



North America's Best

GRAND BAY 40 GAS FREESTANDING (GB40 FS)

INSTALLATION, OPERATION, VENTING AND MAINTENANCE INSTRUCTIONS

CONGRATULATIONS!

You are now the proud owner of one of the finest gas
stoves on the market, the

**QUADRA-FIRE
GB40FS**



Tested and
Listed by  Beaverton
Oregon USA
OMNI-Test Laboratories, Inc.



CAUTION!

PRIOR TO FIRST FIRE:

Clean gold door with a
glass cleanser and soft
cloth, as fingerprint oils
will cause discoloration on
gold when heated.

WARNING

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

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

- Extinguish any open flame.
- Open windows.
- 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 service must be performed by a qualified installer, service agency, or the gas supplier.

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency, or the gas supplier.



401 N. Wynne Street
Colville, WA 99114

SAVE THESE INSTRUCTIONS

Part #250-2970 #842-1620 (Revised 01/2000)

www.aladdinhearth.com
aladdin@aladdinhearth.com

Congratulations




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,

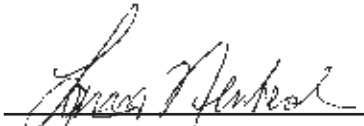

President

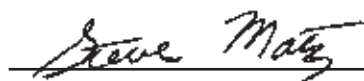

V.P. R & D



Controller

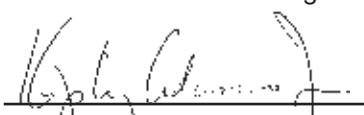

Operations Manager

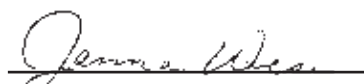

V.P. Sales & Marketing

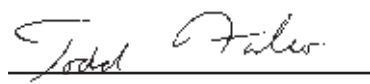

Western Sales Manager



Central Sales Manager


Eastern Sales Manager

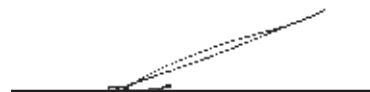

Manufacturing Eng. Mgr.


Sr. Purchasing Agent


Technical Support Manager


Customer Support Manager




Personnel & Safety Manager

W E L C O M E

NOTES



MODEL PURCHASED:

GB40FS

SERIAL NUMBER:

DATE PURCHASED:

DEALERSHIP WHERE PURCHASED:

DEALER PHONE NUMBER

ADDITIONAL INFORMATION :

ATTACH YOUR SALES RECEIPT AND WARRANTY STUB HERE:

NOTES

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**GB40FS SAFETY LABEL
(FOUND ON BACK OF STOVE)**

[illegible]

SAFETY

LABEL

SAFETY NOTICES

This appliance should only be installed by a qualified installer. It is approved for installation in a bedroom. Bedroom installation in Canada requires that the stove be connected to a thermostat. The appliance must be electrically grounded in accordance with local codes, or the latest edition of the National Electric Code. If no local codes exist, this appliance should be installed following the current codes:

CAN/CGA-B149.1	Natural Gas Installation Code
CSA-C22.1.....	Canadian Electrical Code
ANSI Z223.1.....	National Fuel Gas Code
ANSI NFPA-70	National Electrical Code

The control compartment, burner, and circulating air passageways **MUST** be kept clean and clear to allow for adequate combustion and proper operation. Provide adequate clearances around air openings and adequate accessibility clearance for service and operation. **NEVER** obstruct the openings of the appliance or the vent termination on the exterior of the building. **NEVER** vent the appliance to other rooms or buildings; this appliance must be vented **ONLY** to the outside. During installation, be sure to maintain minimum clearances to combustibles, as shown on page 9. Always contact your local building department or fire department prior to installing this appliance. If required, obtain a permit before installing, and have the completed installation inspected. Failure to do this could jeopardize your homeowner's insurance.

The area around the appliance **MUST** be kept free from combustible materials, gasoline and other flammable vapors and liquids.

This appliance is hot during operation, and should be located out of heavy traffic areas and away from furniture and draperies. Clothing or other flammable material should not be placed on or near the appliance. Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Children should not be left unsupervised in the room when this appliance is in operation.

If any part of this appliance has been exposed to water, **DO NOT USE** it!! Immediately call a qualified service technician to inspect the appliance, and to replace any part of the control system or any gas control which has been under water.

This appliance should **NOT** be modified under any circumstances. Any parts removed for servicing must be replaced before operating this appliance. Installation and repair should only be done by a qualified service technician. The appliance and its venting system should be inspected and cleaned annually by a qualified service technician. More frequent cleaning may be necessary due to excess lint and dust from carpeting, bedding material, etc. Be sure to turn off gas valve and pilot before cleaning this appliance.

Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the gas appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly. Your local fire department may provide assistance in selecting smoke detectors, or contact the Consumer Product Safety Commission, Washington, D.C. 20207.

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

SPECIFICATIONS

	NATURAL GAS	PROPANE
Manifold pressure	3.5" WC	10.0" WC
Minimum inlet gas supply pressure	4.5" WC	11.0" WC
Maximum inlet gas supply pressure	7.0" WC	14.0" WC
BTU input rating (high)	40,000	40,000
BTU input rating (low)	28,000	28,000
Efficiency with fan (steady state)	81.4%	83%
Efficiency without fan (steady state)	81%	81%
A.F.U.E.	66%	68%

GAS LINE CONNECTION

Gas line connection can be made near the lower rear of the appliance (3/8" gas hookup). You must supply a shutoff valve installed in a visible location within three feet (3') of the stove.

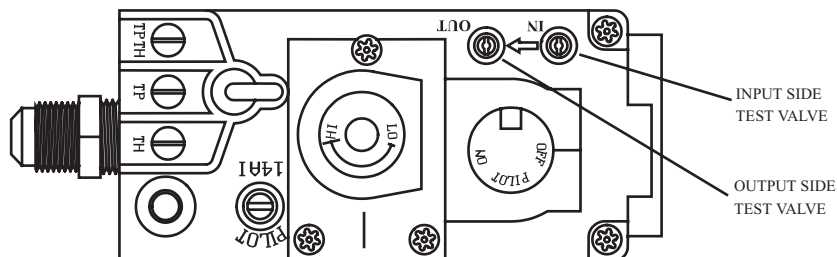
CAUTION

In some areas, gas line pressure may be more than 1/2 psig (14" wc). If you believe that this might be the case in your locality, contact your gas supplier or local utility company. Line pressure greater than 1/2 psig will damage the appliance valve. You must install a regulator upstream from the appliance if line pressure is greater than 1/2 psig.

PRESSURE TESTING

During any pressure testing of the gas supply piping system that exceeds test pressures of 1/2 PSIG, this appliance and its individual shutoff valve must be disconnected from the piping system. If test pressure is less than or equal to 1/2 PSIG, then this appliance must be isolated from the piping system by closing its individual shutoff valve. The gas valve is supplied with pressure test ports for checking input and output pressures. These are located just next to the on/off knob and can be found inside the hinged lower access grill. The port on the left is for output pressure and the port on the right for input. Pressure can be checked by turning the captured screw counterclockwise two or three turns and then placing the manometer tubing over the test port. BE SURE TO CLOSE CAPTURED SCREWS AFTER TESTING BY TURNING THEM CLOCKWISE. DO NOT OVERTIGHTEN SCREWS.

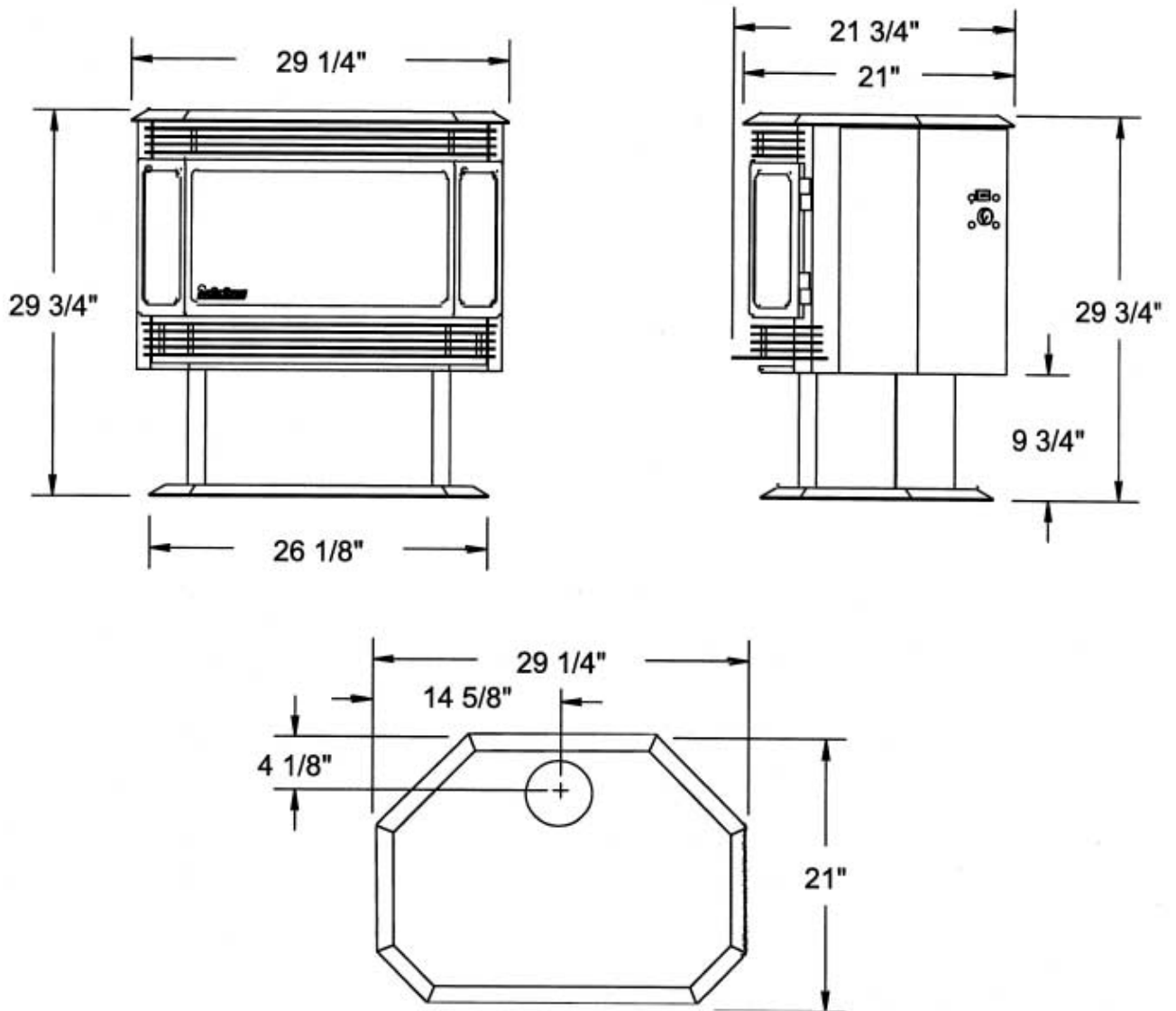
NOTE: To make flame and heat output adjustments, turn the HI-LO knob located on the center of the valve (as seen below). Turn clockwise for a higher flame and counterclockwise for a lower flame.



LISTINGS

The Quadra-Fire GB40 FS is listed to ANSI Z21.11.1 and CAN 1-2.1 by OMNI-Test Laboratories, Inc.

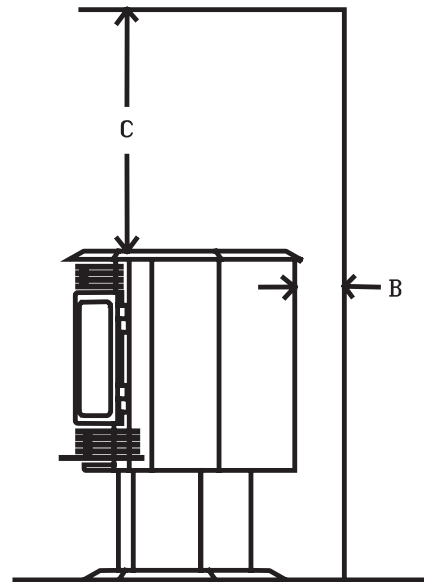
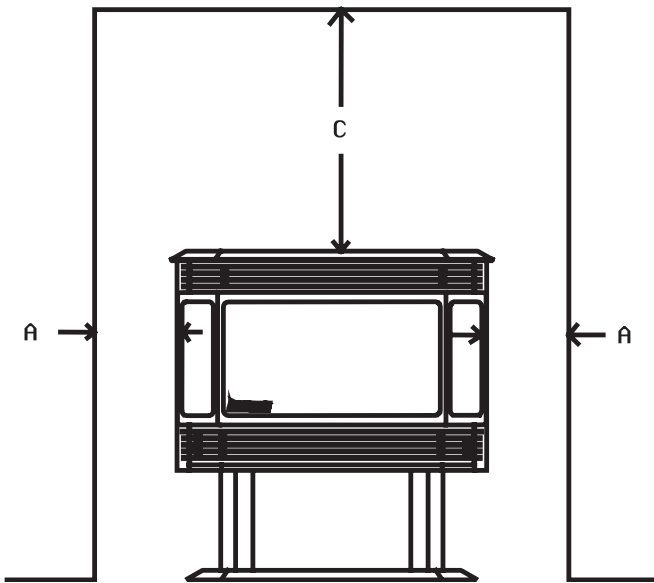
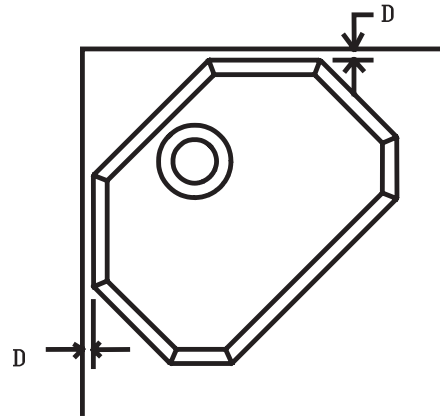
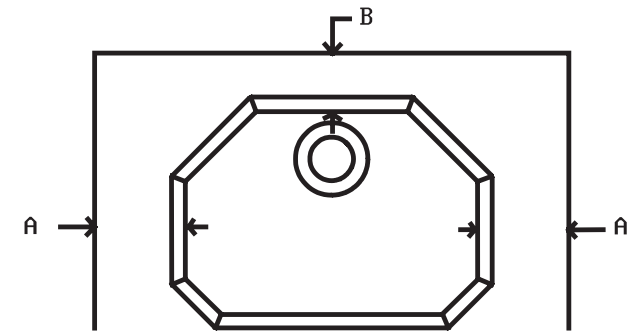
DIMENSIONS



CLEARANCES TO COMBUSTIBLES

Minimum clearances to combustible materials from stove body:

A	Side wall to combustible	7" (178mm)
B	Back wall to combustible	4" (102mm)
C	Top of unit	22" (560mm)
D	Corner clearance	1" (25mm)



CLEARANCES

HEARTH REQUIREMENTS

The floor area beneath the stove must be stable, level and strong enough to support the stove without a tipping hazard. Wood flooring, ceramic tile, brick hearths, or high pressure laminate flooring applied directly over the sub-flooring material meet this requirement. If the appliance is installed over carpet or combustible tile (vinyl tile), a metal or wood panel extending the full width and depth of the appliance must be installed.

HIGH ALTITUDE OPERATION

For installations in the United States and at altitudes above 2000 feet, the appliance input shall be adjusted in accordance with local codes or, in the absence of any, follow the current ANSI Z223.1, National Fuel Gas Code. For altitudes above 4500 feet, contact the authority having jurisdiction, or the manufacturer.

NOTE: 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 (600m). For operation at elevations above 2000 feet, this appliance shall be reduced at the rate of 4% for each 1000 feet above sea level.

Exception: As permitted by the authority having jurisdiction.

EQUIVALENT ORIFICE SIZES AT HIGH ALTITUDES (INCLUDES 4% INPUT REDUCTION FOR EACH 1000 FEET)

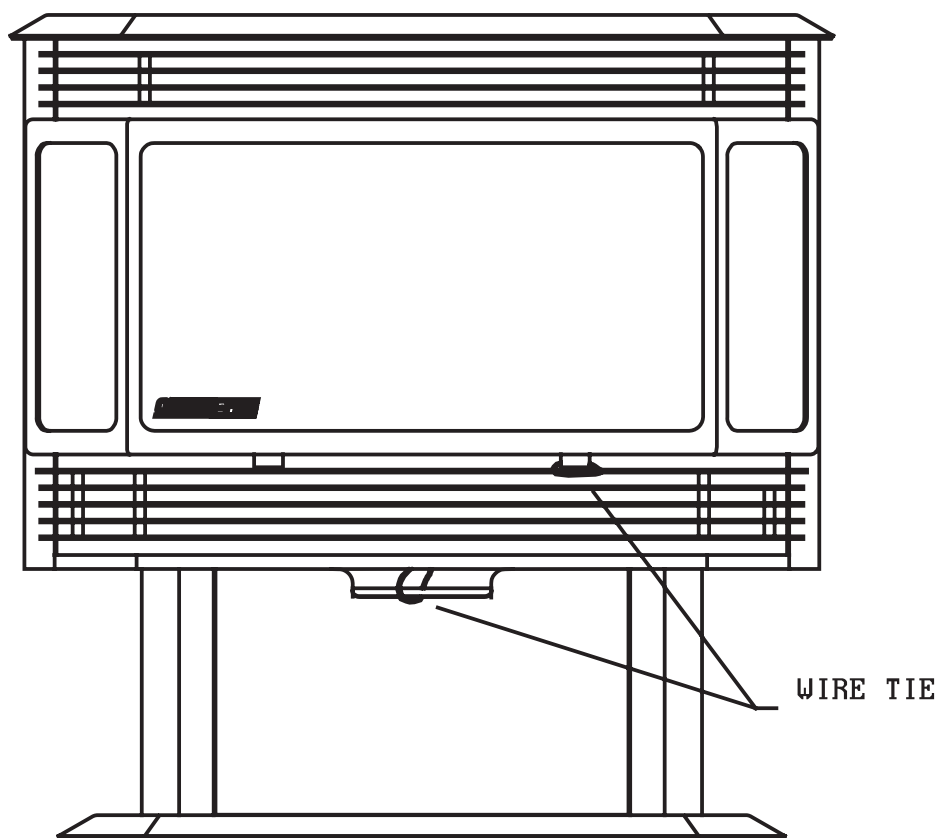
	Orifice size at sea level	2000	3000	4000	5000	6000	7000	8000	9000	10000
NATURAL GAS										
Front	54	54	55	55	55	55	55	56	56	56
Middle	53	54	54	54	54	54	54	55	55	55
Rear	38	39	40	41	41	42	42	43	43	44
PROPANE										
Front	65	65	66	66	66	67	67	68	68	69
Middle	62	63	63	64	64	65	65	66	66	67
Rear	53	54	54	54	54	54	54	55	55	55

UNPACKING THE STOVE

1. Unbolt pallet from appliance using a 7/16" wrench to remove the two bolts from the underside of the pallet.
2. Logs, twigs, brick refractory, glowing embers, touch-up paint, tee handle, and this owner's manual are shipped in the firebox for security in shipping.
3. Appliance door is sold and packaged in its own box.

GAS VALVE LOCATION

1. To gain access to gas valve, cut wire ties (shown below).
2. Bottom grill hinges down; stove controls will then be visible.
3. See Operation Controls on page 22 for information on using the controls to operate the stove.



UNPACKING STOVE

DOOR OPERATION INSTRUCTIONS

1. Verify that the proper door hook (part number 450-7490) is installed on the door. See Fig. A.

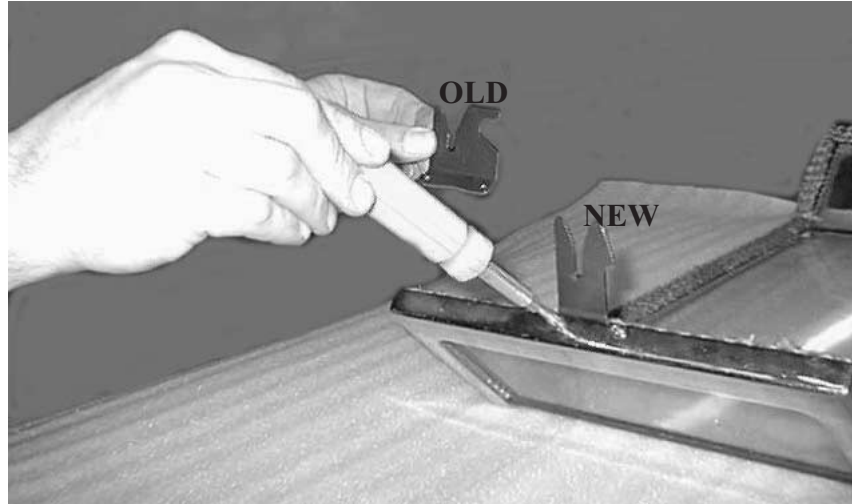


FIG. A

2. Install the door to check the latchbox adjustment. When closing the door, look between the door and the face of the stove at the latching arm. See Fig. B. Watch to see that the door hook is lifting up the latch, and when the door is fully closed that the latch returns to its original position. If the latch does not return, the latchbox is adjusted too tightly.



FIG. B

DOOR OPERATION INSTRUCTIONS

3. Open the door and place a sheet of paper between the door and the stove to check for door rope tension. Close the door and pull on the paper to feel the amount of pressure required to slide the paper out. Repeat this process at both sides of the door and at the center of the top and bottom of the door. If the paper does not have enough tension, the latchbox is adjusted too loosely.
4. To adjust the latchbox, open the door using the “T” handle allen wrench to press the “finger” of latch arm upward until door is released. See Fig. C. Using a 11/32" socket wrench (or 9mm) loosen the four, 8-32 mounting nuts, slide the latchbox forward if it is too tight, or towards the back if it is too loose, then secure with four, 8-32 nuts. Close the door and check for proper seal. Repeat process until a proper seal is obtained. When adjustment is complete, close and latch the door. Pull out on the door, to ensure the door is properly latched.
5. Repeat process until a proper seal is obtained.

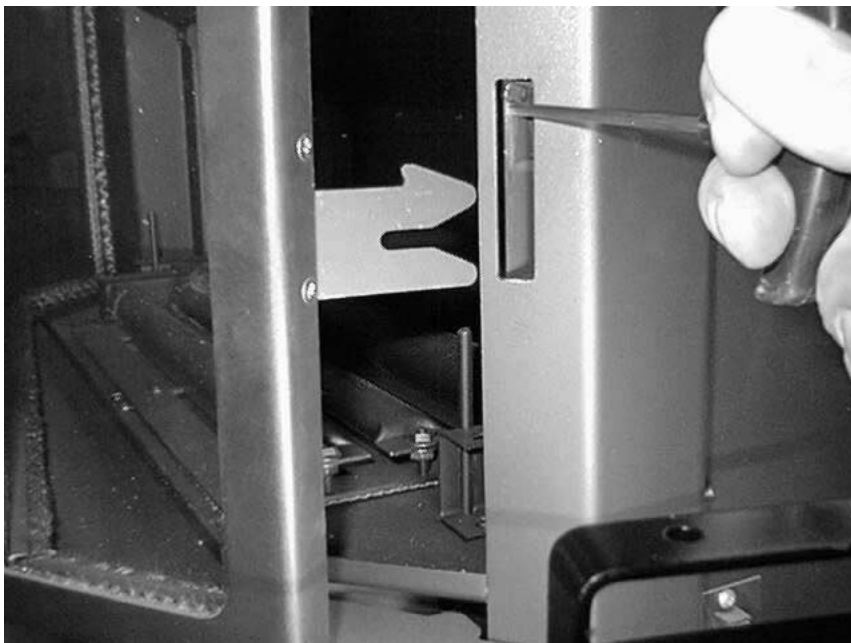


FIG. C

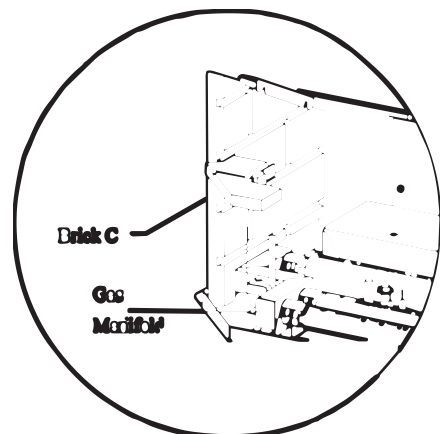
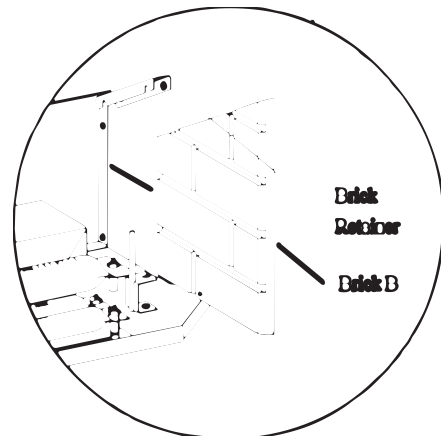
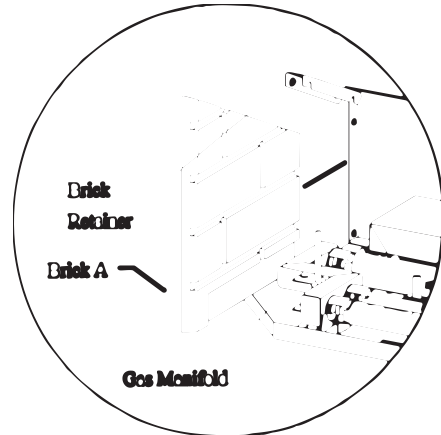
DOOR OPERATION

INSTALLATION: BRICK

BRICK INSTALLATION

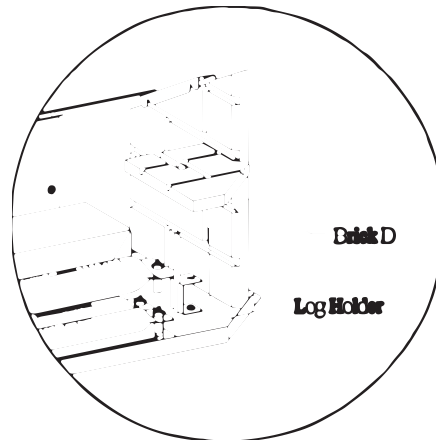
The brick in this unit is packed in the firebox to prevent breakage during shipping. To install the brick, follow the directions below:

1. Open stove door.
2. Place brick A on the left side of the firebox so that it slides into the slots on the top of the firebox and behind the manifold block.
3. Place brick B on the right side of the firebox in the slot provided.
4. Place brick C on the left side of the firebox floor in front of the manifold block.

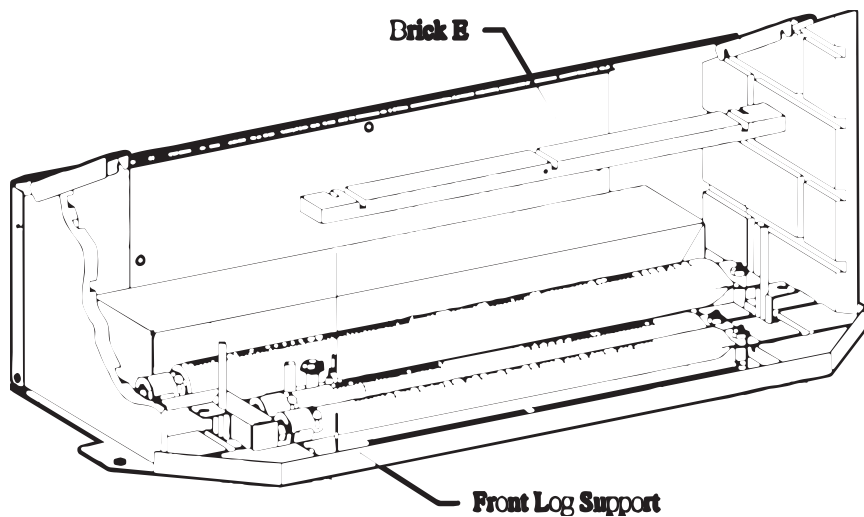


BRICK INSTALLATION

5. Place brick D on the right side of the firebox floor so that the cutout slides around the log holder.



6. Slide brick E in front of the front burner tube so that the brick fits between the burner tube and the face of the insert. Brick must be moved toward face of insert, and **MUST NOT BLOCK** front burner tube air shutter.

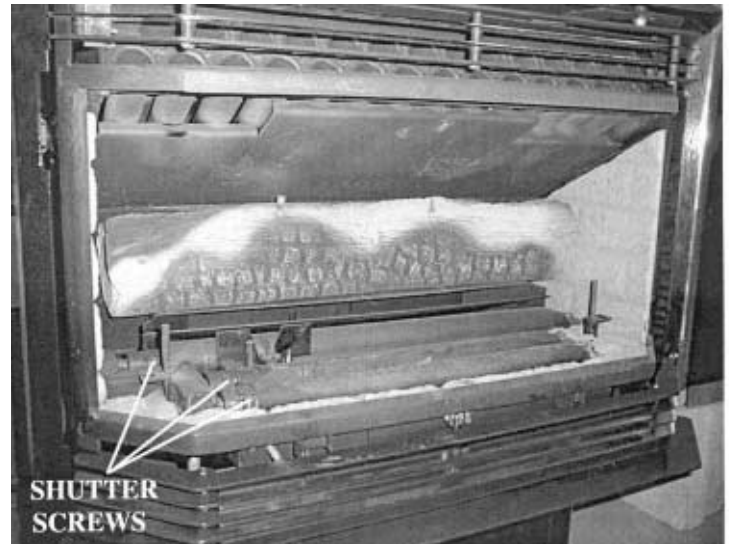


INSTALLATION:
BRICK

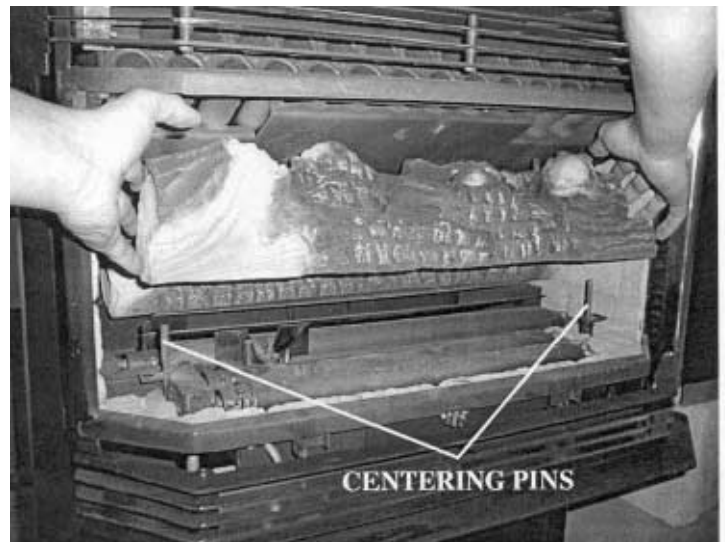
INSTALLING THE LOG SET

CORRECT LOG PLACEMENT IS IMPORTANT TO PREVENT SOOTING! The vacuum-formed ceramic logs are extremely fragile. PLEASE HANDLE CAREFULLY. Small chips on the logs can be covered up using the touch-up paint supplied with the stove. This appliance has been supplied with external shutter adjustments. Loosen the 3 shutter locking screws at left side of burners.

1. Install rear log on log shelf ensuring that both log shelf and log are pressed firmly against back wall.

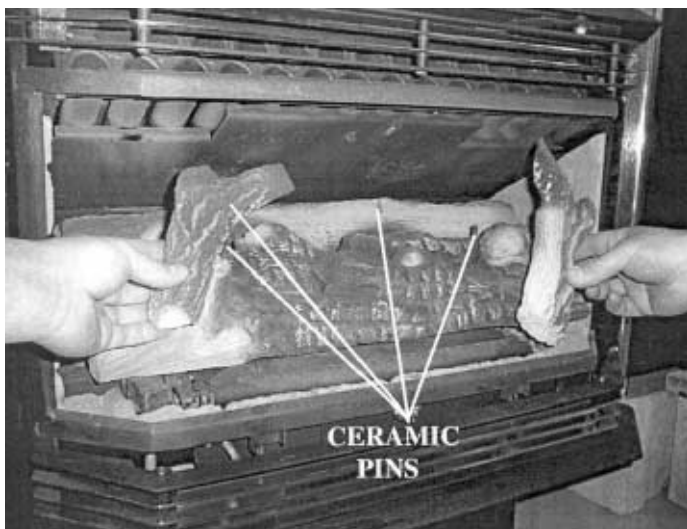


2. Install front log by positioning over centering pins and lowering. (Take care not to force and cause damage to molded holes in bottom of log.)



INSTALLING THE LOG SET

3. Place right twig on front and rear log using ceramic pins and placement holes in bottom of twig for alignment. (If ceramic pins are too close, tilt front log forward, do not make new holes in twigs.) Repeat step for left twig.



4. Place ember nuggets across front of burner.



5. Light appliance and let logs cure for 30 minutes. Adjust shutters to give good flame characteristics.

NOTE: If flame tips have dark yellow or black tips, shutters need to be opened.

6. After correct flame adjustment has been achieved, cool appliance, remove twigs and front log and tighten shutter adjustment screws.

IMPORTANT: If shutter adjustment screws are not tightened, expansion and contraction of burner can allow shutter to close and cause sooting.

THERMOSTAT INSTALLATION

If desired, a thermostat may be installed to regulate the Quadra-Fire GB40 FS. It is important to use a thermostat designed for millivolt operation. Do not connect this appliance to a thermostat serving any other appliance.

OPTIONAL THERMOSTATS

Manual Thermostat

Part #812-2880

Anticipator Setting 1.2

Electronic Setback

Part #811-0520

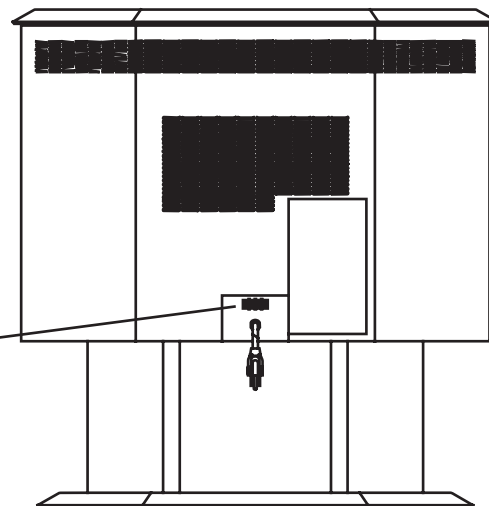
RECOMMENDED MAXIMUM

LEAD LENGTH (TWO WIRE)

WHEN USING WALL THERMOSTAT/ SWITCH

<u>Wire Size</u>	<u>Maximum Length</u>
16 gauge	65 feet
18 gauge	40 feet
20 gauge	25 feet
22 gauge	18 feet

Thermostat
connection block



Connect the thermostat wires to the two center screw terminals in the thermostat connection block, located at the lower rear of the unit (see figure above). Turn off the manual switch located on the control panel behind the lower grill.

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 (see page 34 for part number).

FAN POWER CORD

The fan cord is located at the rear of the appliance, and needs to be routed to a three-prong outlet with correct polarity. Be sure that the appliance is electrically grounded in accordance with local codes, with a current version of CSA C22 (in Canada), or in the absence of local codes, with the National Electric Code ANSI/NFPA 70-1987.

WARNING

Do not cut the grounding terminal off under any circumstances.
Do not route the power cord under the body of the appliance due to high temperatures.

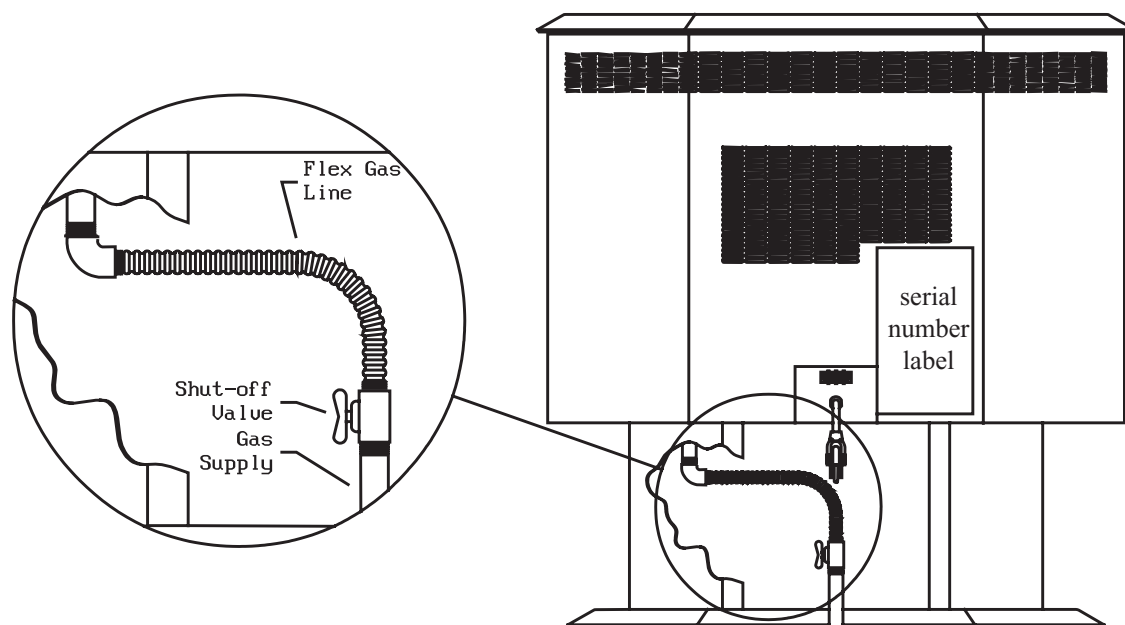
INSTALLATION PROCEDURES

The following procedures show some of the basic installation applications. Remember that every installation is different, and the installer should adjust to insure that the appliance is installed properly.

GAS CONNECTIONS

Before hooking up the stove to the gas supply, be sure that the appliance you are installing is designed for the type of gas being supplied to it. There is a serial number and listing label on the rear of the appliance that will indicate which type of gas it is designed to utilize. The gas valve also has a label telling the type of fuel for which it is set up.

There is a 3/8" gas hookup located under the stove body, with access from the rear through the pedestal cutout. We recommend connecting the stove with an approved flex gas line, as shown below. If flex gas lines are not approved in your area, you can connect a hard pipe to the gas hookup.



INSTALLATION: GAS CONNECTION

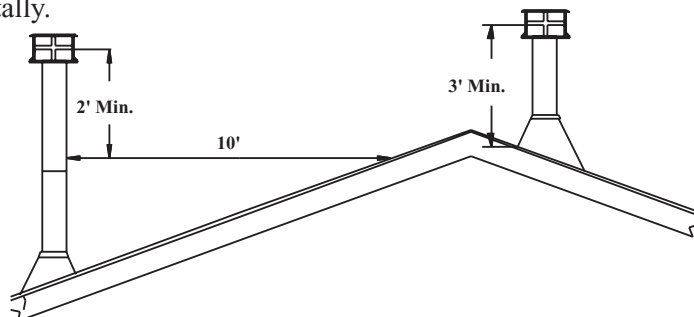
VENT TERMINATIONS REQUIREMENTS

This unit is equipped with a thermal damper, which has been set at the factory. Do not remove or attempt to adjust.

The vent must terminate vertically with an approved cap, and the vent termination must be located where it cannot become restricted or blocked by foreign material (for example, snow and leaves). The vent termination must be above the roof and not below any eaves or overhangs.

ANSI Z23.1, Section 7.6.2 requires a minimum vent height above the roof of 1 foot. On installations with roof pitch greater than 6/12, there must be at least 3 feet of chimney above the roof level, or 2 feet higher than any point within 10 feet measured horizontally.

NOTE: The installer must take into consideration other factors when determining vent termination height, such as negative pressure in the home, horizontal sections and offsets in flue system.



Use all required venting components when installing this appliance, and do not mix two or more manufacturers' products.

EXAMPLES:

1. When the vent passes through the ceiling or upper floor, use of a ceiling support or firestop is required.
2. Venting through a wall requires a wall thimble.
3. When vent passes through the roof proper flashing, storm collar and vent cap are required.

VENTING REQUIREMENTS

PLEASE READ AND FOLLOW ALL VENTING REQUIREMENTS

The GB40 FS must be installed to follow the CAN/CGA B149 (in Canada) or ANSI Z223.1 (in the U.S.A.) requirements, and any local codes or regulations of the authority having jurisdiction.

WARNING: This appliance must be installed in an area with an adequate amount of combustion and ventilation air for it to vent and operate properly. Be sure that provisions for adequate air are made at the time of installation.

THIS APPLIANCE MUST NOT BE CONNECTED TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.

This appliance is designed to attach to either 4" diameter type B vent or double thickness aluminum flex liner, running the full length of an existing masonry chimney. A minimum flue height of 12 feet is recommended. If B vent pipe is used, it must be supported by vent supports supplied by the vent manufacturer.

This appliance has a draft hood installed at the factory, so no external draft hood is required.

B-VENT CHIMNEY REQUIRES A 1" MINIMUM CLEARANCE TO COMBUSTIBLES.

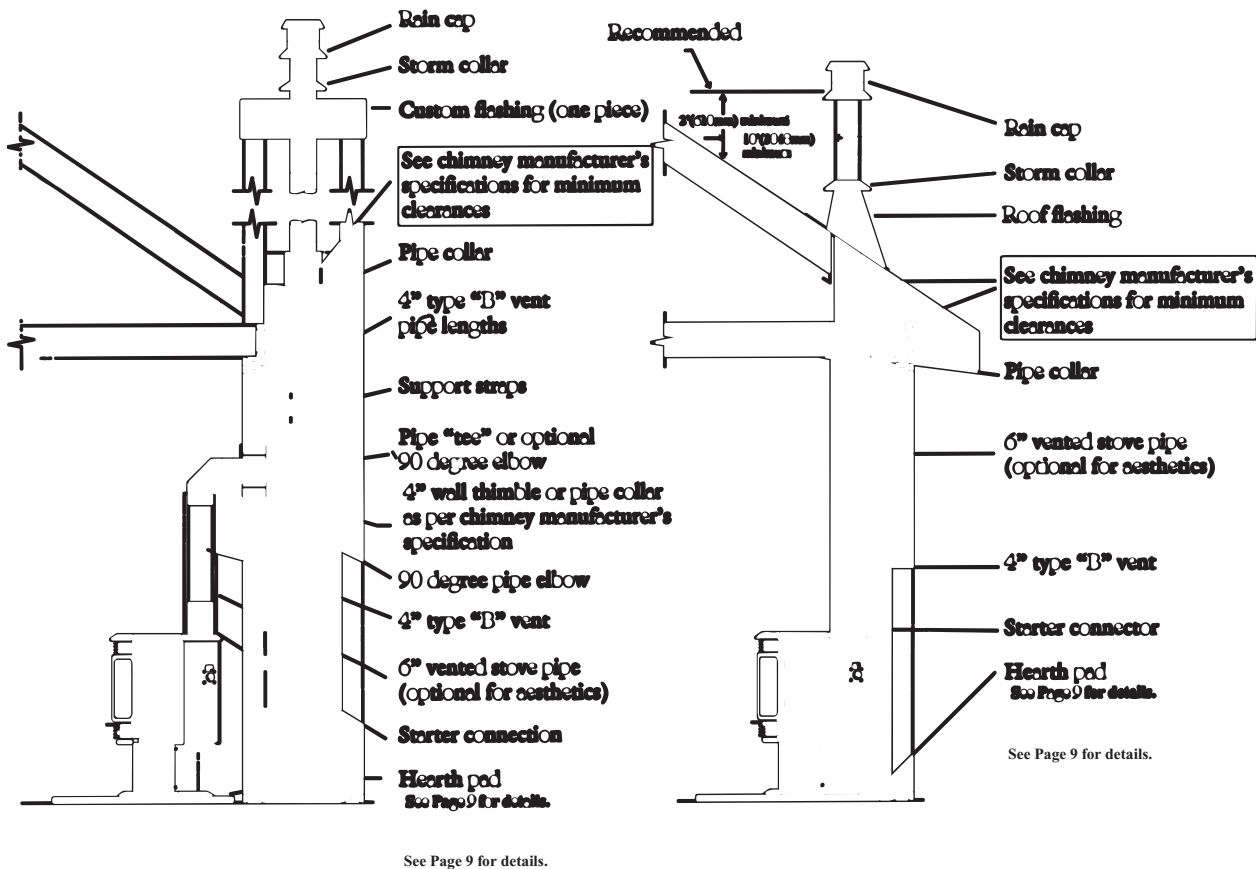
When venting vertically on exterior of structure, use an insulated venting system or properly built chase structure to help insulate the vent system. This is recommended due to the low flue temperatures of this appliance. This also helps prevent the possibility of spillage and draft problems occurring.

VERTICAL TERMINATIONS AND TERMINATIONS WITH HORIZONTAL SECTIONS

The total horizontal run must not exceed 50% of the total vertical run. Provide a 1/4" rise for each 12" horizontal run. **You must have at least 5 feet of vertical rise.**

NOTE: Recommended maximum 35' vertical.
Recommended maximum offset: Use 4 offsets equaling two 90 degree elbows.

You can place 6" vented stove pipe over the 4" B vent pipe for aesthetics, if you choose. There is an optional 6" flue collar available for this purpose (see page 34 for part number).



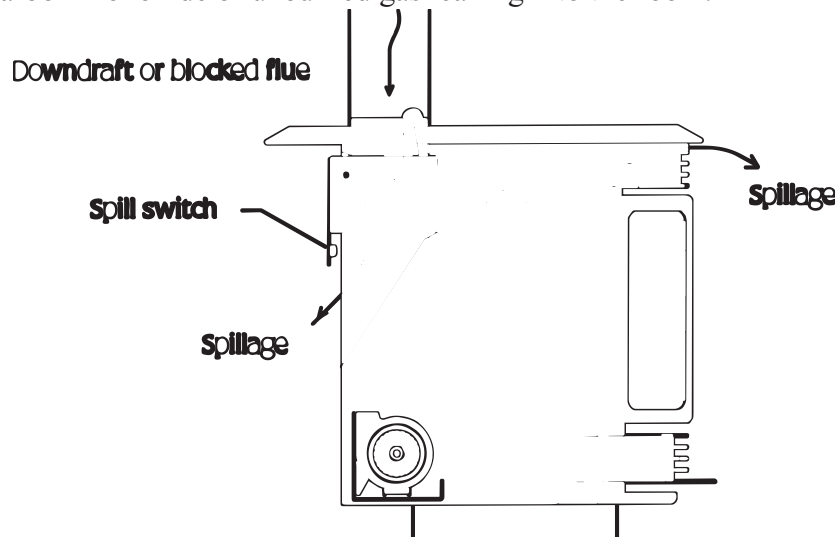
VENT ATTACHMENT TO FLUE COLLAR

The GB40 FS is equipped with a nondetachable flue collar. The draft hood is stationary to the stove. When slipping vent over flue collar, the vent should cause the spill strap to lift up. Do not attempt to rotate the damper on the shaft. This damper should be open when the unit is cold and will close thermally as the unit heats up.

After running the 4" liner down the existing flue, make sure that the damper plate is securely blocked open so that it cannot close and pinch or cut the liner. Securely attach the flue collar to the liner. Adjust and level the stove.

EXHAUST SPILLAGE AND TESTING PROCEDURE

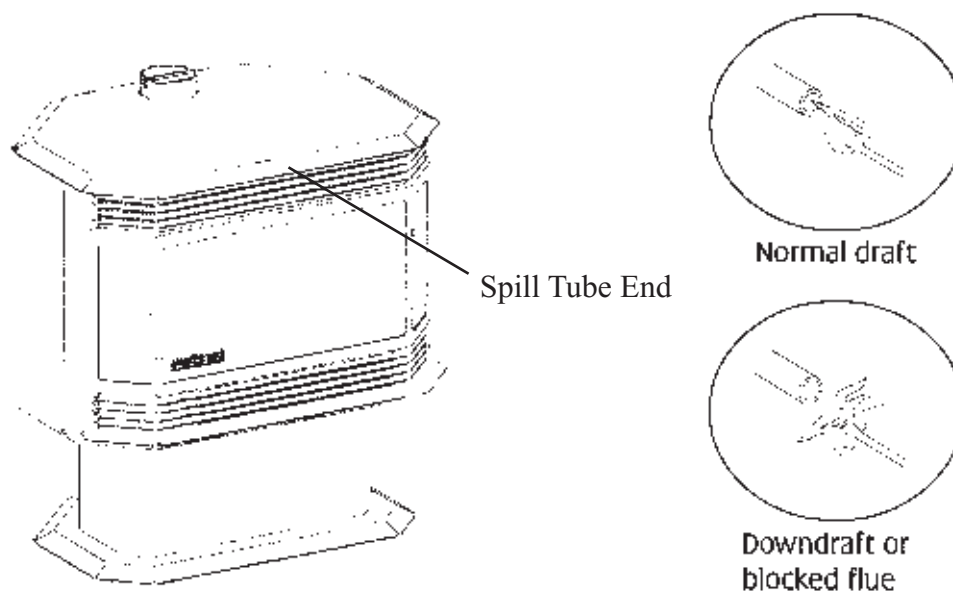
There is a spill switch located on the back of the stove below the draft hood, which is designed to shut down the stove in the case of a blocked flue or a severe downdraft. The switch acts as a safety shutoff to prevent carbon monoxide or unburned gas leaking into the room.



TO TEST FOR SPILLAGE:

1. Start all exhaust fans in the home, then close all doors and windows in the room.
2. Locate the spill tube, which extends to front of stove at top of grill (as shown below).
3. Turn the appliance on and adjust to highest setting. Leave the fan off.
4. **Wait five minutes**, then use a match or other device which creates smoke to test for a draft. Place the match in front of the spill tube (you may want to place a piece of scrap steel or aluminum foil under the match to block the natural convection air supplied through the convection grill). The smoke or flame should be drawn into the spill tube (see Normal draft below). If it is not, wait five minutes and try again. If there is still no draw, turn the unit off and check the venting for the cause. You may need to seek expert advice.

NOTE: For high wind areas, the use of a high wind termination cap is recommended.



LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

- A. This appliance has a pilot that must be lit manually, using the piezo igniter. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the 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 that has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information prior to this section.
2. If using a thermostat, set the thermostat to the lowest setting. Pull down the grill on appliance front to expose the control panel, and turn the ON/OFF switch to OFF.
3. Turn off all electric power to the appliance.
4. Open glass front.
5. Push in gas control knob slightly and turn clockwise to "OFF".
NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
6. Wait five (5) minutes to clear out any gas. Then smell for gas including near the floor. If you smell gas, STOP! Follow "B" of the safety information in the section prior to this. If you don't smell gas, go to the next step.
7. Turn knob on gas control counterclockwise to "PILOT".
8. Push in control knob all the way and hold in. Immediately light the pilot by repeatedly depressing the piezo igniter until a flame appears.
NOTE: The pilot should be visible through the door glass in the lower left hand corner between the front and rear logs. As piezo igniter is depressed a blue spark can be seen. When lit, the flame will be visible.

Continue to hold the control knob in for about thirty (30) seconds 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 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.
9. Close glass front.
 10. Turn gas control knob counterclockwise to "ON".
 11. If you are not using a thermostat, turn ON/OFF switch to ON. If you are using a thermostat, leave the switch in the OFF position and set thermostat to desired setting.

TO TURN OFF GAS TO APPLIANCE

1. If using a thermostat, set it to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Pull down grill on front of appliance to expose control panel.
4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
5. Close grill.

LIGHTING

FIRST FIRE

NOTE: Never operate this appliance with the door open.

NOTE: No electrical power supply is required for the gas control to operate. Standing pilot allows the valve to operate with manual switch or millivolt thermostat.

WARNING: When the appliance is equipped with a 24 karat gold-plated door, you must clean all the fingerprints and oils from the gold surface before firing the appliance for the first time. Use a glass cleaner or vinegar and a towel to insure that the oil is removed. If not cleaned properly before firing, fingerprints or oil can cause permanent markings on the gold plating. After the gold plating is cured, the oils will not affect the finish and little maintenance is required; just wipe clean as needed.

Before first firing the stove, read the owner's manual to become familiar with the stove's features, controls, and cautions for operation.

Remove all labels from glass before starting your first fire in this stove.

Plug power cord into a properly installed outlet for blower operation.

The blower system has an on/off thermo snap disc that will turn the fan on automatically when the proper temperature is reached, and will turn the blower off when it cools down in order not to blow cool air after shut down.

OPERATION CONTROLS

The operation controls are located on the control panel behind the lower grill, and consists of the following:

1) The rheostat, which controls the fan speed. 2) The manual on/off switch. 3) The piezo igniter. 4) Valve On/Off and HI/LO control knob.

Follow the lighting instructions on page 21 of this manual, or on the metal sheet chained in lower grill area by gas control valve.

During your first fire in the appliance, you may notice an odor and steam coming from the stove. This is normal, it is the high temperature paint finishing its curing process. Open the door and/or windows in the home or structure for ventilation.

We recommend that you initially cycle the stove on and off, heating the stove to curing stage for several minutes, and then turn it off to cool for five minutes. Then turn the stove back on, and burn until the steam and/or odor no longer appears. If odor persists, turn the gas supply to the stove off, and call your local dealer or authorized service person to inspect the appliance.

WARNING: Extended use of the appliance on high without using the blower can cause overheating conditions in the appliance, and result in tarnishing or discoloration of the gold plating on the door. It is recommended that when the blower is not in use, you should operate the stove at lower valve control settings or cycle the appliance on and off for short periods.

FIRE

FIRST

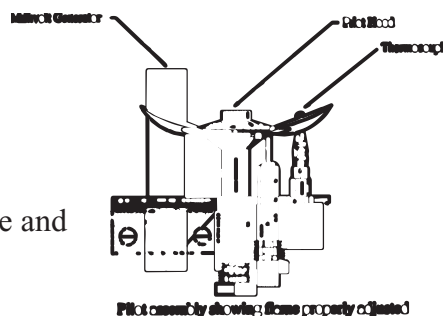
MAINTENANCE

CLEANING AND INSPECTION

At least once yearly, preferably before the heating season, have the insert and venting system cleaned and inspected by a qualified service person. This will insure proper and safe operation throughout the year.

CLEANING THE BURNER TUBES

1. Turn off pilot light.
2. Open door.
3. Remove logs and glowing charcoals.
4. Vacuum burner compartment, especially around orifice and primary air openings.
5. Relight pilot. Check to insure flames are touching millivolt generator (see diagram at right).
6. Reinstall logs. See page 14 for log installation instructions.
7. Close and latch door.
8. Recheck pilot and main burner to insure they are operating correctly.



GLASS CLEANING

WARNING: DO NOT CLEAN GLASS WHEN HOT.

1. Turn off pilot.
2. Open door.

WARNING:
DO NOT USE ABRASIVE CLEANERS ON GLASS OR GOLD SURFACES.

3. Using regular glass cleaner, spray the glass surface and wipe with soft cloth or clean paper towel until surface is dry.
4. Close and latch door.
5. Relight pilot and check main burner's operation.

NOTE: If you observe a white film on the door glass, use a hard water deposit glass cleaner or contact your dealer.

NOTE: Do not use abrasive materials or chemical cleaners.

WARNING: Running the appliance on high for extended periods without the use of the blower can cause the appliance to overheat, resulting in tarnishing or discoloring of the gold plating on the door. We recommended that you operate the appliance at lower valve control settings, or cycle the appliance on and off for short periods when the blower is not in use.

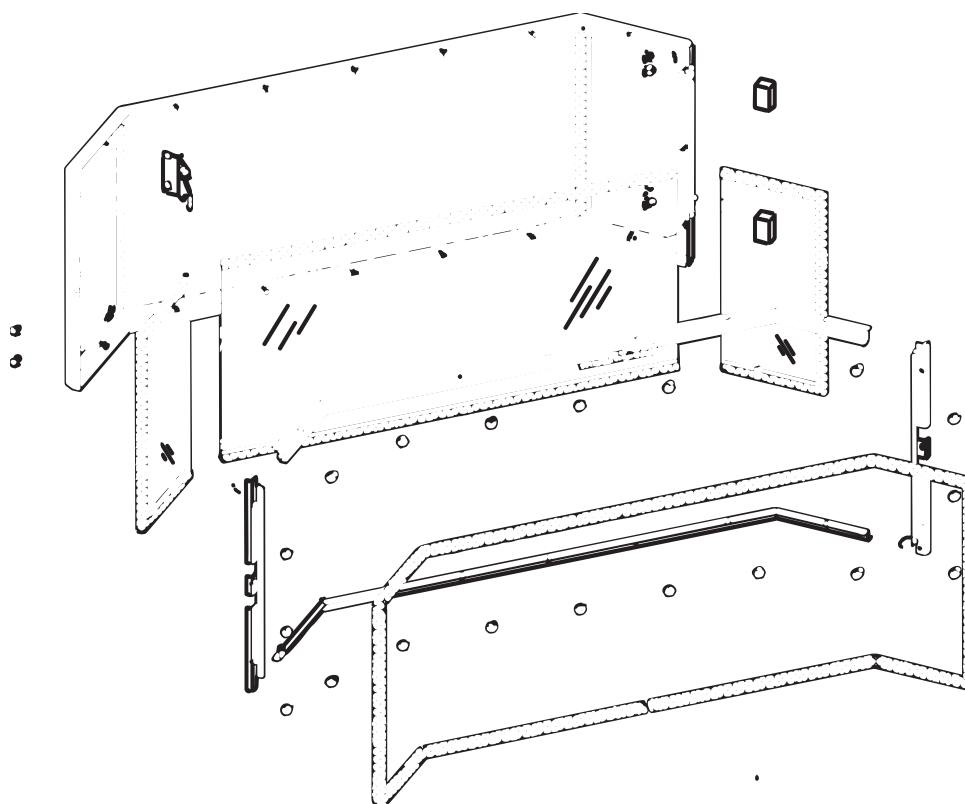
MAINTENANCE (cont.)

GLASS REPLACEMENT (posted doors only; full view doors must be returned to the manufacturer for glass replacement)

WARNING: USE ONLY MANUFACTURER-SUPPLIED REPLACEMENT PARTS (PART NUMBER 842-1360 SIDE GLASS; 842-1280 CENTER GLASS).

1. Open and remove stove door. Place door on a soft surface.
2. Remove rope gasket from door frame.
3. With a 5/16" wrench, remove all nuts that hold glass retaining bars in place. Remove retaining bars.
4. Be very careful when lifting old glass out of the door frame.
5. Insert new glass and reinstall in reverse order. Be sure to use new door gasket (part number 842-1420, 5/8" x 96" rope).

NOTE: Be sure to clean glass and gold door before lighting stove.



The diagram illustrates the electrical wiring for the 110VAC unit. It shows the following components and their connections:

- 110VAC Input:** Connected to the unit via a strain relief bushing. The ground (G) is connected to the unit's frame.
- Fan Speed Control:** A rotary switch with terminals B (Black), W (White), and R (Red). It is connected to the unit's internal wiring.
- Thermostat Terminal Block (optional):** A block with terminals for B, W, and R, connected to the unit's internal wiring.
- burner Assembly:** A gas burner with a thermocouple and a gas pilot. It is connected to the unit's internal wiring. A 2 pin push-in connector is used for the gas line.
- Coil Switch:** A switch that controls the coil. It is connected to the unit's internal wiring.
- Wiring Legend:**
 - B = BLACK
 - W = WHITE
 - R = RED
 - G = GREEN

BLOWER AND SNAP DISC REPLACEMENT

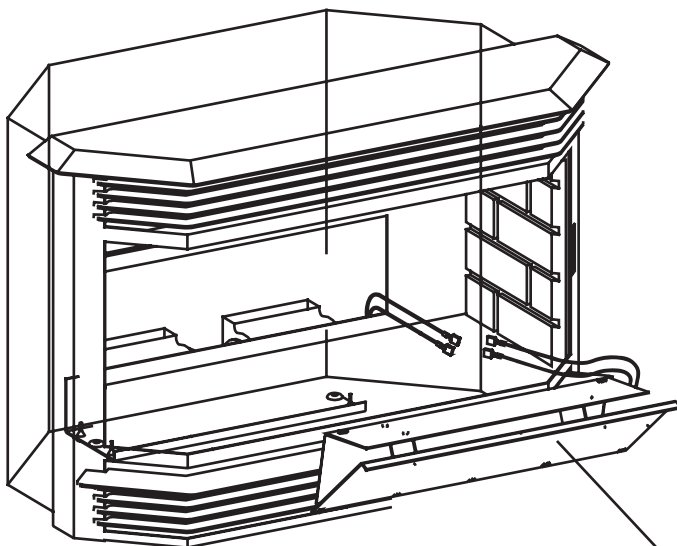
NOTE: BLOWER DOES NOT REQUIRE LUBRICATION. HOWEVER, WE RECOMMEND VACUUMING OR BRUSHING OFF DUST OR LINT FROM THE FAN BLADES AS NEEDED.

BLOWER AND SNAP DISC REMOVAL

This appliance is equipped with a 170 cfm convection blower that is automatically controlled by a temperature-sensing snap disc (145°). The blower has a speed control located on the control panel behind the lower grill. The blower is located behind the rear access panel at the back of the firebox. It will be necessary to remove the log set to remove the access panel. There are twelve screws that hold the panel in place. To replace or access the blower or snap disc, follow the instructions below and observe the drawing on the following page.

1. Disconnect power from the unit and turn off gas supply.
2. Remove the log set (see log installation, page 14, for reinstallation).
3. Remove the rear log support, then remove the eight screws that hold the rear access panel/heat shield assembly in place.
4. To remove rear access panel/heat shield assembly, slightly tip forward and remove from firebox. The snap disc is located on the back of this assembly. To replace snap disc, slide it out of its holder before removing heat shield from the firebox. If the snap disc is all that needs to be replaced, reinstall assembly and log set in reverse order. For blower removal, continue to the next step.
5. Disconnect the blower wiring. This blower is held in place by rubber grommets that slide over two metal studs welded to the bottom of the unit. Gently lift blower off mounting studs and remove.
6. Reinstall in reverse order.

IMPORTANT! The blower 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.



Rear Access Panel/Heat Shield Assembly

TROUBLESHOOTING

I. PILOT WON'T LIGHT

- A. Make sure valve setting is in the pilot position.
- B. Check for spark at igniter.
 1. If no spark:
 - a. Check the wiring between the piezo and the igniter. If bad, fix wiring; if good, you may have a faulty piezo or cracked ceramic on the electrode.
 - b. Call your Quadra-Fire dealer.
 2. If there is a spark:
 - i. Try to light the insert with a match. The flame should either light or flutter.
 - a. If the flame flutters but does not light the pilot, there probably is air in the line. Hold flame to pilot hood, then bleed the line until gas comes through.
 - b. If the match flame does not flutter, make sure the gas is turned on and be sure you are pushing the knob in all the way. If this still doesn't help, you may be dealing with a bad valve, a blocked pilot orifice, or a kinked pilot line.
- C. Call your dealer or authorized service person.

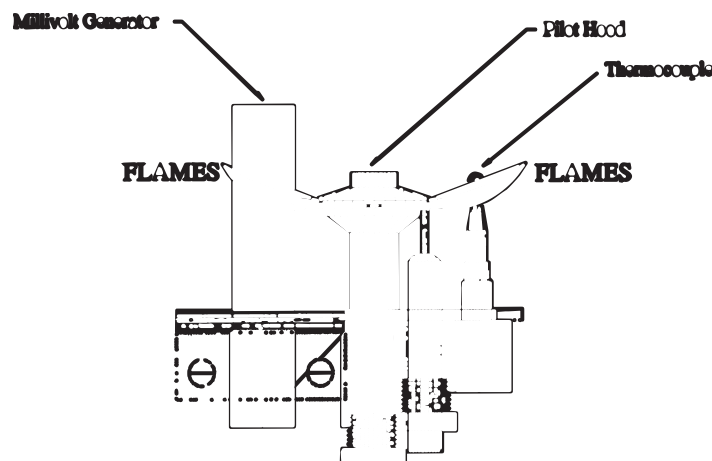
II. PILOT GOES OUT WHEN KNOB IS RELEASED

- A. Wait five minutes and try again. If the pilot still goes out, try again and hold the knob in longer.
- B. If the problem persists, call your dealer or authorized service person.

III. PILOT LIGHTS BUT BURNER WON'T IGNITE

- A. Make sure the knob is turned to the "on" position.
- B. Turn the thermostat up.
- C. If there is no thermostat, flip the manual switch on the control panel behind the lower grill. If the burner does not light, short out the thermostat screws on the face of valve marked TH and TPTH. If the burner lights, you may have a problem in the wiring of the stove, and it should be checked.
- D. Check the thermostat and thermopile connections at the valve, and tighten or reconnect if needed.
- E. If the burner still will not ignite, you may have a bad valve; call your dealer or authorized service person.
- F. Refer to page 16, which covers operation of spill switch and testing.

Check the pilot and burner flames periodically. When properly adjusted, they should look like the flames in the illustration below. Call your dealer or authorized service person to have the pilot properly adjusted.



Pilot assembly showing flame properly adjusted

CONVERSION KIT INSTRUCTIONS

NG Part #842-1361 LP Part#842-1641

Kit Contents:

- (1) Pilot Line
- (3) Burner Orifices
- (1) Pilot assembly
- (1) Conversion Sticker
- (1) Lox-it Fitting
- (1) HI/LO Valve Regulator with instructions

Tools Required:

- 3/8" socket and open end wrenches
- 7/16" socket and open end wrenches
- 10 mm open end wrench
- TH20 torque screwdriver
- Phillips screwdriver
- Gas Leak Detector
- Manometer

Directions:

1. Remove door, logs, burner tubes, nuggets and rear log shelf.
2. Remove 4 screws from burner pan and remove. **See Figure A**
3. Remove control panel cover. **See Figure B**
4. Remove two screws on pilot tower assembly and disengage assembly. **See Figure C**
5. Use 7/16" wrench to disconnect pilot line at valve.

FIG. A

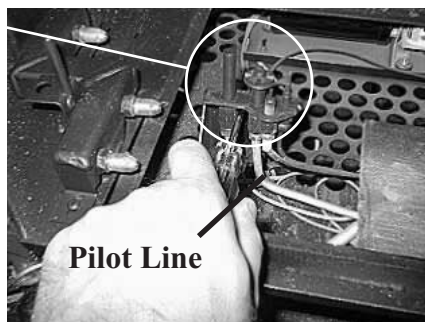


FIG. B



Pilot Tower

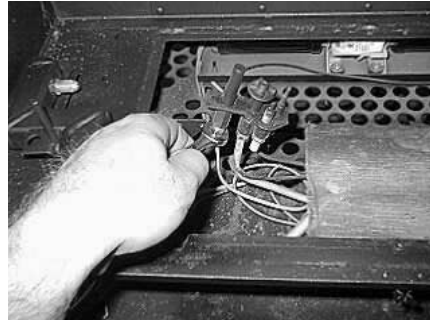
FIG. C



CONVERSION INSTRUCTIONS, CONT.

6. Disconnect thermocouple, thermopile and piezo wire connector from existing pilot assembly.
See Figure D

Fig. D



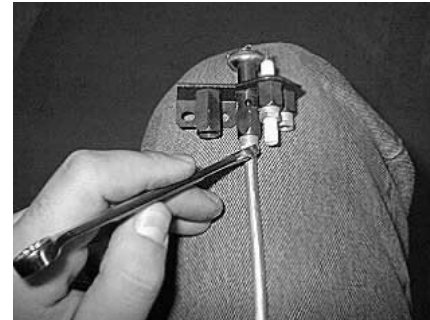
7. Align old pilot line side by side with new line and pre-bend new line into correct position. **See Figure E**

Fig. E



8. Insert new pilot line into new pilot assembly and tighten fitting with 10mm wrench. **See Figure F**

Fig. F



9. Insert new lox-it fitting into valve and hand tighten. **See Figures G & H**

Fig. G

Lox-it fitting

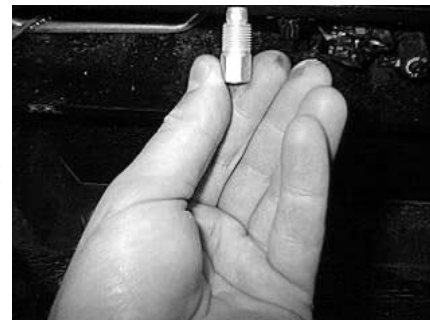


Fig. H

Lox-it fitting in valve.



CONVERSION

CONVERSION INSTRUCTIONS, CONT.

C O N V E R S I O N

10. Reinstall Thermocouple and Thermopile into pilot assembly and reconnect piezo wire connector. See **Figure I**

Fig. I



11. Secure pilot assembly to pilot tower with 2 screws.

12. Insert pilot line into lox-it fitting at valve and tighten fitting with wrench.

Fig. J



13. Use 3/8" socket wrench to remove existing burner orifices and install new burner orifices. See **Figure J**

NOTE! Ensure that orifice size for each burner tube and your altitude is correct, as stated below:

Altitudes of 0-2000'

	NG	LP
Front	#54	#65
Middle	#53	#62
Rear	#39	#53

Altitudes of 2000'-4500'

	NG	LP
Front	#55	#66
Middle	#54	#63
Rear	#40	#54

Fig. K

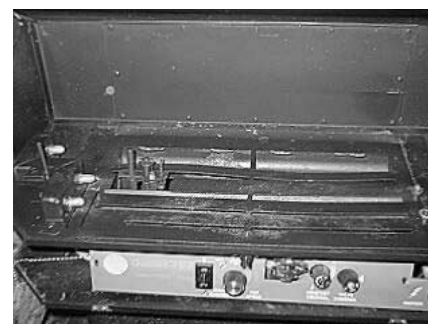


Fig. L



14. Reinstall burner pan and burner tubes. See **Figures K & L**

CONVERSION INSTRUCTIONS, CONT.

15. Remove and replace manual regulator. See instructions provided with part. **See Figure M**

Fig. M



Manual Regulator

16. Light pilot and leak test.
17. Ignite burners and check HI/LO regulator for leaks.
18. Apply conversion sticker to unit.
19. Turn unit OFF and reinstall components in reverse order.

CONVERSION

ACCESSORIES

These may be ordered through your Quadra-Fire dealer.

812-2880	Thermostat, manual
811-0520	Thermostat, electronic set back
841-0320	Remote control
841-0540	6" flue collar

SERVICE PARTS

842-1260	Baffle	842-0330	Gray Brick Panel Set
842-1351	Blower, 170 cfm	842-2030	Gray Left Side Brick
842-0380	Blower cord, 6 foot	842-2190	Gray Right Side Brick
842-0250	Millivolt generator (thermopile)	842-2270	Gray Left Floor Brick
842-0390	Thermocouple	842-2280	Gray Right Floor Brick
842-0250	Thermopile	842-2290	Gray Front Brick
842-1880	Pilot Assembly NG	842-0341	Log Set Split-Deep Bark
842-1890	Pilot Assembly LP	842-3450	Log-Front Split-Deep Bark
842-1400	Blower Snap Disc	842-3680	Log-Back Split-Deep Bark
812-0330	Spill Snap Disc	842-3690	Left Twig Split-Deep Bark
842-1660	Rocker switch (ON/OFF)	842-3510	Right Twig Split-Deep Bark
842-2300	Speed control knob	841-0370	Nuggets, charred
842-0370	Speed Control		
842-0360	Piezo igniter		
842-2080	Piezo wire		
842-1360	Side H-Channel glass		
842-1280	Front H-Channel glass		
842-3090	H-Channel Gold Door		
842-3100	H-Channel Black Door		
842-1761	Full view gold door		
842-0971	Replacement Door Latchbox		
842-1420	Door rope, 5/8" x 96"		
842-1390	Door hinge assembly		
842-1641	LP conversion kit		
842-1631	NG conversion kit		
842-1650	Wire Harness		
842-1620	Owner's manual		



GAS APPLIANCE LIMITED LIFETIME WARRANTY

Aladdin Hearth Products, warrants this gas heating appliance to the original purchaser for the lifetime of the appliance, to be free from defects in material and workmanship. This warranty gives you specific legal rights; you may have other rights which may vary from state to state.

This limited Lifetime Warranty covers items such as but not limited to combustion chambers, burners, gas logs, and gold plating.

All parts to be replaced must be returned to an authorized Aladdin Hearth Products dealer at purchaser's expense for inspection and approval by Aladdin Hearth Products prior to repair or replacement. No repair or replacement costs will be honored without approval of Aladdin Hearth Products.

This new Quadra-Fire product must be installed by a competent, authorized service contractor. It must be installed and operated at all times in accordance with the Installation, Operation and Maintenance 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 void this warranty.

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 provided by law.

All electrical components such as but not limited to blowers, wiring, thermodisc switches and gas valves are covered by Aladdin's one year warranty program.

Aladdin Hearth Products will not be responsible for any alteration to the unit which causes sooting that results in damage to the interior of the building in which this appliance is installed.

This warranty is void if the stove has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals, or the stove is subjected to prolonged periods of dampness or condensation.

This limited Lifetime Warranty does not extend to or include paint or ceramic insulating materials. It does not cover installation or operational related problems such as overfiring, or negative air pressures caused by mechanical systems such as furnaces, fans, clothes dryers, etc.

This limited Lifetime Warranty does not apply to hearth components or other accessories used in conjunction with the installation of this product not manufactured by Aladdin Hearth Products.

This limited Lifetime Warranty is effective on all gas stoves sold after September 1, 1996, and supersedes any and all warranties currently in existence.

IMPORTANT

This warranty is not valid unless the warranty registration card has been properly completed in full and returned within 10 days from the date of purchase to Aladdin Hearth Products, 401 North Wynne Street, Colville, WA 99114-2153. Proof of purchase is required to secure warranty.

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**Grand Bay 40 Gas Freestanding
OWNER'S MANUAL**