# **QUADRA-FIRE**

# **Owner's Manual**

Installation and Operation

**GAS-FIRED** 

Models:

QFI30FB QFI35FB

> 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.

# NOTICE

DO NOT DISCARD THIS MANUAL

AND A REAL



Important operating and maintenance instructions included.

- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

▲ WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- · What to do if you smell gas
  - DO NOT try to light any appliance.
  - **DO NOT** touch any electrical switch. **DO NOT** use any phone in your building.
  - Immediately call your gas supplier from 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.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, *Title 24 CFR, Part 3280* or *Standard for Installation in Mobile Homes, CAN/CSA Z240MH, in Canada.* 

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

# **A** WARNING



Glass and other surfaces are hot during operation AND cool down.

#### Hot glass will cause burns.

- DO NOT touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

• Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

A CO detector shall be installed in the room where the appliance in installed.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory trained professionals, or technicians supervised by an NFI certified professional. Read this manual before installing or operating this appliance. Please retain this owner's manual for future reference.

#### A. Congratulations

Congratulations on selecting a Quadra-Fire gas fireplace, an elegant and clean alternative to wood burning fireplaces. The Quadra-Fire gas fireplace you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this *Owner's Manual*. Pay special attention to all cautions and warnings.

This *Owner's Manual* should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

The information contained in this *Owner's Manual*, unless noted otherwise, applies to all models and gas control systems.

Your new Quadra-Fire gas fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Quadra-Fire family of fireplace products!

Homeowner Reference Information	We recommend that you record the following pertinent information about your fireplace.
Serial Number:	
Notes:	

## Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate usually located in the control area of the fireplace.

Type of Gas	Quadra-Fire, a brand of Hearth & Home Technologies, Inc. 7571 215th Street West, Lakeville, MN 55044	
	Type of Gas (Sorte De Gaz): NATURAL GAS This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 in the USA or CAN/CGA B149 installation codes. (Installer l'appareil selon les codes ou reglements locaux ou, en l'absence de tels reglements, selon les codes d'installation ANSI Z21XX-XXXX · CSA 2.XX-MXX · UL307B	
Gas and Electric Information	Minimum Permissible Gas Supply for Purposes of Input Adjustment.         Approved Minimum ( <i>De Gaz</i> ) Acceptable       0.0 in w.c. ( <i>Po. Col. d'eau</i> )         Maximum Pressure ( <i>Pression</i> )       0.0 in w.c. ( <i>Po. Col. d'eau</i> )         Maximum Manifold Pressure ( <i>Pression</i> )       0.0 in w.c. ( <i>Po. Col. d'eau</i> )         Minimum Manifold Pressure ( <i>Pression</i> )       0.0 in w.c. ( <i>Po. Col. d'eau</i> )         Minimum Manifold Pressure ( <i>Pression</i> )       0.0 in w.c. ( <i>Po. Col. d'eau</i> )         Total Electrical Requirements: 000Vac, 00Hz., less than 00 Amperes       MADE IN USA	Model Number
	IN CANADA ALTITUDE: 0-0000 FT. 0000-0000FT. MAX. INPUT BTUH: 00,000 00,000 MIN. INPUT BTUH: 00,000 00,000 ORIFICE SIZE: #XXXXX #XXXXX Serial (Serie): XXXXXXXX (Serie):	Serial Number

#### A Safety Alert Key:

- DANGER! Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- WARNING! Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- CAUTION! Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE: Used to address practices not related to personal injury.

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#### **B. Limited Lifetime Warranty**

#### Hearth & Home Technologies Inc. LIMITED LIFETIME WARRANTY

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

#### WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

#### WARRANTY PERIOD:

Warranty coverage begins on the date of original purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warrant	rranty Period HHT Manufactured Appliances and Venting									
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	Components Covered	
1 Year		х	x	х	х	х	x	х	All parts and material except as covered by Conditions, Exclusions, and Limitations listed	
				V	V	V			Igniters, electronic components,	
2.16	oro			Х	Х	Х			and glass	
∠ ye	ears	Х	Х	Х	Х	Х			Factory-installed blowers	
			Х						Molded refractory panels	
3 ує	ears			Х					Firepots and burnpots	
5 years	1 year			Х	Х				Castings and baffles	
7 years	3 years		х	х	х				Manifold tubes, HHT chimney and termination	
10 years	1 year	х							Burners, logs and refractory	
Limited Lifetime	3 years	х	х	х	х	х			Firebox and heat exchanger	
90 [	Days	х	х	х	х	х	Х	х	All replacement parts beyond warranty period	

See conditions, exclusions, and limitations on next page.

#### B. Limited Lifetime Warranty (continued)

#### WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

#### WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets, firebricks, grates, flame guides, light bulbs, batteries and the discolor-ation of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/ incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

#### This warranty is void if:

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

#### LIMITATIONS OF LIABILITY:

 The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

#### A. Appliance Certification

#### MODELS: QFI30FB, QFI35FB

LABORATORY: Underwriters Laboratories, Inc. (UL)

TYPE: Vented Gas Appliance Heaters

STANDARD: ANSI Z21.88-2009 • CSA 2.33-2009

This product is listed to ANSI standards for "Vented Gas Appliance Heaters" and applicable sections of "Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles", and "Gas Fired Appliances for Use at High Altitudes".

Quadra-Fire gas inserts are designed for installations into solid fuel masonry or factory built fireplaces that have been installed in accordance with the National, Provincial, State and local building codes. Fireplaces are to be constructed of non-combustible materials and, in the absence of local or regional codes, meet criteria of NFPA 211. No additional outside air source is required.

**NOTICE:** This installation must conform with local codes. In the absence of local codes you must comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A. and the CAN/CGA B149 Installation Codes in Canada.

**NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.** This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

## **B. Glass Specifications**

This appliance is equipped with 5 mm ceramic glass. Replace glass only with 5 mm ceramic glass. Please contact your dealer for replacement glass.

#### C. BTU Specifications

Models (U.S. or Cana	Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)	
	US (0-2000 FT)	36,000	17,000	33
QFI30-FB (NG)	CANADA (2000-4500 FT)	33,250	16,750	34
QFI30-FB (LP)	US (0-2000 FT)	36,000	19,000	50
	CANADA (2000-4500 FT)	31,000	15,500	51
	US (0-2000 FT)	40,000	20,000	31
QFI35-FB (NG)	CANADA (2000-4500 FT)	37,000	19,250	32
	US (0-2000 FT)	38,000	19,000	49
QFI35-FB (LP)	CANADA (2000-4500 FT)	35,000	17,000	50

#### D. High Altitude Installations

**NOTICE:** If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

- In the USA: Reduce input rate 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce input rate 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

Check with your local gas utility to determine proper orifice size.

#### E. Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 °C and UL763 shall be considered non-combustible materials.

#### F. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or plastered or unplastered shall be considered combustible materials.

#### **G. Electrical Codes**

**NOTICE:** 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** or the Canadian Electric Code CSA C22.1.

• A 120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

2 Operating Instructions

## A. Gas Fireplace Safety

## A WARNING



HOT SURFACES! Glass and other surfaces are hot during operation AND cool down.

#### Hot glass will cause burns.

- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.

• Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

If you expect that small children or vulnerable adults may come into contact with this fireplace, the following precautions are recommended:

- Install a physical barrier such as:
  - A decorative firescreen.
  - Adjustable safety gate.
- Install a switch lock or a wall/remote control with child protection lockout feature.

- Keep remote controls out of reach of children.
- Never leave children alone near a hot fireplace, whether operating or cooling down.
- Teach children to NEVER touch the fireplace.
- Consider not using the fireplace when children will be present.

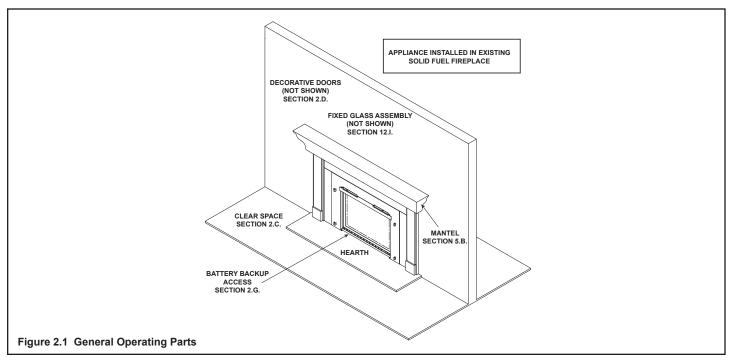
Contact your dealer for more information, or visit: <u>www.</u> <u>hpba.org/safety-information</u>

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation/trips, etc):

- · Remove batteries from remote controls.
- Turn off wall controls.
- Turn off gas controls valve on standing pilot models.

#### **B. Your Fireplace**

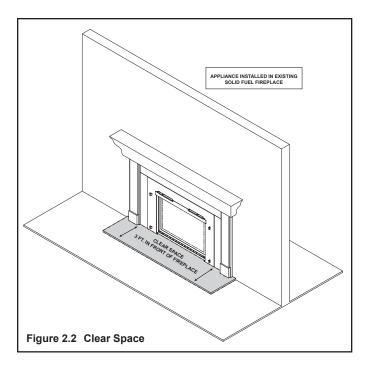
**WARNING! DO NOT operate fireplace before read***ing and understanding operating instructions.* Failure to operate fireplace according to operating instructions could cause fire or injury.



#### C. Clear Space

**WARNING! DO NOT** place combustible objects in front of the fireplace or block louvers. High temperatures may start a fire. See Figure 2.2.

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.



#### D. Decorative Doors, Fronts and Surrounds

**WARNING! Risk of Fire!** Install ONLY doors, fronts or surrounds approved by Hearth & Home Technologies. Unapproved doors or fronts may cause appliance to overheat.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

For more information refer to the instructions supplied with your decorative door or front.

#### E. Fixed Glass Assembly

See Section 12.I.

# F. Remote Controls, Wall Controls and Wall Switches

Follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

See your dealer if you have questions.

#### G. IPI Battery Tray/Battery Installation

The IntelliFire Plus<sup>™</sup> system has a battery backup option. Battery longevity and performance will be affected by the service temperatures of this appliance.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency such as an outage.

The removable battery tray is located in the lower left corner of the appliance next to the lower glass clip. Remove batteries from tray before sliding tray back into appliance. See Figure 2.3.

A notch on the right side of the tray engages the tray with the appliance. See Figure 2.4. To remove the tray, rotate the left side of the tray outward and pull to the left to disengage the notch. Place the batteries in the tray and return it to the closed position with the notch engaged in the appliance.



Figure 2.3 Location of Battery Tray



Figure 2.4 Pull Left Side of Tray Out and Disengage Notch



Figure 2.5 Battery Tray Pulled Out

#### H. Control Module Operation

1. The control module has an ON/OFF/REMOTE selector switch that must be set. See Figure 2.6.

OFF Position: Appliance will ignore all power inputs and will not respond to any commands from a wall switch or remote. The unit should be in the OFF position during installation, service, battery installation, fuel conversion, and in the event that the control goes into LOCK-OUT mode as a result of an error code.

ON Position: Appliance will ignite and run continuously in the HI flame setting, with no adjustment in flame output. This mode of operation is primarily used for initial installation or power outage operation with battery backup.

REMOTE Position: Appliance will initiate commands from an optional wired wall switch and/or the wireless remote (RC300).

- 2. If using a wired wall switch with the module in REMOTE mode, the flame output can be adjusted with the HI/LO selector switch on the module. See Figure 2.6. Note that the flame HI/LO selector switch will become inactive once an optional remote control (RC200/RC300) is programmed to the control module. Note that the control module will always ignite the fireplace on HI and remain so for the initial 10 seconds of operation. If the HI/LO is switched to the LO position, the flame output will automatically drop to the lowest setting after the flame has been established for 10 sec. After this 10 second period, the flame can be adjusted from HI to LO with the switch.
- 3. The control module has safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the RC300 remote.
- 4. If you intend to use both an optional wired wall switch and the RC300 remote control to operate your fireplace, the wall switch will override any commands given by the remote.

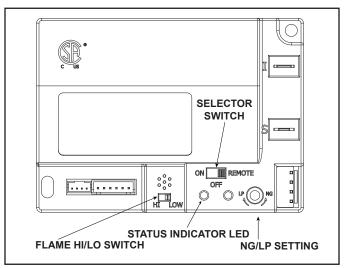


Figure 2.6 Control Module

#### 5. Module Reset Switch

This module may lock-out under certain conditions. When this occurs, the appliance will not ignite or respond to commands. The module will go into lock-out mode by emitting three audible beeps, then continuously displaying a RED/GREEN error code at its status indicator LED.

- Check battery tray. Remove batteries if installed. Batteries should only be installed for use during power outages. See Section G.
- Locate the module reset switch. (SeeFigure 2.7).
- Set the module reset switch to the RESET position.
- Wait five (5) minutes to allow possible accumulated gas to clear.
- · Set the module reset switch to ON.
- · Start the appliance.

**WARNING! Risk of Explosion! DO NOT** press the module reset switch more than one time within a five minute time period. Gas may accumulate in firebox. Call a qualified service technician.

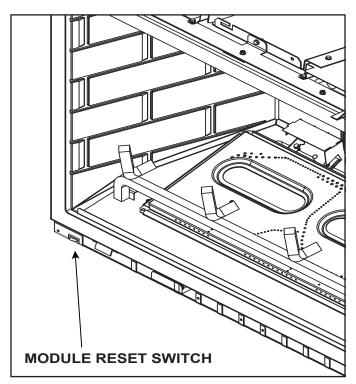


Figure 2.7. Module Reset Switch

#### I. Before Lighting Fireplace

Before operating this fireplace for the first time, **have a qualified technician**:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, ember material and/ or other decorative materials.
- · Check the wiring.
- · Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position and that the integral barrier is in place.

#### **WARNING!** Risk of Fire/Asphyxiation! DO NOT operate fireplace with fixed glass assembly removed.

This fireplace has an Intellifire Plus<sup>™</sup> ignition system.

## J. Lighting Instructions (IPI)

The IPI system may be operated with four AA-cell batteries.

# FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. DO NOT try to light the burner by hand.
- **B. BEFORE LIGHTING,** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS

- DO NOT try to light any appliance.
- **DO NOT** touch any electric switch; do not use any phone in your building.

# WARNING:

#### DO NOT CONNECT LINE VOLT-AGE (110/120 VAC OR 220/240 VAC) TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

• Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.
- **C. DO NOT** use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

# **CAUTION:**

Hot while in operation. **DO NOT** touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

**DO NOT** operate the appliance with fixed glass assembly removed, cracked or broken. Replacement of the fixed glass assembly should be done by a licensed or qualified service person.

#### NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

# Also Certified for Installation in a Bedroom or a Bedsitting Room.

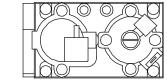
For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

# INSTRUCTIONS (IPI)

 This appliance is equipped with an ignition device which automatically lights the burner. DO NOT try to light the burner by hand.

> GAS VALVE



- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you do not smell gas, go to next step.
- 3. To light the burner:

Equipped with wall switch: Turn ON/OFF switch to ON.

Equipped with remote or wall control: Press ON or FLAME button.

Equipped with thermostat: Set temperature to desired setting.

4. If the appliance does not light after three tries, call your service technician or gas supplier.

# GAS TO APPLIANCE

1. Equipped with wall switch: Turn ON/OFF switch to OFF.

Equipped with remote or wall control: Press OFF button.

Equipped with thermostat: Set temperature to lowest setting.

**2.** Service technician should turn off electric power to the control when performing service.

593-913G

#### Final inspection by \_\_\_\_\_

#### K. After Appliance is Lit

Initial Break-in Procedure

- The appliance should be run three to four hours continuously on high.
- Turn the appliance off and allow it to completely cool.
- Remove fixed glass assembly. See Section 12.I.
- Clean fixed glass assembly. See Section 3.
- Replace the fixed glass assembly and run continuously on high an additional 9 hours.

This cures the materials used to manufacture the fireplace.

# NOTICE! Open windows for air circulation during appliance break-in.

- Some people may be sensitive to smoke and odors.
- Smoke detectors may activate.

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is al- lowed to burn for 20 to 40 minutes.
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the appliance.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Is it normal to see the pilot flame burn continually?	In an intermittent pilot ignition system (IPI), the pilot flame should turn off when appliance is turned off. Some optional control systems available with IPI models may allow pilot flame to remain lit.

#### L. Frequently Asked Questions



# **Maintenance and Service**

Any safety screen or guard removed for servicing must be replaced prior to operating the appliance.

When properly maintained, your appliance will give you many years of trouble-free service. We recommend annual service by a qualified technician.

#### A. Maintenance Tasks-Homeowner

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

The following tasks may be performed annually by the homeowner. If you are uncomfortable performing any of the listed tasks, please call your dealer for a service appointment.

More frequent cleaning may be required due to lint from carpeting or other factors. The control compartment, burner and circulating air passageway of the appliance must be kept clean.

**CAUTION!** Risk of Burns! The appliance should be turned off and cooled before servicing.

#### **Glass Cleaning**

Frequency: Seasonally

By: Homeowner

**Tools Needed**: Protective gloves, glass cleaner, drop cloth and a stable work surface.

**CAUTION! Handle fixed glass assembly with care.** Glass is breakable.

- · Avoid striking, scratching or slamming glass
- Avoid abrasive cleaners
- DO NOT clean glass while it is hot
- Prepare a work area large enough to accommodate fixed glass assembly and door frame by placing a drop cloth on a flat, stable surface.

**Note**: Fixed glass assembly and gasketing may have residue that can stain carpeting or floor surfaces.

- Remove door or decorative front from appliance and set aside on work surface.
- See Section 12.I for instructions to remove fixed glass assembly.
- Clean glass with a non-abrasive commercially available cleaner.
  - Light deposits: Use a soft cloth with soap and water
  - Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer)
- Carefully set fixed glass assembly in place on appliance. Hold glass in place with one hand and secure glass latches with the other hand.

#### Doors, Surrounds, Fronts

Frequency: Annually

By: Homeowner

Tools needed: Protective gloves, stable work surface

- · Assess condition of screen and replace as necessary.
- Inspect for scratches, dents or other damage and repair as necessary.
- · Check that louvers are not blocked.
- · Vacuum or dust surfaces.

#### **Remote Control**

Frequency: Seasonally

By: Homeowner

**Tools needed:** Replacement batteries and remote control instructions.

- · Locate remote control transmitter and receiver.
- Verify operation of remote. Refer to remote control operation instructions for proper calibration and setup procedure.
- Place batteries as needed in remote transmitters and battery-powered receivers.
- · Place remote control out of reach of children.

If not using your fireplace for an extended period of time (summer months, vacations/trips, etc), to prevent unintended operation:

· Remove batteries from remote controls.

• Reinstall door or decorative front.

#### Venting

Frequency: Seasonally

#### By: Homeowner

Tools needed: Protective gloves and safety glasses.

- Inspect venting and termination cap for blockage or obstruction such plants, bird nests, leaves, snow, debris, etc.
- Verify termination cap clearance to subsequent construction (building additions, decks, fences, or sheds). See Section 6.
- Inspect for corrosion or separation.
- Verify weather stripping, sealing and flashing remains intact.
- Inspect draft shield to verify it is not damaged or missing.

#### B. Maintenance Tasks-Service Technician

The following tasks must be performed by a qualified technician.

#### **Gasket Seal and Glass Assembly Inspection**

Frequency: Annually

By: Service Technician

**Tools needed:** Protective gloves, drop cloth and a stable work surface.

- Inspect gasket seal and its condition.
- Inspect fixed glass assembly for scratches and nicks that can lead to breakage when exposed to heat.
- Confirm there is no damage to glass or glass frame. Replace as necessary.
- Verify that fixed glass assembly is properly retained and attachment components are intact and not damaged. Replace as necessary.

#### Logs

Frequency: Annually

By: Service Technician

Tools needed: Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary. Refer to Section 12 for log placement instructions.
- Verify correct log placement and no flame impingement causing sooting. Correct as necessary.

# **Control Compartment and Firebox Top**

#### Frequency: Annually

By: Service Technician

**Tools needed:** Protective gloves, vacuum cleaner, dust cloths

- Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
- Remove all foreign objects.
- Verify unobstructed air circulation.

#### Firebox

#### Frequency: Annually

By: Service Technician

**Tools needed:** Protective gloves, sandpaper, steel wool, cloths, mineral spirits, primer and touch-up paint.

- Inspect for paint condition, warped surfaces, corrosion or perforation. Sand and repaint as necessary.
- Replace appliance if firebox has been perforated.

Surface cracking or crazing of firebrick material is normal and expected. The following types of cracks are acceptable and do not require replacement of the unit or the firebox:

- Cracks that do not propagate entirely through the material.
- Light fracture lines or "spider-webbing" on the surface of the material.
- Cracks that are less than 1/32 in. wide and less than 3 in.long.
- If cosmetically unacceptable, such cracks may be repaired with the SRV-PACK service kit.

Cracks that are unacceptable:

- Cracks greater than 1/32 in. wide and 3 in. long are at risk of growing.
- Cracks that penetrate entirely through the firebrick material.

Inspection for cracking should be run when the appliance is cool. Cracks tend to close as the appliance heats up.

#### **Light Bulbs**

Frequency: As needed

By: Service Technician

**Tools needed:** Protective gloves, replacement light bulbs. 1/4 in. nut driver.

- Remove the glass frame. See Section 12.I.
- Remove the logs, grate, and burner.
- Remove the two ember glass retainer tabs.
- Remove the ember glass.
- Replace light bulb.
- · Reassemble components in reverse order of disassembly.

#### **Burner Ignition and Operation**

#### Frequency: Annually

#### By: Service Technician

**Tools needed:** Protective gloves, vacuum cleaner, whisk broom, flashlight, voltmeter, indexed drill bit set, and a manometer.

- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Replace Glowing embers with new dime-size pieces.
   DO NOT block ports or obstruct lighting paths. Refer to Section 12 for proper ember placement.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature degradation due to long term heat exposure.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay.
- Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Section 12 for required air shutter setting. Verify air shutter is clear of dust and debris.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Inspect pilot flame pattern and strength. See Figure 3.1 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
- Verify that there is not a short in flame sense circuit by checking continuity between pilot hood and flame sense rod. Replace pilot as necessary.

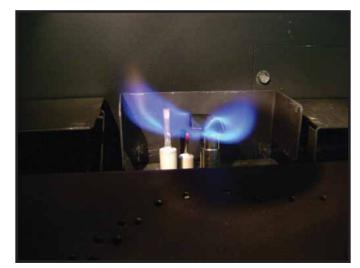
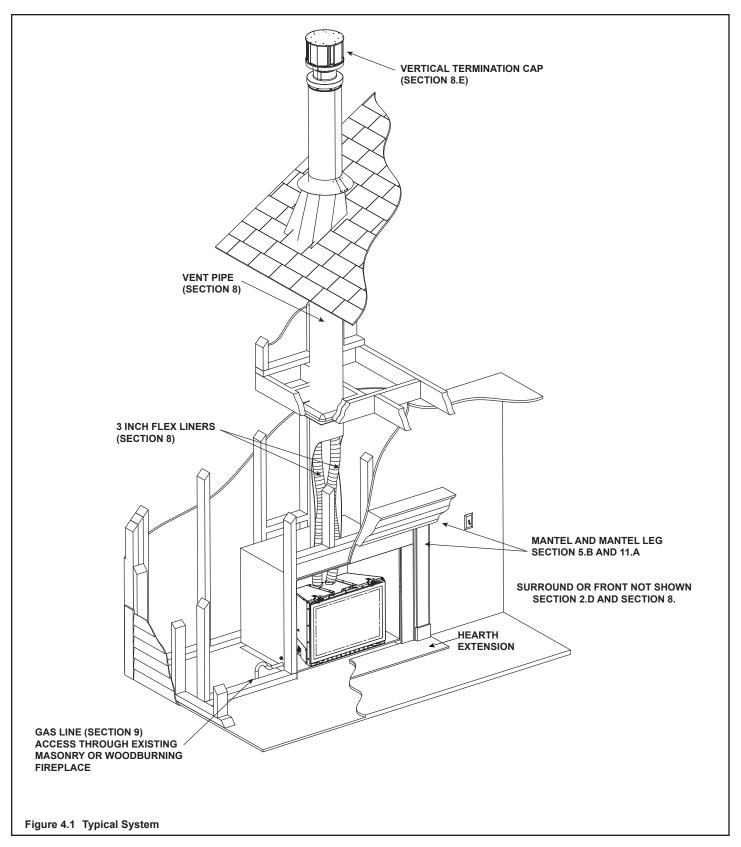


Figure 3.1 IPI Pilot Flame Patterns

# A. Typical Appliance System

**Getting Started** 

**NOTICE:** Illustrations and photos reflect typical installations and are for design purposes only. Illustrations/diagrams are not drawn to scale. Actual product may vary from pictures in manual



#### B. Design and Installation Considerations

Quadra-Fire gas inserts are designed for installations into solid fuel masonry or factory built fireplaces that have been installed in accordance with the National, Provincial, State and local building codes. Fireplaces are to be constructed of non-combustible materials and, in the absence of local or regional codes, meet criteria of NFPA 211. No additional outside air source is required.

Installation MUST comply with local, regional, state and national codes and regulations. Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Prior to installing the gas insert:

- Have the chimney and adjacent structure inspected and cleaned by qualified professionals. Hearth & Home Technologies recommends that NFI or CSIA certified professionals, or technicians under the direction of certified professionals, conduct a minimum of a NFPA 211 Level 2 inspection of the chimney.
- Replace component parts of the chimney and fireplace as specified by the professionals.
- Ensure combustible mantel and surround clearances comply with applicable codes and regulations for solid-fuel fireplaces. In the absence of local or regional codes, refer to NFPA 211.
- Ensure all joints are properly engaged and the chimney is properly secured.
- Minimum fireplace size. See Section 5.A.
- · Gas supply piping requirements.
- Electrical wiring requirements.
- · Finishing details.
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified technician, service agency or your dealer.

#### C. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

	-			
Tape measure		Framing material		
Plier	S	Phillips screwdriver		
Glov	es	Framing square		
Voltn	neter	Electric drill and bits (1/4 in.)		
Plumb line		Safety glasses		
Level		Reciprocating saw		
Manometer		Flat blade screwdriver		
Hammer		Noncorrosive leak check solution		
1/2 2/1 in ch longth		#6 or #9 Colf drilling porous		

1/2 - 3/4 inch length, #6 or #8 Self-drilling screws Caulking material (300°F minimum continuous exposure rating)

Stove cement (1200°F or higher continuous exposure rating)

#### **D. Inspect Appliance and Components**

- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative doors and fronts may be shipped in separate packages.
- If packaged separately, the log set and appliance grate must be installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.

**WARNING!** Risk of Fire or Explosion! Damaged parts could impair safe operation. **DO NOT install damaged**, incomplete or substitute components. Keep appliance dry.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- · Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

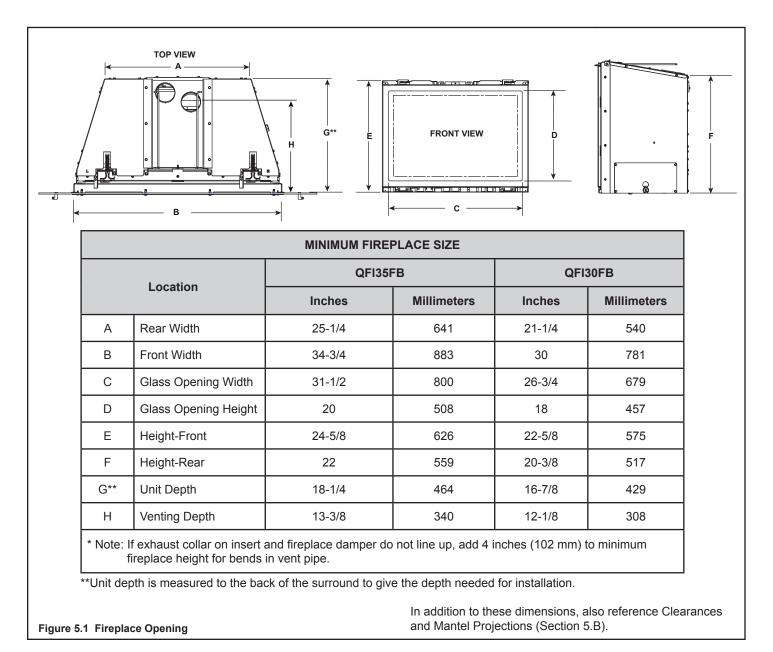
WARNING! Risk of Fire,/Explosion/Electric Shock! DO NOT use this appliance if any part has been under water. Call a qualified technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water. **Fireplace Size Requirements** 

#### A. Minimum Fireplace Opening

Minimum fireplace opening requirements are shown in Figure 5.1.

WARNING! Risk of Fire or Burns! Provide adequate clearance around air openings and for service access. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

- The firebrick (refractory), glass doors, screen rails, screen mesh and log grates can be removed from a factory built firebox in order to gain minimum gas insert opening requirements.
- Any smoke shelves, shields and baffles may be removed from the factory built firebox if attached with mechanical fasteners.
- The metal floor of the solid fuel firebox may be removed to facilitate the installation of the insert. The appliance may not be placed directly on the base of the outer wrap, a 1/4 inch airspace must be provided between the insert and the floor of the outer wrap. Use the levelling legs to raise the insert a minimum of 1/4 inch. The original fireplace may never be returned to solid fuel in this condition. The sidewalls and top structure of the firebox may not be altered with the exception of removable baffles and dampers.
- Cutting of any sheet metal parts of the fireplace in which the gas fireplace insert is to be installed is prohibited, except the floor as tested for and as noted above.



#### **B. Mantel and Wall Projections**

**WARNING!** Risk of Fire! Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).

Clearance to combustible material under the insert is 1/4 inch (6 mm). Clearance from top of fireplace opening for combustibles extending 12 inches max. is 12 inches.

• Use leveling legs to raise insert minimum 1/4 inch (6 mm) above combustible material or outer wrap of factory built firebox.

Combustible facings must not extend behind the insert surround. For non-combustible material specifications refer to section 1.E.

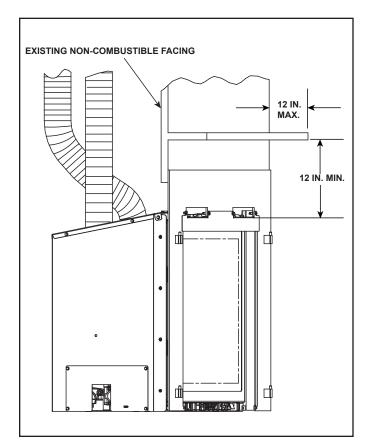
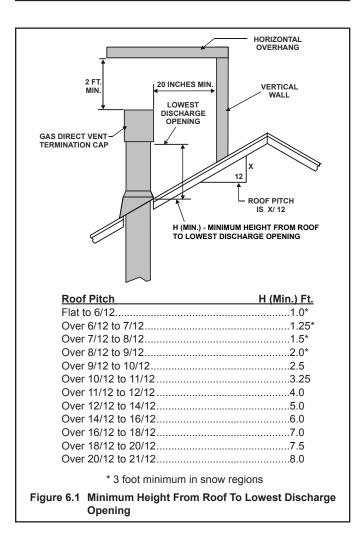
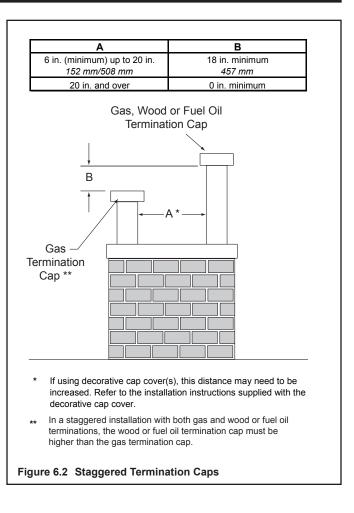


Figure 5.2 Mantel Clearance

#### A. Vent Termination Minimum Clearances

Fire Risk. Maintain vent clearance to combustibles as specified. • DO NOT pack air space with insulation or other materials. Failure to keep insulation or other materials away from vent pipe may cause fire.





Installation Preparation

Prepare the existing solid fuel masonry or factory built non-combustible firebox for installation.

#### A. Inspection and Cleaning

Prior to installing the gas insert:

- Have the chimney and adjacent structure inspected and cleaned by qualified professionals. Hearth & Home Technologies recommends that NFI or CSIA certified professionals, or technicians under the direction of certified professionals, conduct a minimum of a NFPA 211 Level 2 inspection of the chimney.
- Replace component parts of the chimney and fireplace as specified by the professionals.
- Ensure all joints are properly engaged and the chimney is properly secured.
- Ensure combustible mantel and surround clearances comply with applicable codes and regulations for solid-fuel fireplaces. In the absence of local or regional codes, refer to NFPA 211.
- Ensure chimney is constructed of non-combustible materials.
- Ensure chimney is clean and in good working order.
- Ensure that all chimney cleanouts fit properly to prevent air leakage into chimney.

#### **B.** Flue Damper

Fully lock the solid fuel fireplace's flue damper in the open position, OR completely remove it.

#### C. Gas Line

**Note:** If the factory built fireplace has no gas access hole provided, an access hole of 1 inch (25 mm) diameter or less may be drilled through the lower sides or bottom of the firebox in a proper workmanship - like manner. This access hole must be plugged with non-combustible insulation after the gas supply line has been installed.

- Install gas line into firebox cavity.
- Check local codes and gas line sizing requirements following NFPA51. See Section 9.

#### **D. Fireplace Conversion Notice**

Permanently attach the label with the following warning to the inside lower back of the fireplace firebox into which the insert is being installed. Silicone or mechanical fasteners may be required to properly secure the label.

**WARNING!** Risk of Fire! This fireplace has been converted for use with a gas fireplace insert only and cannot be used for burning wood or solid fuels unless all original parts have been replaced, and the fireplace re-approved by the authority having jurisdiction.

#### E. Electrical Outlet Box

An outlet box may be installed in a bottom back corner of the existing solid fuel masonry or factory built fireplace to permit blowers or other optional accessories to be used. Alternatively, the supplied power cord may be routed out onto the hearth to a nearby outlet.

#### F. Remote Control Configuration

The Intellifire Plus<sup>™</sup> should be programmed to the RC300 remote control prior to the installation of the insert into the existing solid fuel masonry or factory built fireplace.

The control is accessed by removing the lower access panel on the rear of the insert. See Section 10.C and 10.D for details.

#### A. Vent Limits

The abbreviations listed in this vent table key are used in the vent diagrams.

Description				
Minimum Vertical Run Length 10 ft.				
Maximum Vertical Run Length 50 ft.				

Horizontal venting is NOT allowed.

Vertical terminations are measured to top of chimney.

This appliance is listed for use with LINK-DV systems and components only. It is permissible to extend venting above existing chimney (within specified maximum vertical limits) using SL-D series or Dura Vent GS series 4 in. x 6-5/8 in. gas direct-vent pipe. Connection is made using DV-46DVA-GK. The vent must be terminated with the cap supplied with the LINK-series vent kit.

**WARNING!** Risk of Fire/Explosion/Asphyxiation! Do NOT connect this gas appliance to a chimney flue serving a separate solid fuel or gas burning appliance.

- May impair safe operation of this appliance or other appliances connected to the flue.
- Vent this appliance directly outside.
- · Use separate vent system for this appliance.

CAUTION! ALL vent specifications MUST be followed.

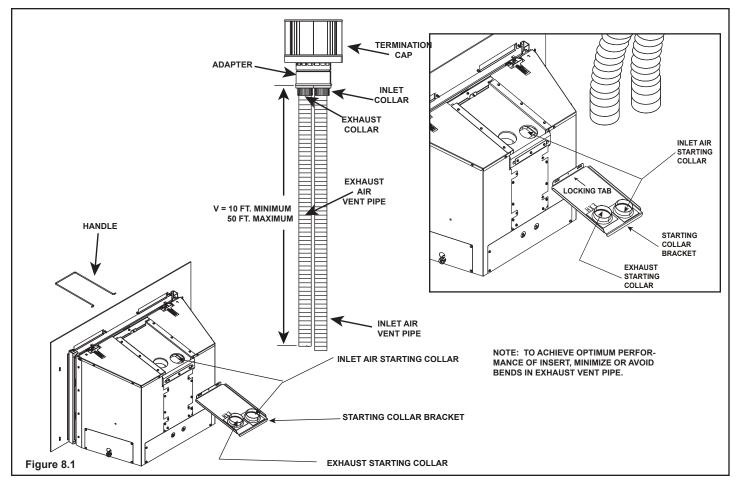
This product is tested and listed to these specifications. Appliance performance will suffer if specifications are not followed.

#### **B. Venting Components**

**CAUTION! Risk of Cuts/Abrasions/Flying Debris.** Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

The vertical vent termination system installed on this model includes:

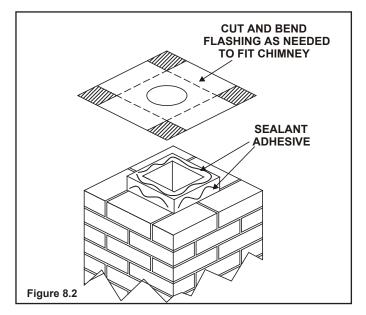
- One 3-foot section stainless steel flexible pipe (included with insert).
- Flexible vent pipe for exhaust air (included with vent kit).
- One length of 3-inch flexible vent pipe for combustion air (included with vent kit).
- · One pipe-to-cap adaptor (included with vent kit).
- · One vertical termination cap (included with vent kit).



#### C. Connecting Vent Pipe

Reference instructions in the termination kit.

- Install the 3-inch flexible vent pipe(s) down through the chimney.
- Secure the exhaust flexible vent pipe to the 3 foot section stainless steel flexible vent pipe using the factory-installed 3-inch collar in the stainless steel section of pipe (see Figure 8.1).
- Secure the stainless flexible vent pipe to the exhaust starting collar on top of the appliance with three screws and seal with stove cement rated for continuous exposure to 1200°F or higher.
- Use 3 screws to attach the section of inlet air vent to the inlet collar on the collar slide plate and seal with stove cement rated for continuous exposure to 1200°F or higher. See Figure 8.1. NOTE: The collar slide plate may be removed from appliance to aid installation.



- Trim chimney top plate to minimize excess overhang or bend over flue tile (see Figure 8.2).
- Place 3/8 inch bead of silicone (300°F minimum continuous exposure rating) on flue tile top.

## D. Placing, Securing and Leveling the Appliance

- Install insert (without surround attached) into existing fireplace while pulling collar slide plate forward.
- Install gas line into hole provided on insert side.
- Secure collar slide plate to appliance by placing locking handle into position with locking tabs (see Figure 8.1) and secure with #8 screw.
- Level the appliance from side to side and front to back. If necessary, use the leveling legs included with the manual bag to set each corner of the base.
- Position any excess flexible vent pipe back up into chimney without sagging. Twist and push flex vent together to shorten.
- Attach surround. Follow instructions accompanying the front.
- Push insert so that surround becomes tight against face of fireplace.

**WARNING!** Risk of Fire! Only an approved Hearth & Home Technologies surround may be used to cover integral grills on solid fuel burning fireplaces. No other components such as shrouds, sheetmetal plates, etc., may be used to seal off vents.

**WARNING!** Risk of Explosion! Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

**WARNING! Risk of Explosion/Combustion Fumes!** Connect vent sections per installation instructions.

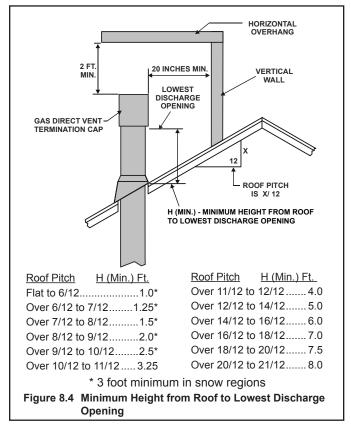
- The 3 foot section of stainless steel flexible pipe MUST be attached directly to the exhaust collar on the collar slide plate.
- Connect exhaust vent pipe ONLY to exhaust starting collar and termination cap center collar.
- Connect inlet air vent ONLY to inlet air collar on appliance and either the termination cap inlet air collar OR terminate within chimney.
- **DO NOT** allow vent to sag below connection point to appliance.

### E. Installing Adaptor and Termination Cap

For installation of termination cap see minimum vent heights for various pitched roofs (see Figure 8.4) .

To install adaptor see Figure 8.5.

To prevent odors and cold drafts, the chimney must be sealed around the vent with non-combustible blanket insulation or field fabricated metal plates.



To help eliminate cold air drafts, it may be necessary to place noncombustible insulation around the flues as they go though the damper.

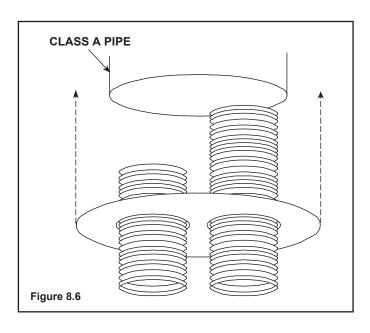
**CAUTION!** Risk of Cuts/Abrasions/Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

Damper Flashing Kit (Optional)

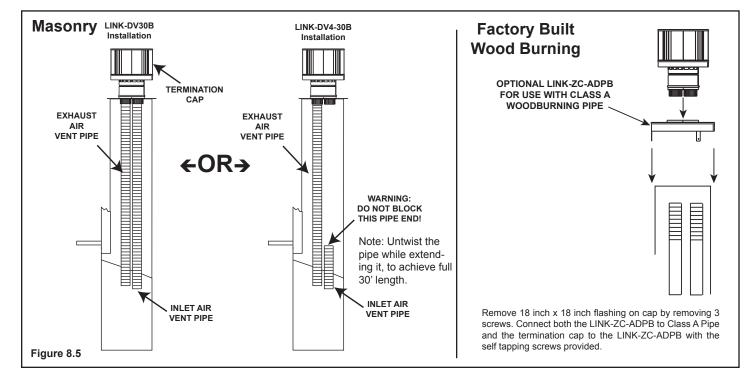
For use with LINK-DV30B or LINK-DV4-30B Liner Kit.

Note: Damper may have to be removed to use this kit.

- Run flex liners through 3 in. holes in damper flashing.
- Attach damper flashing to firebox roof with self tapping screws included in kit.



**Note**: The LINK-DV4-30B system REQUIRES this insulation.



Gas Information

#### A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified technician (NFI certified or factory-trained) using Hearth & Home Technologies specified and approved parts.

#### **B. Gas Pressure**

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z221.3 National Fuel Gas Code in the USA and CAN/ CGA B149 in Canada.
- Pressure requirements are:

Gas Pressure	Natural Gas	Propane
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum inlet pressure	10.0 in. w.c.	13.0 in. w.c.
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.

**WARNING!** Risk of Fire/Explosion! High pressure will damage valve. Low pressure may cause explosion.

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.



# **WARNING**

Fire Risk. Explosion Hazard.

High pressure will damage valve.

- Disconnect gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.

**Note:** Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

**Note:** A listed (and Commonwealth of Massachusetts approved) 1/2 inch (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 inch (13 mm) control valve inlet.

• If substituting for these components, please consult local codes for compliance.

#### C. Gas Connection

- Refer to Reference Section 14 for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- The gap between supply piping and gas access hole may be caulked with caulk with a minimum of 300°F continuous exposure rating or stuffed with noncombustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

**WARNING! Risk of Fire/Explosion!** Support control when attaching pipe to prevent bending gas line.

• A small amount of air will be in the gas supply lines.

**WARNING!** Risk of Fire/Explosion! Gas build-up during line purge could ignite.

- Purge should be performed by technician certified by NFI or factory-trained.
- Ensure adequate ventilation.
- Ensure there are no ignition sources such as sparks or open flames.

Light the appliance. It will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

**WARNING!** Risk of Fire, Explosion or Asphyxiation! Check all fittings and connections with a non-corrosive commercially available leak-check solution. **DO NOT** use open flame. Fittings and connections could have loosened during shipping and handling.

**WARNING! Risk of Fire! DO NOT** change valve settings. This valve has been preset at the factory.

## D. High Altitude Installations

**NOTICE:** If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 feet elevation:

- In the USA: Reduce burner orifice 4% for each 1000 feet above 2000 feet.
- In the CANADA: Reduce burner orifice 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

**10** Electrical Information

#### A. Wiring Requirements

**NOTICE:** 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** or the **Canadian Electric Code CSA C22.1**.

- This appliance comes with a 120 VAC cord assembly. This is required for proper operation of the appliance (IntelliFire Ignition). An outlet box may be installed in a bottom back corner of the existing solid fuel masonry or factory built fireplace to plug in the cord assembly, or the supplied power cord may be routed out onto the hearth to a nearby outlet.
- A 120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.
- Low voltage and 120 VAC voltage cannot be shared within the same wall box.

**WARNING! Risk of Shock or Explosion! DO NOT** wire 120V to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

**WARNING! Risk of Shock!** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

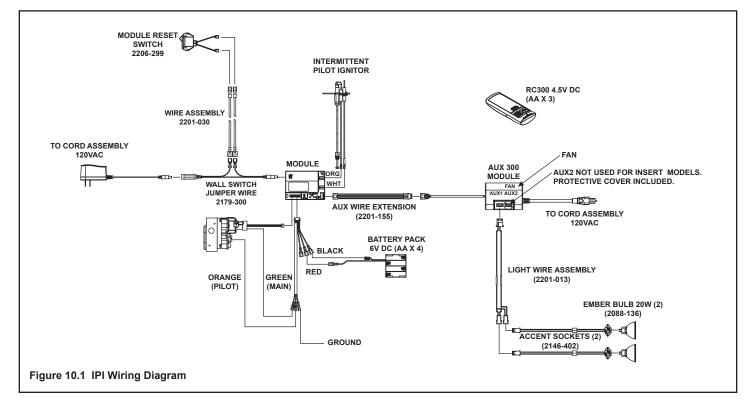
**WARNING! Risk of Shock!** Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.

#### B. IntelliFire Plus<sup>™</sup> Ignition System Wiring

 Wire an outlet box (120VAC) in the bottom back corner of the existing solid fuel masonry or factory built fireplace to plug in the cord assembly, or the supplied cord assembly may be rerouted out onto the hearth to a nearby outlet for proper operation of the appliance.

**WARNING! Risk of Shock or Explosion! DO NOT** wire IPI controlled appliance junction box to a switched circuit. Incorrect wiring will override IPI safety lockout.

- Refer to Figure 10.1, IPI Wiring Diagram.
- This appliance is equipped with an IntelliFire Plus<sup>™</sup> control valve which operates on a 6 volt system.
- Plug the 6 volt transformer plug into the appliance cord assembly to supply power to the unit OR install 4 AA cell batteries (not included) into the battery tray before use. See Section 2.H for instructions on locating battery tray and installing batteries.
- Battery longevity and performance will be affected by the service temperatures of this appliance. Batteries should only be used as a power source in the event of an emergency such as an outage.



#### C. IPI Battery Tray/Battery Installation

The IntelliFire Plus<sup>™</sup> system has a battery backup option. Batteries should only be placed in the battery pack when 120VAC is not available. See Section 2.H.

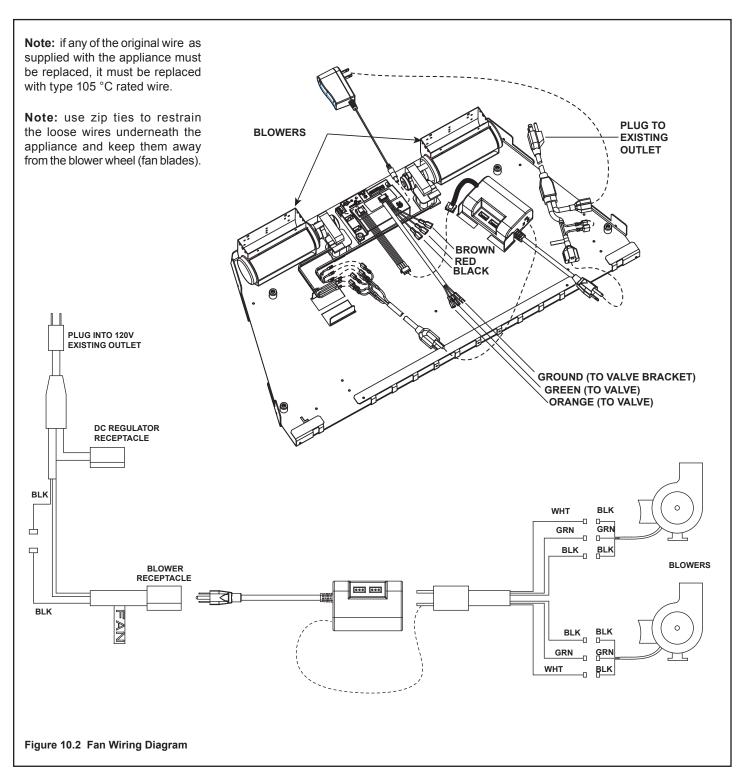
#### **D. Control Module Operation**

See Section 2.I for control module operation instructions.

# E. Programming the RC300 to the Control Module

**CAUTION! Risk of burns!** DO NOT program the remote control to the control module when fireplace is hot.

• Refer to the RC300 Installation Instructions included in appliance manual bag to program the RC300 to the control module.





#### A. Mantel and Wall Projections

**WARNING!** Risk of Fire! Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).

Clearance to combustible material under the insert is 1/4 inch (6 mm). Clearance from top of fireplace opening for combustibles extending 12 inches max. is 12 inches.

• Use leveling legs to raise insert minimum 1/4 inch (6 mm) above combustible material or outer wrap of factory built firebox.

Combustible facings must not extend behind the insert surround. For non-combustible material specifications refer to section 1.E.

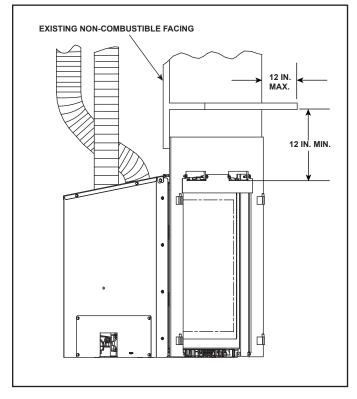


Figure 11.1 Mantel Clearance



#### A. Remove Glass Assembly

See Section 12.I.

#### B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

#### C. Inspect Firebox

Surface cracking or crazing of firebrick material is normal and expected. The following types of cracks are acceptable and do not require replacement of the unit or the firebox:

- Cracks that do not propagate entirely through the material.
- Light fracture lines or "spider-webbing" on the surface of the material.
- Cracks that are less than 1/32 in. wide and less than 3 in. long.
- If cosmetically unacceptable, such cracks may be repaired with the SRV-PACK service kit. See Service Parts List.

Cracks that are unacceptable:

- Cracks greater than 1/32 in. wide and 3 in. long are at risk of growing.
- Cracks that penetrate entirely through the firebrick material.

Inspection for cracking should be run when the appliance is cool. Cracks tend to close as the appliance heats up.

#### D. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

#### E. Accessories

Install approved accessories per instructions included with accessories. Contact your dealer for a list of approved accessories.

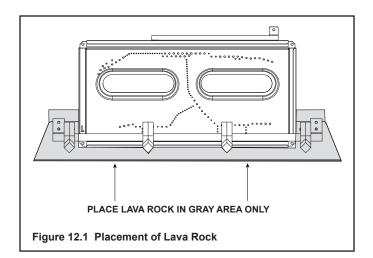
**WARNING! Risk of Fire and Electric Shock!** Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.

#### F. Place the Lava Rock

**WARNING!** Risk of Explosion! Follow lava rock placement instructions in manual. **DO NOT** place lava rock on burner. Improperly placed lava rock interferes with proper burner operation.

Lava rock is shipped with this gas appliance. To place the lava rock:

- Lava rock CANNOT be placed on the burner.
- · Place lava rock in front of and to the sides of the burner.

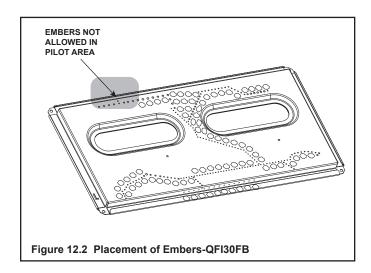


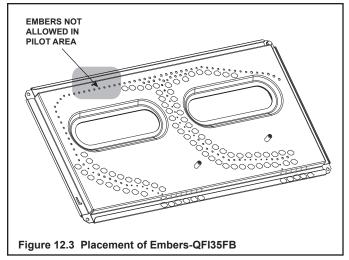
#### G. Ember Placement

**WARNING! Risk of Explosion!** Follow ember placement instructions in manual. DO NOT place embers directly over burner ports. Replace ember material annually. Improperly placed embers interfere with proper burner operation.

Ember material is shipped with this gas appliance. To place the ember material:

- Embers CANNOT be placed directly over ports. Care should be taken not to cover the lighting trail of ports (from back to front).
- Place dime-size pieces of Glowing Embers® just in front of the port trail, but not on or in between the ports. See Figure 12.2 (QFI30FB) or Figure 12.3 (QFI35FB). Care should be taken so that the ports are not covered. Failure to follow this procedure will likely cause lighting and sooting problems.
- Save the remaining ember materials for use during appliance servicing. The embers provided should be enough for 3 to 5 applications.





# H. Install the Log Assembly Log Set Assembly: LOGS-QFI30FB Models: QFI30FB

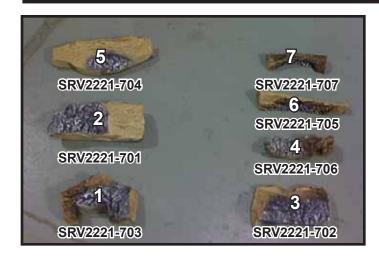




Figure 1. Logs Installed

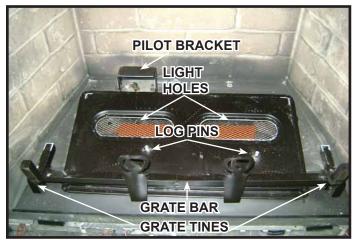


Figure 2. Reference Points for Log Placement

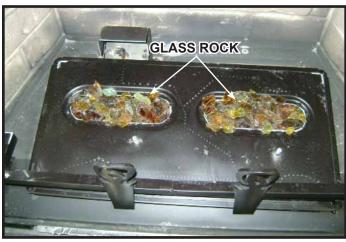


Figure 3. Install Glass Rock

*CAUTION: Logs are fragile, handle with care.* Glass Rock (2201-853): Fill each light hole evenly with the glass rock. Use all of the glass rock provided.



Figure 4. Place Log #1

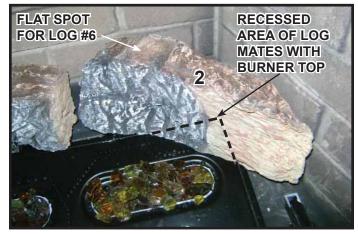
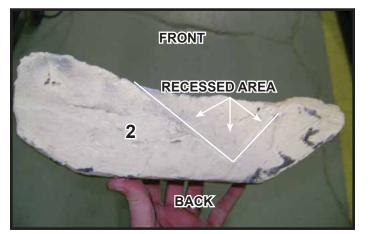


Figure 5. Place Log #2

Log #1 (SRV2221-703): Position Log #1 as shown in Figure 4. See Figure 2 for additional points of reference. Center the log over the pilot bracket. Pull the log forward until contact is made with burner.

**Log #2 (SRV2221-701)**: Position Log #2 as shown in Figure 5. See Figure 2 and Figure 6 for additional points of reference. The recessed area on the bottom of the log and the back right corner of the burner top mate.



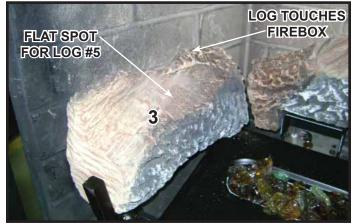


Figure 6. Log #2

Figure 7. Place Log #3

**Log #3 (SRV2221-702)**: Position Log #3 as shown in Figure 7. See Figure 2 and Figure 8 for additional reference points. Mate the base of the left grate tine with the groove located on the bottom of the log. Pull the log forward until it stops against the vertical portion of the grate tine. Swing the rear of the log counterclockwise until it touches the firebox.



Figure 8. Log #3 - Bottom View

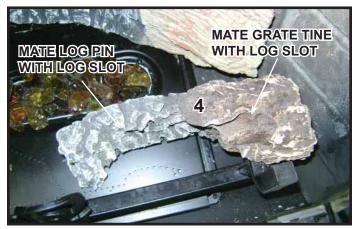


Figure 9. Place Log #4

**Log #4 (SRV2221-706)**: Position Log #4 as shown in Figure 9. See Figure 2 and Figure 10 for additional references. Mate the grate tine slot with the base of the right grate tine. The grate tine slot is located on the bottom right end of Log #4. See Figure 10. Slide the right end of the log forward until the tine fully engages the slot. Mate the log pin slot with the right log pin.

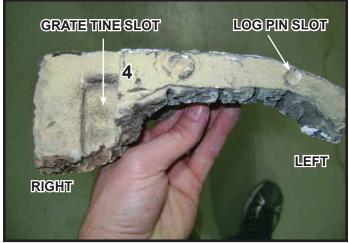
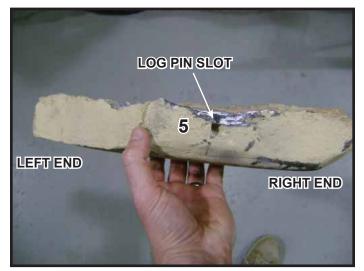


Figure 10. Log #4 - Bottom View



Figure 11. Place Log #5

**Log #5 (SRV2221-704)**: Position Log #5 as shown in Figure 11. See Figure 2 and Figure 12 for additional references. Rest the left end of Log #5 on the flat spot indicated in Figure 7. Mate the slot, located on the bottom of the log, with the left log pin. Ensure the nose of the log does not cover any burner ports.



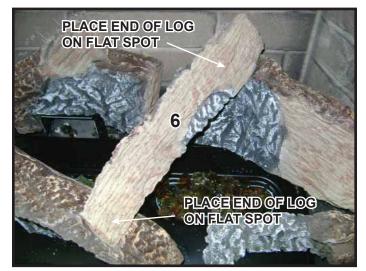


Figure 12. Log #5 - Bottom View

Figure 13. Place Log #6

**Log #6 (SRV2221-705)**: Position Log #6 as shown in Figure 13. See Figures 2, 5 and 11 for additional reference points. Place the front end of log #6 n the flat spot indicated in Figure 11. Place the back end of Log #6 on the flat spot indicated in Figure 5.

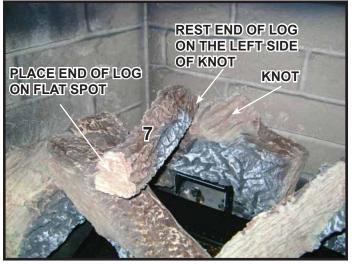


Figure 14. Place Log #7

**Log #7 (SRV2221-707)**: Position Log #7 as shown in Figure 14. See Figure 2 and 11 for additional reference points. Place the front end of Log #7 on the flat spot indicated in Figure 11. Place the back end of Log #7 on the left side of the knot. See Figure 14.

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## H. Install the Log Assembly Log Set Assembly: LOGS-QFI35FB Models: QFI35FB





Figure 1. Logs Installed

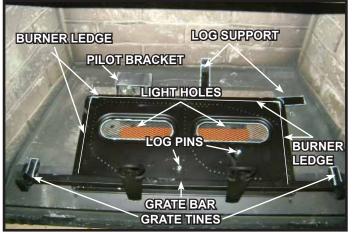


Figure 2. Reference Points for Log Placement

#### CAUTION: Logs are fragile, handle with care.

Glass Rock (2201-853): Fill each light hole evenly with the glass rock. Use all of the glass rock provided.

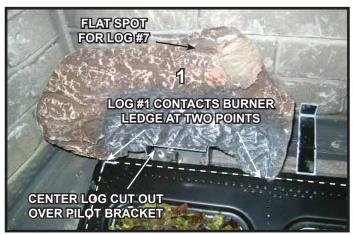


Figure 4. Place Log #1

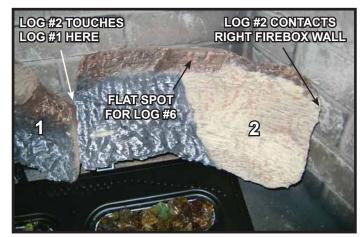


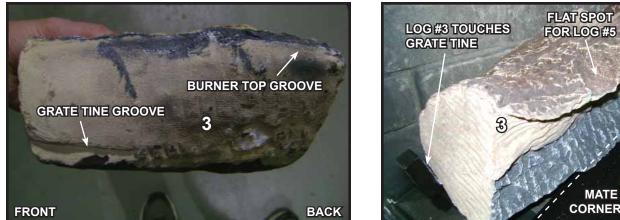
Figure 5. Place Log #2

Log #1 (SRV2223-703): Position Log #1 as shown in Figure 4. See Figure 2 for additional points of reference. Center the log over the pilot bracket. The log should rest on the burner ledge as shown in Figure 4.

Log #2 (SRV2223-701): Position Log #2 as shown in Figure 5. See Figure 2 for additional points of reference. Place the left end of the log on the rear log support. Slide the log back until it rest against the back of the log support. The left end of the log should touch Log #1. Swing the right end of the log counterclockwise until it contacts the right refractory wall.



Figure 3. Install Glass Rock

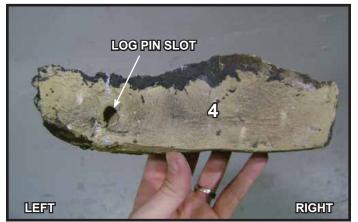


MATE GROOVE WITH CORNER OF BURNER TOP

Figure 6. Log #3 - Bottom View

Figure 7. Place Log #3

Log #3 (SRV2223-702): Position Log #3 as shown in Figure 7. See Figure 2 and Figure 6 for additional references. Mate the grate tine groove with the base of the left grate tine. Slide the log forward until it stops against the vertical portion of the left grate tine. Mate the burner top groove with the left edge of the burner top as shown in Figure 7.



4 MATE LOG PIN WITH LOG SLOT LOG CONTACTS **GRATE BAR** 

Figure 8. Log #4 - Bottom View

Figure 9. Place Log #4

Log #4 (SRV2223-706): Position Log #4 as shown in Figure 9. See Figure 2 and Figure 8 for additional references. Mate the slot located at the left end of log #4, shown in Figure 8, with the right log pin. Rotate the right end of the log clockwise, until the log contacts the grate bar.

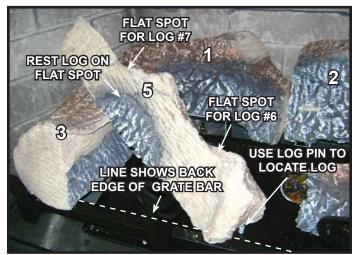


Figure 10. Place Log #5

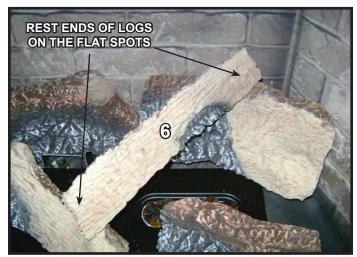


Figure 11. Place Log #6

Log #5 (SRV2223-704): Position Log #5 as shown in Figure 10. See Figure 2 and Figure 7 for additional references. Rest the left end of the log on the flat spot of log #3. Locate the groove located on the right end of the log. Mate the groove with the grate bar. Use the left log pin to positively locate the right end of the log.

Log #6 (SRV2223-705): Position Log #6 as shown in Figure 11. See Figures 2, 5 and 10 for additional reference points. Place the front and back ends of the log on the flat spots as shown in Figure 11.



Figure 12. Place Log #7

Log #7 (SRV2221-707): Position Log #7 as shown in Figure 12. See Figure 2 and 10 for additional reference points. Place the front and back ends of the log on the flat spots as shown in Figure 12.

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#### I. Fixed Glass Assembly

**WARNING!** Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

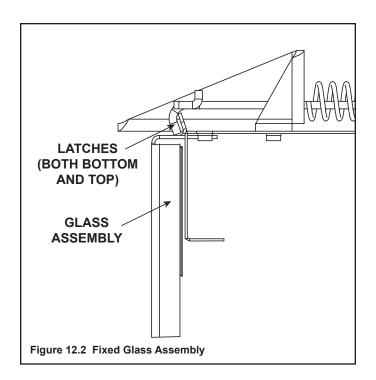
- DO NOT strike, slam or scratch glass.
- **DO NOT** operate fireplace with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.

#### **Removing Fixed Glass Assembly**

- The glass assembly fastens to the fireplace in four places. The fastening mechanisms are spring-loaded glass latches. An example of the glass latch is shown in Figure 12.2.
- To release glass assembly, pull the two top springloaded latches forward and allow them to retract away from the glass assembly. Slide the glass assembly outward and downward until top of the glass frame will clear the surround.

#### **Replacing Fixed Glass Assembly**

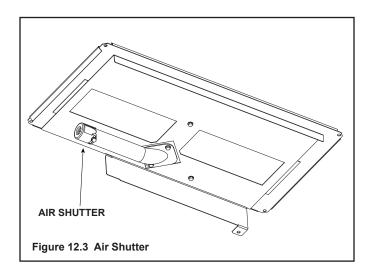
- Tilt glass assembly toward fireplace and slide glass assembly downward to engage bottom latches. Verify bottom latches are fully engaged and then fasten the two top latches.
- Note that the extended glass latch tabs on the glass frame are for the bottom glass latches.



#### J. Air Shutter Setting

Air shutter settings should be adjusted by a qualified service technician at the time of installation. The air shutter is set at the factory for minimum vertical vent run. Adjust air shutter for longer vertical runs. See Figure 12.3.

**NOTICE:** If sooting occurs, provide more air by opening the air shutter.



#### **Air Shutter Settings**

	NG	LP
QFI30FB	1/4 in.	Full Open
QFI35FB	1/4 in.	Full Open



With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified technician. Contact your dealer to arrange a service call by a qualified technician.

#### A. IntelliFire Plus<sup>™</sup> Ignition System

Symptom	Possible Cause	Corrective Action
<ol> <li>Pilot won't light. The ignitor/module makes noise, but no spark.</li> </ol>	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
	B. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from mod- ule to pilot assembly. Verify connections underneath pilot assembly are tight; also verify igniter and flame sense wires are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
2. Pilot won't light, there is no noise or spark.	A. No power, transformer installed incorrectly, or depleted batteries.	Verify that transformer is installed and plugged into module. Check voltage of transformer at connection to module. Acceptable readings of a good transformer are between 6.4 and 6.6 volts AC. Battery power supply voltage must be at least 4 volts. If below 4 volts, replace batteries.
	B. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Re- move and verify continuity of each wire in wiring harness. Replace any damaged components.
	C. Improper wall switch wiring.	Verify that 120/VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
3. Pilot sparks, but Pilot will not light.	A. Gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits.
	B. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 in. or 1/8 in. (3 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	D. Pilot valve solenoid	Verify that 1.5 to 1.8 VDC is supplied to pilot solenoid from module. If below 1.5 volts, replace module. If 1.5 volts or greater, replace valve.

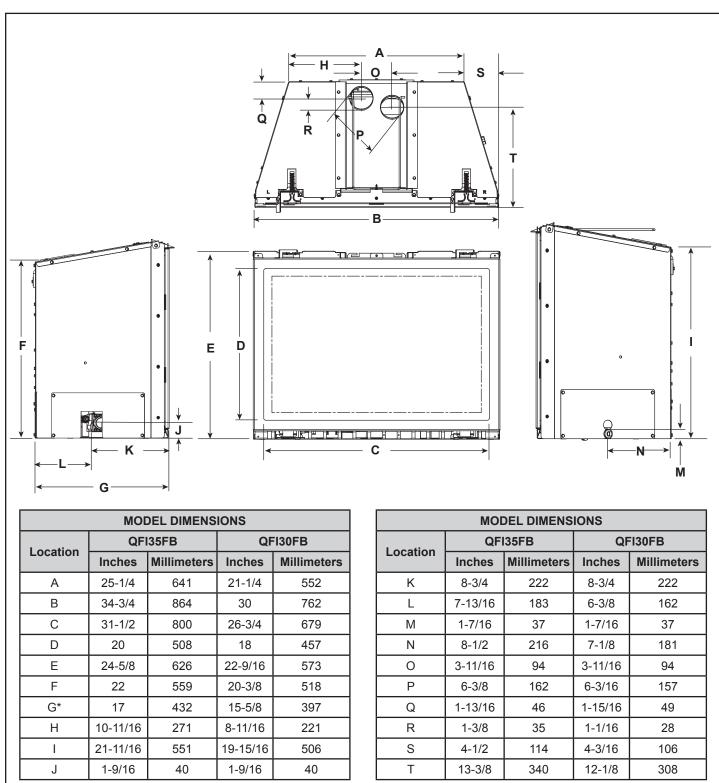
# Troubleshooting (continued)

Symptom	Possible Cause	Corrective Action
4. Pilot lights but con- tinues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	<ul> <li>A shorted or loose connection in flame sensing rod.</li> </ul>	Verify all connections to wiring diagram in manual. Verify connec- tions underneath pilot assembly are tight. Verify flame sense or ig- niter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contami- nated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or con- taminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.

**14.** Reference Materials

#### A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only.



**\*Note:** Location G on Figure 14.1 is measuring the appliance depth, for installation depth reference Location G on Figure 5.1.

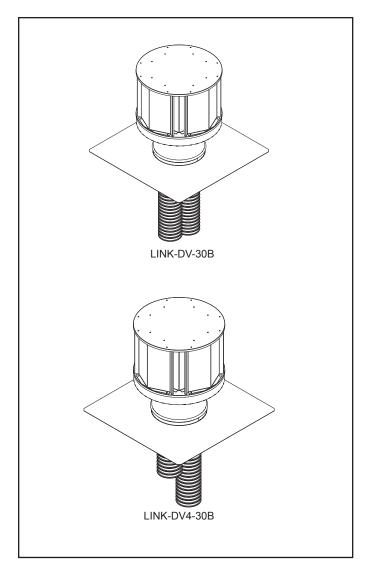
Figure 14.1 Appliance Dimensions

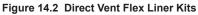
#### **B. Vent Kits Components**

Direct Vent Flex Liner Kits (see Figure 14.2)

LINK-DV-30B: Masonry 3 inch flex liner kit. Expands to 30 feet. Includes: two liners, termination cap, flashing, and link adapter.

LINK-DV4-30B: Masonry 3 inch flex liner kit. Expands to 30 feet and 4 feet respectively. Includes: two liners, termination cap, flashing, and link adapter.





Direct Vent Flex Liner Accessory Kits (see Figure 14.3)

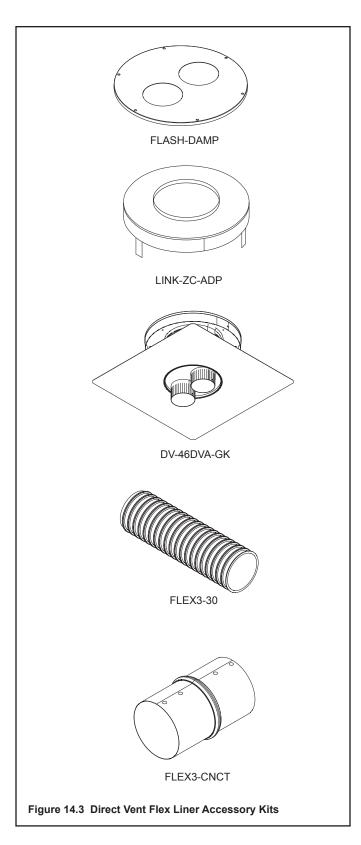
Flash-Damp: Zero clearance damper flashing kit for use with LINK-DV-30B or LINK-DV4-30B liner kits.

LINK-ZC-ADP: Zero clearance chimney adapter

DV-46DVA-GK: Adapter kit (colinear to coaxial 3 inches included in above kits). It is permissible to use DV-46DVA-GK to connect collinear flex vent to SL-D vent pipe to extend the run.

FLEX3-30: One 3 inch flexible liner expands to 30 feet.

FLEX-CNCT: Connector kit - 3 inch liner to 3 inch liner, one connector per kit.



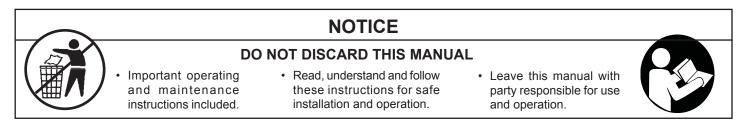
#### **D.** Contact Information



Quadra-Fire, a brand of Hearth & Home Technologies Inc. 7571 215<sup>th</sup> Street West, Lakeville, MN 55044 www.quadrafire.com

Please contact your Quadra-Fire dealer with any questions or concerns. For the location of your nearest Quadra-Fire dealer, please visit www.quadrafire.com.

#### - NOTES -



This product may be covered by one or more of the following patents: (United States) 5328356, 5601073, 5613487, 5647340, 5890485, 5941237, 5947112, 5996575, 6006743, 6019099, 6053165, 6145502, 6170481, 6374822, 6484712, 6601579, 6769426, 6863064, 7077122, 7098269, 7258116, 7470729 or other U.S. and foreign patents pending.

2000-945

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