matches or any other external device.
- Allow the appliance to cool before carrying out any maintenance or cleaning.
- The pilot flame must contact the thermopile and thermocouple. If it does not, turn the gas control valve to "OFF" and call your Dealer.
- DO NOT away throw this manual. Important operating and maintenance instructions are included.
- DO NOT remove, replace, modify or substitute any part of the appliance.
- 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 hazards of high surface temperature and should stay away to avoid burns or lothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- Clothing or other flammable material should not be placed on or near the appliance.
- Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.
- Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.
- Only doors certified with the appilance shall be used.
- Ensure that the flow of combustion and ventilation air is not obstructed.
- Ensure that adequate combustion and ventilation are provided.

#### WARNING:

Do not operate appliance with the glass front OR panels removed, cracked or broken. Replacement of glass or panels should be done by a licensed or qualified service person.



**RATINGS & LISTINGS** 

Columbia Bay Direct Vent Gas Insert

THIS INFORMATION IS	RATINGS & LIST	INGS G ATTACHED TO INSERT WITH A CHAIN.
Tested and D-T L Beaverton Listed by D-T L Oregon USA	SERIAL NO.	ALADDIN HEARTH PRODUCTS
C DUD OMNI-Test Laboratories, Inc.	MODEL: QUADRA-FIRE COLUME	A Division of Hearth Technologies Inc.
Report No. / Rapport Numero	VENTED GAS FIREPLA	1445 North Highway Colville, WA 99114
061-S-30-5		-
	NOT FOR USE WITH S	SOLID FUEL
FAN TYPE VENTED CIRC	ULATOR Blower Electrical Rating115 V	'., 1.5 Amps, 60 Hz, 150 Watts
Appliances for Manufactured Home Altitudes." This appliance is manufactured for c	Vented Gas Fireplace Heater, and a s and Recreational Vehicles, CAN/Co operation with Natural Gas.	applicable sections of UL307b Gas Burning Heating GA 2.17-M91 "Gas Fired Appliances for use at High e must be used in conjuntion with the instructions in
This vented gas fireplace heater is n This appliance may be installed in a		ada remote thermostat installation is required.
•	For use with Natural Gas!	For use with Propane
1	0-4500'!	0-4500'
Input Rate on "HI" (BTU/Hr)•	30,000•	30,000•
Input Rate on "LO" (BTU/Hr)•	22,000•	23,000•
Maximum Output (BTU/Hr)•	22,386•	22,734•
Main Burner Orifice•	#36 (.106)•	#52 (.063)•
Minimum Inlet Pressure (Inches W.C.)		11"•
Maximum Inlet Pressure (Inches W.C.)		14"•
Manifold Pressure on "HI" (Inches W.C	.)• 3.5"•	10"
AFUE & Steady State at Max. 35' Pipe	• AFUE 85% SS 85%•	AFUE 85% SS 86%•
1992 and NFPA 54(88); or Canadian Ir MANUFACTURED OR MOBILE HOME	stallation Codes CAN/CGA-B149. E INSTALLATION: This appliance is onl arket, permanently located, manufactu	e, follow The National Fuel Gas Code, ANSI Z223.1- y for use with the type of gas indicated on the rating ired (mobile) home where not prohibited by local rtified kit is used.
	least annually by a qualified service pe	nstructions accompanying appliance. This appliance erson. More frequent cleaning may be required where
		e with the manufacturer's installation instructions.
CAUTIONS: All safety screen or guard of electrical shock. Switch the househo		ust be replaced prior to operating the appliance. Risk ervicng unit.
	MINIMUM CLEARANCES TO COM	BUSTIBLES
To Side Wall & Trim: From edge of stove side	.7" (178mm)	
• To MAX.8" Deep Mantel: • From top of stove	9" (229mm)	
•		
Hearth Extension: No hearth extension	required.	
	<u>\</u>	
	9" (229mm)	+ (178mm)



# SPECIFICATIONS

#### WARNING!

This appliance may only use the Direct Vent Chimney System Required with the Unit and MUST NOT be connected to a chimney flue servicing a separate Solid Fuel or Gas Burning appliance.

#### **VENT SYSTEM APPROVALS**

Approved vent system terminations are labeled for identification. Two separate 3" diameter listed flexible aluminum or stainless steel gas vent is used for both exhaust and incoming combustion air and must be run up through the fireplace chimney and terminated vertically. Horizontal terminations MUST NOT be done. Follow the vent manufacturer's installation instructions in conjunction with this manual.

#### SYSTEM COMPONENTS

Part Number	Description
840-0380	Columbia Bay Direct Vent Gas Fired Insert - Natural Gas (Firebox only)
DVIK33	Flex Kit includes 923K, 991, and Flex 3302.
Flex 3302	Flex Kit (Includes (2) 3"x30' Chimney Liner Flex)
923GK	3" Direct Vent Chimney Liner Termination Kit (Dura-Vent product)
980	Vertical Termination Cap with Wind Halo (Dura-Vent product)
991	High Wind Termination Cap (Dura-Vent product)
841-0870	Standard Panel Set (28-1/2" x 40")
841-0880	Medium Panel Set (31" x 44")
841-0890	Large Panel Set (33" x 46")

# DIMENSIONS



Height:	Front 18"	Rear: 15	;"
Width:	Front: 26"	Rear:	2
Depth:	Тор: 13"	Bottom:	1

20" 13" SPECIFICATIONS



# MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

When finishing the fireplace **NEVER OBSTRUCT OR MODIFY THE AIR INLET/OUTLET OPENINGS IN ANY MANNER.** While a hearth extension may be desirable for aesthetic reasons, it is not required for gas wall heaters per ANSI or CAN/CGA testing standards.

Provide adequate accessibility clearances for servicing and proper operation.



#### WARNING!

FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THESE DIAGRAMS OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APLIANCE MAY RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.

#### INSTALLATION

#### WARNING!

- 1. Wear gloves and safety glasses for protection.
- 2. Keep hand tools in good condition. Sharpen cutting edges and make sure tool handles are secure.
- 3. Always maintain the minimum air space required to the enclosure to prevent fire.
- 4. Read the following installation instructions.

INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE HEATER SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A QUALIFIED SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC. IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE HEATER BE KEPT CLEAN.

**Note:** Fireplace chimney systems must be cleaned thoroughly and inspected before installation of the appliance. If any portion of the chimney system shows signs of structural or mechanical weaknesses, such as cracks, leaky joints, corroded or warped surfaces, the faulty portion must be repaired or replaced.



## INSTALLATION

# Tools and building supplies normally required for installation.

Tools Pliers Phillips screwdriver Tape measure Level Electrical drill and bits Square High Temperature Sealant Material

**High Temperature Sealant Material.** Sealants that will withstand high temperatures (at least 350 degrees Fahrenheit); General Electric RTV103 (Black), or equivalent. Rutland, Inc. Fireplace Mortar #63, or equivalent; Dow Corning 732 or equivalent.

**NOTE:** To avoid down drafts and/or cold air problems, it is recommended to seal off the area between the termination cap and the top of the solid-fuel chimney opening into which the vent cap has been installed.

# CONNECTING THE VENT PIPE.

- 1. The damper of the masonry or factory-built chimney must be removed or fixed open to install the appliance.
- 2. Before installing the 3" flex vent pipe, mark or label the <u>exhaust</u> pipe at both ends.
- 3. Install the 3-inch flexible vent pipes down through the chimney. Attach and secure the bottom ends of the flex pipes to the starting collar bracket with hose clamps on each collar. Attach the labeled pipe to the exhaust collar on the starter collar bracket.
- 4. Place the insert on the hearth and carefully slide it into the fireplace. Be sure the gas line enters the heater through the gas access opening and that the electrical cord is extending out the right (cord may be re-routed to the left if necessary.)
- 5. Position any excess flex vent pipe back up into the chimney.
- 6. Install LP conversion, optional brickset and panel/trim at this point in accordance with your installation plans. See instructions in this manual to do so.
- 7. Slide the unit back ino the fireplace.
- 8. Attach the pipe-to-cap adapter to the termination cap and to the top of the flexible vent pipe and set the cap in place at the top of the chimney. Attach the labeled vent pipe to the labeled collar on the termination. See Figure 1.







#### WARNING!

The exhaust pipe must only be connected to the exhaust starting collar of the unit and the center collar of the termination cap.

The inlet air pipe must only be connected to the inlet air collar of the unit and either attached to the inlet air collar of the termination cap or terminated in the chimney.

Figure 3 This option shows the air inlet terminating in the chimney.



# INSTALLATION

## VENT CAP HEIGHT REQUIREMENTS



7 KH KHU KWRI WKH YHQWFDS P XVWP HHW WKH P LQLP XP EXLOGLQJ FRGH UHT XLLHP HQW GHVFLLEHG DERYH

## **GAS LINE INSTALLATION**

A gas line must be run into the existing fireplace for either a factory built fireplace or masonry. It is recommended that 1/2" inside diameter black pipe be run into the fireplace through the right side. The gas supply line should be installed and connected to the shut-off valve by a qualified service person in accordance with all prevailing building codes.

A 3/8" flare adapter (not supplied) is necessary to connect the flex line (supplied) to the black pipe. Turn Gas Shut-off Valve to the "OFF" position.

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

Check for leaks using a soap and water solution or gas sniffer.

Use high temperature silicone to seal the point where the gas line enters the existing fireplace firebox to prevent cold air infiltration.

#### CAUTION:

THE GAS SUPPLY LINE SHOULD BE PURGED OF ANY TRAPPED AIR PRIOR TO THE FIRST FIRING OF THE UNIT.



# LP CONVERSION

Manufacturer's conversion kit supplied with the appliance is required for this procedure. NOTE: If converting this unit to propane, so do at this point of installation.

#### WARNING! THE INSTALLATION OF THIS CONVERSION KIT MUST ONLY BE UNDER-TAKEN BY A QUALIFIED AND CERTIFIED GAS APPLIANCE INSTALLER.

## WARNING !

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installatin of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

#### CAUTION! DISCONNECT ANY ELECTRICAL CORDS AND TURN OFF GAS SUPPLY TO UNIT BEFORE PRO-CEEDING.

#### Valve Regulator Tower

- 1. Turn control knob to the OFF position and shut off the gas supply to the valve.
- Using a Torx TH20, or slotted screwdriver, remove the three pressure regulator mounting screws (A), pressure regulator tower (B), and diaphragm (C). (You may wish to retain these items for converting back to original gas if necessary.)
- Insure that the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten screws securely. (Reference torque = 25in/lb)
- 4. Install the enclosed identification label (F) to the valve body where it can be seen.

Continued on next page.



# LP CONVERSION, CONT.

- Remove front (if installed):

   Lift lid on top of insert; (2) Unlatch springs; (3) Door pivots on bottom, push in bottom and lift up.
- 2. Remove logs, if installed.
- 3. Remove metal refractory by first removing 2 screws on each side of bay front. See screw positions in **FIG. 1**. Then remove metal refractory brick piece by pulling each side in towards the middle of firebox and then rotating the piece out of the firebox. See **FIG. 2**
- 2. Remove log pan; First remove screws, then lift the front of pan vertically and slide pan to one side and pull out of firebox. **FIG. 3**
- 3. Remove burner pan. FIG. 4
- 4. Pull off pilot hood and set aside. FIG. 5
- 5. Use a 5/32" Allen wrench to remove the pilot injector. FIG. 6
- 6. Replace pilot injector with the one supplied with the appliance (#35 for Propane, #62 for Natural Gas).
- 7. Replace pilot hood, aligning notches and snapping into place.
- 8. Remove main burner orifice using a 5/8" wrench. See FIG. 7
- 9. Replace orifice with a #52 (.063") for LP.





FIG. 2













FIG. 7





#### **OPTIONAL BRICKSET INSTALLATION**

Order Part #841-0900

#### **FIREBOX ENTRY**

(1) Lift lid on top of insert; (2) Unlatch springs; (3) Door pivots on bottom, push in bottom and lift up.

- 1. Remove metal refractory brick: Remove 4 screws (2 per side) on the bay extension. See FIG. 1 of LP Conversion instructions on preceeding page.
- Holding both sides of metal refractory brick piece, pull the sides together slightly and rotate out of firebox. See FIG. 2 of LP Conversion instructions on preceeding page.
- 3. Install rear panel of new brickset by gently wedging it between the support shelf and baffle base. See FIG. 1 on this page.
- 4. Install each side panel. See FIG. 2 on this page.
- 5. Install brick brackets enclosed with brickset, using the screw placement shown in FIG. 1 of LP Conversion instructions on preceeding page.



FIG. 1 BRICKSET



FIG. 2 BRICKSET

# LOGSET INSTALLATION

- Remove log packaging from firebox. Note: If using (LP) conversion kit or optional brickset, install prior to installing log set.
- 2. Unwrap logs and ceramic log pins.
- 3. Place ceramic log pins in holes located on large log (#1). These pins are pressure fit. **FIG. 1**
- 4. Place the large log (#1) over placement pin to left side of pilot assembly on log pan and rest log in slots. **FIG. 2**
- 5. Place Log #2 over the right pin on log #1 and over the placement pin located in the back right side of the firebox. **FIG. 3**
- 6. Place log #3 pin into log #2 and over rear pin on log #1. FIG. 4
- 7. Set log #4 over the middle pin on log #1 and rest bottom edge on bend along inner edge of pan. **FIG. 5**
- 8. Place an even layer of mineral wool over surface of burner. **FIG. 6**



Fig.1 Log #1 with log pins installed.



Fig.2 Log #1 installed.

when burning.

i diameter.

Note: Placement of the Rock Woolshould be done with care and time, as this will effect the look of the fire

PLACING ROCK WOOL 1) Tear the Rock Wool into pieces no larger than 1/2"

2) Do not pack the Rock Wool against the Gas Ports of the Burner. Place mineral wool over entire burner surface lightly so gas can penetrate burner

ports. Flames exiting the burner pan gas ports will then contact the Rock Wool creating the "glowing

It is not necessary to use the entire bag of Rock Wool.

embers" look. Refer to Fig. 6 on this page.



Fig.3 Installing log #2



Fig.4 Installing log #3



Fig.5 Placing log #4



Fig.6 Logs installed with wool in place.

# **INSTALLATION - LOGS**



# PANEL SET INSTALLATION

Three panel sizes are available: Part #841-0870 Standard Panel set, 28.5" x 40" Part #841-0880 Medium Panel Set, 31" x 44" Part #841-0890 Large Panel Set, 33" x 46"

- Included in Kit: (2) Angle Brackets and set screws; (1) Trim, 3 piece; (2) Side Panels; (1) Top Panel; (1) Switch plug; (8) screws; and an instruction sheet.
- NOTE: Remove the door from the insert before beginning the panel installation.
- 1. Assemble the panel top to the panel sides with the screws provided. FIG. 1
- 2. Assemble the gold trim with the 2 corner brackets provided. FIG. 2
- 3. Slide the assembled trim over the assembled panel set.
- 4. Slide the panel/trim down over the face of the unit, behind the top, aligning the holes in the upper and lower, right and left corners, and secure the panel/trim set to the appliance with the attachment screws using four screws, two per side. FIG. 3
- 5. Determine your desired placement of the rocker switch.

1) If you wish to place it on the control panel in the "Main Burner" opening: Disconnect the "ON/OFF" switch from the low voltage wire leads. Pull the wires through the control panel, attach the wires to the "ON/OFF" rocker switch and push the rocker switch into the "Main Burner opening on control panel.

#### OR

2) If you wish to place it on the side of appliance in the knock out provided on the panel/trim: Carefully reposition the wiring beneath the firebox to the RIGHT side of appliance. Disconnect the "ON/OFF" switch from the low voltage wire leads. Pull the wires through the knockout plate on the panel/trim, attach the wires to the "ON/OFF" rocker switch and push the rocker switch into the opening on the panel/trim. Place lug provided with panel set in empty switch location.

- Install power cord restraint (cord is shipped exiting the right side of appliance, but can be routed in either direction.)
- 7. Slide the unit back until the panel is tight to the fireplace.



FIG. 1 Attach panel sides & top.



FIG. 2 Assemble Trim



FIG. 3 Attach Panel/trim set to insert



# **INSTALLATION - GRILLE & THERMOSTAT**

#### **GRILLE INSTALLATION**

- 1. Install 2 screws into holes on each side of grille.
- 2. Slide screws on grille into openings on door face from the back side.
- 3. Ensure that grille is aligned evenly left to right. Tighten screws.



#### DOOR CROWN INSTALLATION Part #841-0910 Gold - Optional Accessory #842-4880 Black - Replacement Part

- 1. Remove door from appliance.
- 2. Uninstall existing crown by removing four (4) screws on the back side of face (see Fig. 1 below), and pull crown off door.
- 3. Set replacement crown in place and re-insert and tighten screws.
- 4. **IMPORTANT! PREVENT PERMANENT STAINING!** Use a soft cloth and a window cleaning solution to clean all fingerprint oils from the gold surface of crown PRIOR

to lighting the stove.



#### THERMOSTAT INSTALLATION

If desired, a thermostat may be installed to regulate the Quadra-Fire Columbia Bay Insert. It is important to use a thermostat designed for millivolt operation. Do not connect this stove to a thermostat serving any other appliance. Bedroom installation in Canada <u>requires</u> this stove to be connected to a thermostat.

Connect the thermostat wires to the outside valve terminals labeled "TH" and "TPTH". Turn off the manual switch, located on the control panel.



## **REMOTE CONTROL**

A remote control or a wall switch may be wired to the thermostat terminals. Contact your Quadra-Fire dealer or service person for details.

# RECOMMENDED MAXIMUM LEAD LENGTH (TWO WIRE) WHEN USING WALL THERMOSTAT/SWITCH

Wire Size	Maximum Length
16 gauge	65 feet
18 gauge	40 feet
20 gauge	25 feet
22 gauge	18 feet

When mounting a thermostat on a wall, be sure to follow your thermostat installation instructions carefully. Ensure the thermostat is mounted level for accurate readings. The thermostat should be mounted on an inside wall and not in direct line with the stove convection air. If the thermostat is located too close to the stove, you may need to set the temperature setting slightly higher to maintain the desired temperature in your home.



# OPERATION

#### **GAS LINE PURGING**

Upon completing the gas line connection, a small amount of air will be in the lines. When first lighting the pilot light, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the pilot and burner will light and operate. Subsequent lightings of the appliance will not require such purging.

**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 red ignitor button at least once every second.

When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to paint and lubricants used in the manufacturing process. Additionally, for the first few minutes after each lighting, vapor may condense and fog the glass and the flames may be blue. After a few minutes, this moisture will disappear and within 15-30 minutes the flames should become yellow.

#### **FLAME APPEARANCE**

Refer to the photo below. Flames should have a simlar appearance in height.



# HIGH ALTITUDE OPERATION

In Canada, this unit is approved from 0 to 4500 feet above sea level. Installation of this stove at altitudes above 4500 feet is subject to field test of the individual installation and approval by the local authority having jurisdiction.

In the United States, input ratings of this unit are based on sea level operation, and shall not be changed for operation at elevations up to 2000 feet. For operation at elevations above 2000 feet, this stove shall be reduced at the rate of 4% for each 1000 feet above sea level. Exception: As permitted by the authority having jurisdiction. To adjust stove for operation above 2000 feet the burner orifices may need to be changed. The orifices are located beneath the log set so it is necessary to first remove the logs. WARNING ! The following procedure should only be undertaken by a qualified and certified gas appliance installer. CAUTION: DISCONNECT ANY ELECTRICAL CORDS AND TURN OFF GAS SUPPLY TO UNIT BEFORE PROCEEDING. CAUTION: The correct orifice placement is critical for proper appliance performance follow BTU de-rating chart below to locate the necessary orifice size for the front and rear burners.

-								-	
Orifice size	2000	3000	4000	5000	6000	7000	8000	9000	10000
at Sea Level: <u>Natural Gas</u>									
Front 36	36	36	37	38	39	40	40	41	41
<u>Propane</u>									
Front 52	52	52	52	53	53	53	54	54	54

#### Equivalent Orifice Sizes at High Altitudes (Includes 4% Input Reduction For Each 1000 Feet)

# **OPERATION**



# OPERATION

# AIR SHUTTER ADJUSTMENT

The air shutter is used to fine-tune the flame as necessary. **The air shutter is shipped in the fully open position.** Allow the unit to operate 15-20 minutes before making any adjustments to the shutter. This will give the flame time to reach its height and color before making adjustments to the air shutter.

The shutter control bolt adjusts the amount of air that mixes with the gas as it enters the burner pan. To adjust the air shutter:

1. Remove door.

2. Loosening thumb screws on right and left of control panel in front of appliance.

3. Pull off the Comfort Control knob and remove the control panel.

4. Locate the shutter adjustment bolt to the right side of controls beneath the firebox.



5. Using a 7/16" end wrench, turn the adjustment screw aproximately 1/4 turn counter clockwise  $\bigcirc$  to close fully, and 1/4 turn clockwise  $\bigcirc$  to open.

6. When desired flame is obtained, finger tighten nut to hold shuuter bolt in place.

#### CAUTION!

The firebox bottom may become very hot during this adjustment procedure. Take care to not contact any hot components.



#### **CONTROL PANEL**

**MAIN BURNER**......This control is used to turn the fireplace on and off.

**PILOT IGNITOR**......The pilot ignitor is used only to start the pilot. When pressed, it sends an electrical charge to the pilot assembly. This creates a blue spark directly next to the pilot, igniting the pilot flame.

**VALVE CONTROL**......This knob is used to control gas to the fireplace and for starting the pilot. There are three positions, ON, OFF, & PILOT. The pointer on the panel indicates the position of the knob.

**COMFORT CONTROL**......This knob controls the flame height from low ("LO") to high ("HI").

**FAN SPEED**.....This knob controls the speed of the internal convection blower that pushes the heated air into the room.

**NOTE:** If using a remote control or thermostat, the On/Off Switch must be left "OFF". Turning the On/Off Switch "ON" will keep the fireplace on continually.

# NORMAL OPERATING SOUNDS

Blower The fireplace uses a 160 cfm blower to circulate heated air into the living area. It produces a whirring sound which increases in volume as the speed is increased.
Pilot Flame The pilot flame remains on constantly and makes a "whisper" sound.
Gas control valve As the valve opens and shuts down it will click.
Burner pan The burner pan is located beneath the logs. It distributes the gas producing a clean, efficient and aesthetic burn. As the main burner gets up to temperature a creaking sound will be heard. This is the expansion of the metal. The sound will cease once the fireplace is up to temperature but may return upon cool down.
Blower snap disc This part may produce a clicking
sound as the blower turns on and off. Heat Exchanger A normal expansion and contraction sound may be heard.

#### **CONTROL PANEL**



# LIGHTING INSTRUCTIONS 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 that must be lit manually. When lighting the pilot, follow these instructions exactly.
- B BEFORE LIGHTING, smell around the appliance areas for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS

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

- C. Use only your hand to push in or turn the gas control know. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a gualified 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 on these instructions.
- 2. Set the thermostat to the lowest setting (if applicable) and turn off the switch at the control panel.
- 3. Disconnect power from appliance.
- 4. Open the door of the appliance with spring latches located at the top of door.
- 5. Wait five (5) minutes to clear out any gas. Smell for gas, including near the floor. If you smell gas, STOP! Follow "B" of the safety information above. If you don't smell gas, go to the next step.
- 6. Push gas control knob in and turn to "PILOT" position. NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
- 7. Press down on the gas control knob in "PILOT" position and simultaneously press piezo igniter on the control panel. (This may take many repetitions for lighting.)
- 8. The pilot should be visible through the door.
- 9. After the pilot is lit, continue holding control knob down for Approximately 30 seconds. Release knob and it will pop back up.

Pilot should remain lit. If it goes out, repeat steps 5 through 8.

If the 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. Close appliance door.
- 11. Turn gas control knob to "ON".
- 12. Turn burner switch on the control panel to "ON". If thermostat is to be used, leave switch in "OFF" position and set the thermostat to desired setting.
- 13. Reconnect electrical poser to appliance.

#### TO TURN OFF GAS TO APPLIANCE

- 1. Set the thermostat to lowest setting.
- 2. Turn off all electric power to the appliance if service is to be performed.
- 3. Push in gas control knob slightly and turn clockwise to "OFF position. Do not force.





**OPERATION - LIGHTING INSTRUCTIONS** 



#### **GLASS REPLACEMENT**

#### WARNING!

Never operate this appliance with the glass removed OR not sealed. Use only glass replacement components as supplied by manufacturer, available from your dealer.

#### **INSTALLATION OF GLASS**

NOTE: Glass can be replaced either as thre (3) separate pieces, or as an assembly with the door. See Parts and Accessories page to order.

TO REPLACE SEPARATE GLASS PIECES:

- 1. Turn off gas to appliance.
- 2. Remove door from the appliance and set on a protective surface.
- 3. Remove door crown. See instructions in this manual for installation of door crown for procedure.
- 4. Remove screws from front of door (it will be every other placement in which the screw head faces the front of appliance.)
- 5. Lay door face down and carefully remove aluminum posts, rope and broken glass. RETAIN THE ALUMINUM POSTS AND ROPE FOR RE-INSTALLING THE GLASS.
- 6. Carefully reinsert the replacement glass onto the gasketing material left in the door frame.
- 7. Reinsert the rope into the corner glass sections.
- 8 Reinsert the aluminum post in corners.
- 9. Reinstall glass retaining screws.
- 10. Reinstall door crown.

#### **DOOR INSTALLATION**

Place the 3 tabs on the bottom of the door/glass frame into the 3 slots on the bottom lip of the apliance. Push the top edge of the glass frame against the unit and secure the latches to the glass frame

#### **GOLD CLEANING**

All prints and smudges must be wiped clean from the gold trim prior to initial burn. If this is not done, these prints will be cured into the gold finish and set for the life of the heater. To keep the finish looking its best, gently wipe with a soft cloth. If desired, use a non-abrasive cleaner such as soap and water. Never use any solvent, thinner, or abrasive cleaner since these will damage the finish.

#### **GLASS CLEANING**

When cleaning the glass, use only non-caustic, non-abrasive cleaners. DO NOT ATTEMPT TO CLEAN HOT GLASS. It is dangerous, and the glass is more likely to be stained by the cleaning agent. Stubborn film can often be removed using Cook Top Cleaning Creme available at appliance centers.

#### SEASONAL SHUTDOWN

When the burning season comes to an end, the entire system should be shut down to prevent gas running to the appliance while it is not in use.

#### **OPERATION PROCEDURE DURING REGULAR USE**

Simply turn the switch/thermostat to the ON position. This will ignite the main burner.

#### SHUTDOWN DURING REGULAR USE

Simply turn the switch/thermostat to OFF. This will disengage the burner and the flames will extinguish.



# GENERAL

Installation and repair should be done by a qualified service person.

The appliance and its venting system should be inspected before use and at least annually by a qualified agency.

More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera.

It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

If the unit's installation is tampered with, or its venting system is removed for any reason, a proper reassembly and resealing of the vent-air intake system must be performed and checked by a qualified agency prior to operation.

Visually check the flame of the burner periodically, making sure the flames are steady; not lifting or floating. The flame color should be blue with yellow tips. The thermopile tip should be covered with flame. See figure below.



If the vent configuration is installed incorrectly, the vent may cause the flames inside the appliance to lift or "ghost" - a dangerous situation. Inspect the flames after installation to ensure proper performance. If the vent configuration is correct, yet the flames are lifting or ghosting, shut off gas to the appliance and contact the dealer for information on remedying the problem.

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

#### WARNING!

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

## YEARLY SERVICING PROCEDURES

WARNING! Failure to inspect and maintain the fireplace may lead to improper combustion and a potentially dangerous situation. The following procedures are recommended to be completed by a qualified technician once per year, preferably prior to the heating season.

- 1. Check the pilot flame. It should engulf approximately 3/8" of the top of the thermopile and engulf the top of the thermocouple (see illustration on page 33).
- Shut off gas to the fireplace by turning the valve control knob to "OFF" (see step A under "Starting the Pilot" on page 34). Allow the fireplace to cool for 15 minutes. Remove the fascia and glass.
- Remove the log set (NOTE: the logs are extremely fragile ceramic. If any log is cracked or deteriorated, replace it when reinstalling. Check the logs for sooting. A small amount of soot along the bottom of the logs is normal. If excessive sooting is found, the fireplace will require adjustment. Contact your dealer.
- 4. Clean the burner pan (especially in the burner holes and slots) and inspect the following:
- a. Check for burner pan holes that are cracked, severely warped, or corroded.
- b. Make sure the burner pan assembly fits flat against the floor of the firebox.
- c. Check the firebox and area around the pilot to make sure there is no warping or damage. If any problem is found, discontinue use and contact your dealer for service.
- 5. Reinstall the log set. Reinstall the glass (if the glass is damaged, contact your dealer for a replacement) Make sure the gasket along the perimeter of the glass contacts the face of the firebox and forms an airtight seal. If it does not, realign or replace the gasket to insure an airtight seal. Reinstall the fascia.
- 6. Inspect the area behind the access door. Check the gas control valve and all of the gas lines. If any damage is found, discontinue use and contact your dealer for service.
- Start the pilot and turn on the main burner. The flames should be orange/yellow and not touch the top of the firebox. If the pilot or main burners do not burn correctly, contact your dealer for service. Monitor the blower operation.
- 8. Remove any debris or vegetation near the vent termination, ensuring that the flow of combustion and ventilation air is not obstructed. Contact your dealer if any sooting or deterioration is found near the vent termination.



# **MAINTENANCE - BLOWER**

This appliance has a factory installed Blower, Junction Box, variable speed Rheostat Control Switch and Temperature Sensor Switch for the Blower. To provide the 110-120 VAC, 60 HZ are needed at the junction box. Simply plug the 3-prong grounded cord into a 3-prong grounded 110-120 VAC, 60 HZ wall outlet. This cord exits the unit at the lower right hand front of appliance. A 110-120 VAC outlet should be located close to the lower right side of the appliance to allow the Blower to be plugged in.

The Temperature Sensor Switch will automatically turn the Blower ON when the unit warms up. To install or service the Blower, this appliance must be removed from the fireplace. Remove the sheet metal screws holding the blower cover in place to access the blower.

#### WARNING!

This appliance is equipped with a Threeprong (grounding) plug for your protection against shock hazards and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. **Note:** This appliance DOES require a 110-120 VAC supply for operation of the Blower.

WARNING! <u>DO NOT</u> connect 110 - 120 VAC to the Gas Control Valve or Control Wiring System of this unit.

**Note:** This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with National Electric Code ANSI/NFPA 70-latest edition. This appliance can be used with a thermostat.

# **BLOWER WIRING**



03/28/01 #250-6240





# VALVE/PILOT WIRING



# **PRE-USE CHECK**

Before operating this appliance, please review the safety precautions noted in this manual, as well as the items listed below:

1. Check to make sure the logs and rock wool have all been placed correctly.

2. Check to see that all wiring is correct and enclosed to prevent possible shock.

3. Check to ensure there are no gas leaks. This may be done with a soap and water solution or a gas detector.

4. Make sure the glass is sealed and in its proper position. Never operate this heater with the glass removed or not sealed.

5. Flex liners and terminal cap are properly installed.

6. Prints and smudges are wiped from gold trim.

7. Read and understand these Instructions thoroughly before attempting to operate this appliance.



# TROUBLESHOOTING

Problem	Cause	Corrective Action
		Turn knob to PILOT and push in on the valve (see lighting instructions on page 21).
	B.Gas control knob isn't pushed in.	Check the shutoff valve.
	C.Gas is not turned on.	Check the shutoff valve.
	D.Ignitor isn't working.	Check wiring between piezo button and ignitor. Check for cracked ceramic on the electrode. Check spacing of ignitor tip and pilot hood. Spark should be extending approximately 1/8" to the bottom of the pilot hood. Adjust gap as necessary to give proper spark.
2. Pilot will not stay lit.	A.Defective thermo- couple.	Check pilot flame. See example on page 23. Adjust flame if necessary. Be sure thermocouple is constantly in contact with pilot flame. Be sure thermocouple line is attached to valve.
<ol> <li>Main burner will not light.</li> </ol>	A.Pilot has gone out.	Relight pilot (see page21 ).
	B.Gas control knob isn't turned to "ON".	Turn valve to "ON".
	C.ON/OFF switch.	Turn switch to "ON". Check wiring connections at the valve and switch.
	D.Thermostat is set too high or is dis- connected.	Set thermostat to a lower temperature.
	E.Bad Thermopile.	Check wiring connections and wiring diagram. Not heated up enough (takes about a minute to get up to correct temperature).
4. Glass Fogs up.	A. A normal result of gas combustion.	No action is necessary. After the heater has warmed up, the glass will clear.
5. Blue flames.	A. A normal result during the first 20 minutes of burning.	No action is necessary. Flames will begin to turn more yellowish after about 20 minutes of burning.
6. Flames too short.	Valve on low. Air shutter too wide.	Turn variable head to "HI". Close down air shutter; it is not recommended to close it unless absolutely necessary.
7. Glass soots.	Flame impingement on logs.	Adjust the log set so that the flame does not excessively touch logs.

#### WARRANTY

#### LIFETIME WARRANTY

The Aladdin Hearth Products limited Lifetime Warranty guarantees that the following components will work as designed for the lifetime of the stove or Aladdin Hearth Products will repair or replace them. These items include, but are not limited to, steel and cast iron components, all gas burners, gas logs, combustion chambers, heat exchanger systems, stainless steel firebox components, gold plating, doors, glass damaged by thermal breakage, steel baffles and manifold tubes. Labor is covered for the first five years.

#### THREE YEAR WARRANTY

Our EZ Clean firepots are covered under Aladdin Hearth Products three-year warranty program. Labor is covered for 3 years.

#### **ONE YEAR WARRANTY**

All electrical components such as, but not limited to, blowers, wiring, vacuum switches, speed controls, control boxes, thermodisc switches, pilot assemblies, gas valves, thermostats and remotes are covered under Aladdin Hearth Products one-year warranty program. Carburetors, burner rings and catalysts are covered under Aladdin's one-year warranty program. Porcelain finishes are warranted against manufacturer defects for one year. Labor to repair or replace these parts is covered for one year and reimbursed per our warranty service fee schedule. The igniter is not covered by any warranty, expressed or implied.

#### CONDITIONS

This warranty is non-transferable and is made to the original retail purchaser only provided that the purchase was made through an authorized dealer of Aladdin Hearth Products. It must be installed and operated at all times in accordance with the Installation and Operating Instructions furnished with this product, as well as any applicable local and national codes. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.

Labor to repair or replace items covered under the limited Lifetime Warranty will be covered for the first five years per our warranty service fee reimbursement schedule. Parts covered under the limited Lifetime Warranty will be covered for the lifetime of the appliance up to a maximum of five years after Aladdin Hearth Products discontinues the model. Adjustments, regular maintenance, cleaning and temporary repairs do not qualify for a service call fee and will not be covered. The replacement of consumer replaceable items and installation of upgraded component parts do not quality for a service call fee, and will not be covered.

This limited Lifetime Warranty does not extend to or include surface finish on the appliance, logs for oil or pellet stoves, door gasketing, glass gasketing, thermocouple covers, firebrick, kaowool or other ceramic insulating materials. It does not cover installation or operational-related problems such as the use of corrosive driftwood, downdrafts or spillage caused by environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, or negative air pressures caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

Any installation, construction, transportation, or other related costs or expenses arising from defective part(s), repair, replacement, etc., will not be covered by this warranty, nor will Aladdin Hearth Products assume responsibility for them. Further, Aladdin Hearth Products will not be responsible for any incidental, indirect, or consequential damages, except as results in damage to the interior or exterior of the building in which this appliance is installed. This limited Lifetime Warranty does not apply to the venting components, hearth components or other accessories used in conjunction with the installation of this product not manufactured by Aladdin Hearth Products.

This warranty is void if the stove has been overfired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals; the stove is subjected to prolonged periods of dampness or condensation; or there is any damage to the stove or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation. Aladdin Hearth Products may, at its discretion, fully discharge all obligations with respect to this warranty by either repairing or replacing the unit, or refunding the wholesale price of the defective part(s).

This limited Lifetime Warranty is effective on all Dovre and Affinity appliances sold after July 1, 1998 and all Quadra-Fire appliances sold after September 1, 1996, and supersedes any and all warranties currently in existence.