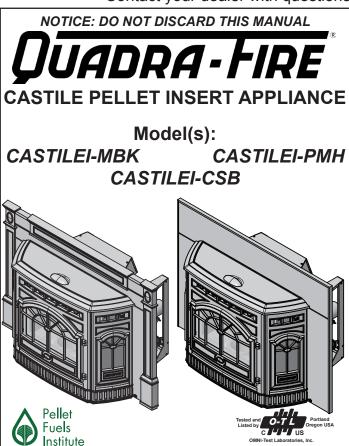
Owner's Manual

Operation & Care

INSTALLER: Leave this manual with party responsible for use and operation. OWNER: Retain this manual for future reference.

Contact your dealer with questions on installation, operation, or service.



CAUTION

Tested and approved for wood pellets and corn pellets. Burning of any other type of fuel voids your warranty.

CAUTION

Check building codes prior to installation.

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

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.





A WARNING

If the information in these instructions is not followed exactly, a fire could 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.
- Do not over fire If appliance or chimney connector glows, you are over firing. Over firing will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

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.

NOTE

To obtain a French translation of this manual, please contact your dealer or visit www.quadrafire.com

Pour obtenir une traduction française de ce manuel, s'il vous plaît contacter votre revendeur ou visitez www.quadrafire.com

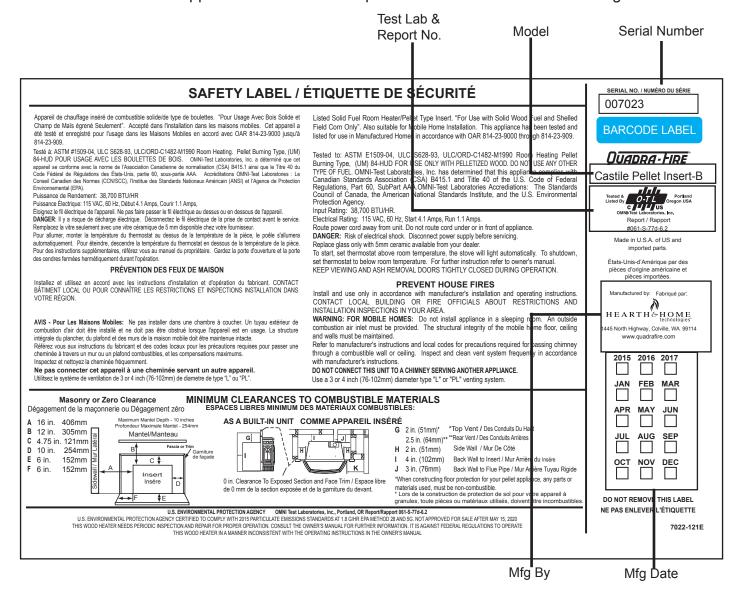


and Welcome to the Quadra-Fire Family!

NOTE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction

A. Sample of Serial Number / Safety Label

LOCATION: Riveted to appliance behind left side panel. Remove cast side and swing label forward





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: Indicates practices which may cause damage to the appliance or to property.

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B. Warranty Policy

Hearth & Home Technologies LIMITED LIFETIME WARRANTY

Hearth & Home Technologies, on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet 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 for consumers begins at the date of installation. 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. However, 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 and pellet appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period				I	ннт ма	anufactur	ed Applia	nnces and Venting
Parts	Labor	Gas (Indoor)	Gas/Wood (Outdoor Protected) *	Pellet	Wood	Electric	Venting	Components Covered
1 Year		X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 V	2070	X		X	X			Igniters, auger motors, electronic components, and glass Factory-installed blowers
2 Years		X		Λ	X			Molded refractory panels Ignition Modules
3 Years				X				Firepots, burn pots, mechanical feeders/auger assemblies
5 Years	1 Year	X						Vent Free burners, Vent Free ceramic fiber logs, Aluminized Burners
				X	X			Castings and Baffles
6 Years 3 Years					X			Catalyst - limitations listed
7 Years	3 Years			X	X			Manifold tubes, HHT chimney and termination
10 Years 1 Year X				Burners, logs and refractory				
Limited Lifetime	3 Vears X X X X			Firebox and heat exchanger, Grate and Stainless Steel Burners, FlexBurn® System (engine, inner cover, access cover, and fire back)				
00.1		v	v	v	v	v	V	All and a second and a second assessment
90 I	Days 1.C. 1:	X	X	X	X	X	X	All replacement parts beyond warranty period

^{*} Not designed for direct outdoor environment, see HHT Outdoor products. When installed outdoors, installation must strictly follow HHT Outdoor Protected Outdoor Applications Guidelines available from HHT Authorized Dealers.

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.
- This warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the appliance resides.
- Contact your installing dealer for warranty service. If the installing dealer or distributor 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.
- · Limited Catalyst Warranty
 - For wood burning products containing a catalyst, the catalyst will be warranted for a six-year period as follows: if the original catalyst or a replacement catalyst proves defective or ceases to maintain 70% of its particulate emission reduction activity (as measured by an approved testing procedure) within 36 months from the purchase date, the catalyst will be replaced for free.
 - From 37 to 72 months a pro-rated credit will be allowed against a replacement catalyst and labor credit necessary to install the replacement catalyst. The proration rate is as follows:

Amount of Time Since Purchase	Credit Towards Replacement Cost
0-36 Months	100%
37 – 48 Months	30%
49 – 60 Months	20%
61 – 72 Months	10%

• Any replacement catalyst will be warranted under the terms of the catalyst warranty for the remaining term of the original warranty. The purchaser must provide the name, address, and telephone number of the location where the product is installed, proof of original purchase date, date of failure, and any relevant information regarding the failure of the catalyst.

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 are not covered.
 These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration 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 operation 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 connections 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 the appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired, 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, deformation/warping of interior cast iron structure or components, 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.

Listing and Code Approvals

A. Appliance Certification

Model	Castile Pellet Insert-B
Laboratory	OMNI Test Laboratories, Inc.
Report No.	061-S-77d-6.2
Туре	Solid Fuel Room Appliance/Pellet Fuel Burning Type Insert
Standard	ASTM E1509-2004, ULC S628-93 and ULC/ORD-C1482-M1990 Room Appliance Pellet Fuel Burning Type and (UM) 84-HUD, Mobile Home Approved
FCC	Complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the ASTM E1509-2004, ULC S628-93, ULC/ORD-C-1482-M1990, (UM) 84-HUD

The Quadra-Fire Castile Pellet Insert meets the U.S. Environmental Protection Agency's emission limits for pellet appliances sold after May 15, 2015.

This pellet insert needs periodic inspection and repair for proper operation. It is against federal regulations to operate this pellet insert in a manner inconsistent with operating instructions in this manual.

B. BTU & Efficiency Specifications

940-14
1.8 grams per hour
N/A
N/A
8,500 to 28,200 / hr.
11,600 to 38,700 / hr.
3 or 4 inches, "L" or "PL"
45 lbs.
Wood Pellets

- Weighted average LHV efficiency using data collected during EPA emissions test.
- **Weighted average HHV efficiency using data collected during EPA emissions test.
- ***A range of BTU outputs based on EPA Default Efficiency and the burn rates from the low and high EPA tests.
- ****Based on the maximum feed rate per hour multiplied by approximately 8600 BTU's which is the average BTU's from a pound of pellets.

C. Glass Specifications

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

D. Electrical Rating

115 VAC, 60 Hz, Start 4.1 Amps, Run 1.1 Amps

E. Mobile Home Approved

- This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided.
- The structural integrity of the mobile home floor, ceiling, and walls must be maintained.
- The appliance must be properly grounded to the frame of the mobile home and use only Listed pellet vent Class "L" or "PL" connector pipe.
- · Outside Air Kit, part OAK-ACC must be installed in a mobile home installation.



WARNING



Fire Risk.

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

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with appliance).
- Do NOT Over fire If appliance or chimney connector glows, you are over firing.

Any such action that may cause a fire hazard.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.

For assistance or additional information, consult a qualified installer, service agency or your dealer.

NOTE: Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

Quadra-Fire is a registered trademark of Hearth & Home Technologies.

User Guide

Operating Instructions



WARNING



Fire Risk.

- Do not operate appliance before reading and understanding operating instructions.
- Failure to operate appliance properly may cause a house fire.

A. Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

- · Install at least one smoke detector and CO monitor on each floor of your home.
- Locate detectors away from the heating appliance and close to the sleeping areas.
- Follow the detector's manufacturer's placement and installation instructions and maintain regularly.
- · Conveniently locate a Class A fire extinguisher to contend with small fires.
- In the event of a hopper fire:
 - · Evacuate the house immediately.
 - · Notify fire department.

B. Non-Combustible Materials

Material which will not ignite and burn, composed of any combination of the following:

- Steel - Plaster - Tile - Glass - Brick - Iron - Slate - Concrete

Materials reported as passing ASTM E 136, Standard Test Method for Behavior of Metals, in a Vertical Tube Furnace of 750° C.

C. Combustible Materials

Material made of/or surfaced with any of the following materials:

- Compressed Paper - Wood - Plywood/OSB

- Sheet Rock (drywall) - Plastic - Plant Fibers

Any material that can ignite and burn: flame proofed or not, plastered or non-plastered.

D. Fuel Material and Fuel Storage

Pellet fuel quality can greatly fluctuate. This appliance has been designed to burn a wide variety of fuels, giving you the choice to use the fuel that is most economical in your region.

Hearth & Home Technologies strongly recommends only using Pellet Fuel Institute (PFI) certified fuel.

Fuel Material

Made from sawdust or wood by-products

- Shelled field corn & other biomass fuels
- Depending on the source material it may have a high or low ash content.

Higher Ash Content Material

- Hardwoods with a high mineral content
- Fuel that contains bark
- Standard grade pellets, high ash pellets, corn and other biomass fuels

Lower Ash Content Material

- Softwoods
- Fuels with low mineral content
- Premium grade pellets

Shelled Field Corn

- Must be 15% or less moisture content.
- Must be clean and free from debris
- · Never burn corn straight from the field
- Stalk parts, excessive fines and cob remnants, etc. will clog the auger mechanism
- · Corn with excessive grain dust must be screened by sifting with 3/16 inch (4.7mm) mesh screening



CAUTION

Do not burn fuel that contains an additive; (such as soybean oil).

- · May cause hopper fires
- · Damage to product may result

Read the ingredients list on the package. If you are buying corn the only ingredient that should be listed is corn.



WARNING

Risk of Chemical Poisoning!

Do NOT burn treated seed corn

- Chemical pesticides are harmful or fatal if swallowed
- Burning treated seed corn will void your warranty

Clinkers

Minerals and other non-combustible materials such as sand will turn into a hard, glass-like substance called a clinker when heated in the fire pot.

Trees from different areas will vary in mineral content. That is why some fuels produce more clinkers than others.

Moisture

Always burn dry fuel. Burning fuel with high moisture content takes heat from the fuel and tends to cool the appliance, robbing heat from your home. Damp pellet fuel can clog the feed system.

E. General Operating Information

1. Thermostat Calls For Heat

The appliance is like most modern furnaces; when the thermostat calls for heat, your appliance will automatically light and deliver heat.

When the room is up to temperature and the thermostat is satisfied, the red call light will shut off and the appliance will shut down. The red call light is located behind the right access panel.

2. Heat Output Controls

This appliance is equipped with a heat output control switch that has three settings or burn rates; low, medium and high. **Figure 9.1.**

The appliance will turn on and off as the thermostat demands. When the thermostat calls for heat, the appliance will always start up on High. After burning approximately 4 minutes, the appliance will then burn at the rate at which it was originally set. If the appliance is set at one of the lower settings, it will run quieter but takes longer to heat up an area than if it were set at a higher burn rate.

Regardless of the burn rate, when the area is warm enough to satisfy the thermostat, the appliance will shut off.

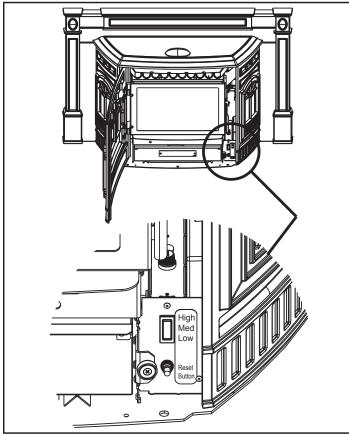


Figure 9.1

F. Before Your First Fire

 First, make sure your appliance has been properly installed and that all safety requirements have been met. Pay particular attention to the fire protection, venting and thermostat installation instructions.

- 2. Double check that the ash drawer and firebox are empty!
- 3. Close the front door.

CAUTION

Tip of thermocouple must be in contact with the inside end of the thermocouple cover.

Missed ignitions can occur.

G. Clear Space

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

NOTICE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.



WARNING



Fire Hazard.

Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the appliance's vicinity.
- NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS APPLIANCE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE APPLIANCE WHILE IT IS IN USE.
- DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.
- DO NOT USE CHEMICALS OF FLUIDS TO START THE FIRE.
- · Combustible materials may ignite.

H. Starting Your First Fire

- 1. A thermostat is required for proper operation of this appliance, except for corn. At this time, fill the hopper with pellets, set the thermostat to its lowest setting. Plug the power cord into nearby outlet.
- 2. The exhaust blower will stay on for approximately 18 minutes even though the thermostat is not calling for heat. This is normal.
- 3. Locate the heat output control switch on the lower right side of the firebox behind decorative front door. Set to the HIGH setting and then adjust the thermostat to its highest setting. The red call light will be on which is located on the top of the junction box behind the right access panel. This indicates the thermostat is calling for heat. Figure 9.1.
- 4. The fuel feed system and the igniter should now be on.
- 5. For your first fire it will be necessary to press the reset button once per minute until pellets start to drop into the fire pot, then press button 1 more time. This will fill the feed system and allow the appliance to begin dropping

- pellets. The appliance will continue to run as long as the thermostat is calling for heat.
- Once the appliance has ignited, let it burn for approximately 15 minutes, then set the thermostat to the desired room temperature. Adjust the heat output control switch to the desired setting.

NOTE: We recommend the use of a 50-50 blend of corn and wood pellets. The only change in operation is that the feed rate may require a slight adjustment. If the appliance is running all of the time, 100% corn will work after the fire has been started using wood pellets.



WARNING

Do

Fire Risk

Do NOT operate appliance:

- · With appliance door open.
- Fire pot floor open.
- · Cleaning slide plates open.

Do NOT store fuel:

- Closer than required clearances to combustibles to appliance
- · Within space required for loading or ash removal.

I. Fire Characteristics

A properly adjusted fire with the heat output control button set on "HIGH" has a short active flame pattern that extends out of the fire pot approximately 4 inches (102mm). If the fire has tall flames with black tails and seems somewhat lazy, the feed rate will need to be reduced. If the fire is not 4 inches (102mm) tall, increase the feed rate. A medium and low setting will give a shorter flame. The flame will rise and fall somewhat. This is normal.

J. Feed Rate Adjustment Instructions

The feed adjustment control rod is factory set, and should be adequate for most fuels. The control rod will slide by only loosening the wing screw.

However, if the flame height is too high or too low, you will need to adjust the feed rate. Wait until the appliance has been burning for 15 minutes before making your adjustments and allow 15 minutes for feed adjustment to take effect. Make adjustments in approximately 1/2 inch increments.

- 1. Loosen the wing screw.
- Adjust the fuel adjustment control rod towards to the right and up to increase the feed rate and flame height or to the left and down to decrease the feed rate and flame height.
- Re-tighten the wing screw.

K. Ignition Cycles

- 1. During each ignition cycle, it is normal to see some smoke in the firebox. The smoke will stop once the fire starts.
- The convection blower will automatically turn on after your appliance has reached the set temperature. This blower transfers heat from your appliance into the room, and will

- continue to run after the thermostat has stopped calling for heat until the appliance has cooled down.
- 3. Occasionally the appliance may run out of fuel and shut itself down. When this happens, the red call light will be on. To restart it, fill the hopper and press the reset button. When you press the reset button the red call light will go out. Release the button and the light will come back on. You should see a fire shortly. If not, follow the instructions on page 8, "Starting Your First Fire".

L. Insert Removal

In the case that service or inspection is required the appliance may need to be removed from the wall.

- 1. Appliance must be unplugged before removal of appliance is possible. Unplug the appliance from its power source.
- 2. Remove insert surround from appliance, to ease the process of removal.
- 3. Non-clip the exhaust transition from the exhaust outlet in the back of the appliance. This is what connects the venting to the appliance. Removal of the clips will allow you to remove the appliance from the wall without damaging or adjusting the venting.
- 4. Slide appliance from the wall and rotate either direction as needed.

M. Ignition Cycles

- At the beginning of each ignition cycle, it is normal to see some smoke in the firebox. The smoke will stop once the fire starts.
- 2. The convection blower will automatically turn on after your appliance has reached the set temperature.

This blower transfers heat from your appliance into the room, and will continue to run after the thermostat has stopped calling for heat until the appliance has cooled down.

3. Occasionally the appliance may run out of fuel and shut itself down. When this happens, the red call light will be on. See Figure 24.3 on page 24.

To restart it, fill the hopper and press the reset button. When you press the reset button the red call light will go out. Release the button and the light will come back on. You should see a fire shortly.

If not, follow the instructions on **page 18**, "Starting Your First Fire".



WARNING



Fire Risk.

- High ask fuels, or lack of maintenance, can cause the fire pot to fill with ash and clinker. If the fire pot fills to the top, immediately shut down the appliance and clean.
- Failure to do so could result in smoking, sooting and possible hoper fires.

N. Frequently Asked Questions

	ISSUES		SOLUTIONS
1.	Metallic noise	1.	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 your appliance.
2.	Ash build-up on glass	2.	This is normal. Clean the glass.
3.	Glass has turned dirty	3.	Excessive build up of ash. The lower burn settings will produce more ash, the higher burn settings produce less. The more it burns on low the more frequent cleaning of the glass is required.
4.	Fire has tall flames with black tails and is lazy	4.	The flame height adjustment needs to be reduced or the fire pot needs cleaning. Heat exchanger or exhaust blower needs cleaning.
5.	Excessive smoky start-up	5.	Either the fire pot is dirty or there is too much fuel at start-up and not enough air.
6.	Large flame at start-up	6.	This is normal. Flame will settle down once the fire is established. Some smoke is normal.
7.	Mechanical Noise	7.	The floor of the fire pot in the auto-clean system may make some noise as it scrapes the ash into the ash pan.

CONTACT YOUR DEALER for additional information regarding operation and troubleshooting. Visit www.quadrafire.com to find a dealer.

CAUTION

Odors and vapors released during initial operation.

- Curing of high temperature paint.
- Open windows for air circulation.

Odors may be irritating to sensitive individuals.

Maintenance and Service

When properly maintained, your fireplace will give you many years of trouble-free service. Contact your dealer to answer question regarding proper operation, troubleshooting and service for your appliance. Visit www.guadrafire. com to find a dealer. We recommend annual service by a qualified service technician.

This pellet insert has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this pellet appliance in a manner inconsistent with operating instructions in this manual.



CAUTION



Shock and Smoke Hazard

- Turn down thermostat, let appliance completely cool and exhaust blower must be off. Now you can unplug appliance before servicing.
- Smoke spillage into room can occur if appliance is not cool before unplugging.
- Risk of shock if appliance not unplugged before servicing appliance.

A. Quick Reference Maintenance Chart

Cleaning or Inspection	Frequency		Daily	Weekly	Every 2 Weeks	Monthly	Yearly
Ash Pan - Burning Wood Pellets	Every 5 bags of fuel	OR		Х			
Ash Pan - Burning Alternate Fuels	Every 1 bag of fuel	OR	Х				
Ash Removal from Firebox	More frequently depending on the fuel type or ash build-up	OR		Х			
Auto-Clean Inspection	More frequently depending on the fuel type	OR				Х	
Blower, Combustion (Exhaust)	More frequently depending on the fuel type	OR					Х
Blower, Convection	More frequently depending on the operating environment	OR					Х
Door Latch Inspection	Prior to heating season	OR				Х	
Firebox - Prepare for Non-Burn Season	At end of heating season	OR					Х
Fire pot - Burning Softwood Pellets	Every 5 bags	OR		Х			
Fire pot - Burning Hardwood Pellets	Every 3 bags	OR		Х			
Fire pot - Burning Alternate Fuels	Every 1 bag	OR	Х				
Glass	When clear view of fire pot becomes obscured	OR		Х			
Heat Exchanger & Drop Tube	Every 1 ton of fuel	OR			Х		
Hopper	Every 1 ton of fuel or when changing fuel types	OR				Х	
Venting System	More frequently depending on the fuel type	OR					Х

NOTICE: These are recommendations. Clean more frequently if you encounter heavy build-up of ash at the recommended interval or you see soot coming from the vent. Not properly cleaning your appliance on a regular basis will void your warranty.

B. General Maintenance and Cleaning

1. Types of Fuel

Depending on the type of fuel you are burning will dictate how often you have to clean your fire pot.

If the fuel you are burning has a high dirt or ash content or you are burning shelled field corn, it may be necessary to clean the fire pot more than once a day.

Dirty fuel will cause clinkers to form in the fire pot. A clinker is formed when dirt, ash or a non-burnable substance is heated to 2000°F (1093°C) and becomes glass-like. See **page 15** in this section for more details on fuels with high ash content.

2. Cleaning Fire pot with Cleaning Rod & Fire pot Clean-Out Tool

- Frequency: Daily or more often as needed
- By: Homeowner
 - a. The appliance must be in complete shutdown and cool and the exhaust blower off. NOTE: If you are just cleaning the fire pot, there is no need to unplug the insert.
 - b. Pull fire pot cleaning rod OUT and IN a couple of times to help shake debris loose. **See page 14.**

If rod is hard to pull, it may be necessary to use your fire pot clean-out tool to chip away material that has built up on the bottom plate of the fire pot and to push out any clinkers. Larger clinkers may have to be removed from the top of the fire pot. Corn clinkers can be especially difficult to break up.

c. The fire pot floor plate must be fully closed when finished.



Figure 13.1

3. Ash Removal from Firebox

- Frequency: Weekly or more frequently depending on ash build-up
- By: Homeowner
 - a. There must not be any hot ashes in the firebox during cleaning so allow the appliance to completely cool. Frequent cleaning of the ash in the firebox will help slow down the build-up of ash in the exhaust blower and vent system.
 - b. Plug in your appliance, if unplugged, and turn the thermostat on and immediately shut it off to start the exhaust blower on its cycle time. It will pull fly ash out the exhaust instead of into the room.

- c. Open door. There are 2 cleaning slide plates to the left and right of the fire pot with finger holes. Pull both slide plates out and sweep the remaining ash from the firebox into the 2 open holes. A paint brush works well for this. Close slide plates.
- d. This ash is deposited in the same ash drawer as the fire pot debris. The ash drawer should be emptied every time you clean the firebox. Remember to place the ash and debris into a metal or non-combustible container.
- e. The 2 cleaning slide plates must be fully closed when cleaning is complete.

4. Cleaning Ash Drawer

- Frequency: Weekly or every 5 bags of fuel
- By: Homeowner

Locate the ash drawer underneath the fire pot and slide the ash drawer straight out. Empty into a non-combustible container and re-install ash drawer.

5. Disposal of Ashes

- Frequency: As needed
- By: Homeowner

Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal.

If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.



WARNING

Disposal of Ashes



Ashes should be placed in metal container with tight fitting lid.

Ashes should be retained in closed container until all cinders have thoroughly cooled.



WARNING

Fire Risk NEVER p plates who fall into as

NEVER pull fire pot cleaning rods or cleaning slide plates when appliance is operating. Hot pellets may fall into ash pan and may start a fire or have mis-starts due to lack of vacuum.

A

WARNING



Fire Risk.

The cleaning slide plates must be fully CLOSED when appliance is operating. Hot pellets may fall into ash pan and start a fire.

6. Cleaning Heat Exchanger Chambers

- Frequency: Weekly or every 1 ton of fuel
- By: Homeowner

The amount of ash buildup in the firebox will be a good guide to determine how often you should clean the heat exchangers.

- a. Allow the appliance to completely cool down before pulling the cleaning rods. Turn the thermostat on and then immediately off to start the exhaust blower on its cycle time. It will pull fly ash out the exhaust instead of into the room.
- b. Locate the 2 exposed rods directly underneath the heat exchanger tubes. **Figure 14.1.**
- c. To clean, pull the rods straight out until it stops, approximately 8 inches (203mm). Slide the rods OUT and IN a couple of times.

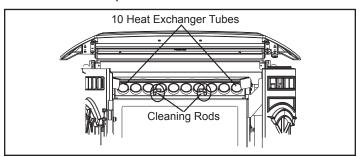


Figure 14.1

A

WARNING



Heat exchanger cleaning rods may be warm to the touch. For safety purposes wear gloves.

Do not pull heat exchanger cleaning rods while appliance is operating.



Push cleaning rods IN when done, DO NOT leave cleaning rods OUT. Injury can occur.

7. Cleaning Beneath Heat Exchanger

- Frequency: Monthly or every 1 ton of fuel
- By: Homeowner

A more thorough cleaning is needed to remove the excess ash that is left behind from the use of the cleaning rods for the heat exchanger tubes. The ash will be resting on the back of the baffle.

This will require removing the baffle and cast brick set. Please refer to **pages 21** for a detailed explanation of removing the baffle and brick set.

NOTE: There are heavy duty vacuum cleaners specifically designed for solid fuel appliance cleaning.

8. Cleaning the Glass

- Frequency: When clear view of the fire pot is obscure
- By: Homeowner
 - a. Appliance must be completely cool before cleaning glass.
 - b. Use a damp paper towel or any non-abrasive glass cleaner. Wipe off with dry towel.

CAUTION



Handle glass assembly with care.

When cleaning glass:

- Avoid striking, scratching or slamming glass.
- Do NOT clean glass when hot.
- · Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Refer to maintenance instructions.

A WARNING



Handle glass with care.

- · Inspect the gasket to ensure it is undamaged.
- · Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass assembly removed.
- · Do NOT operate with glass cracked, broken or scratched.

9. Door Latch Inspection

- Frequency: Prior to heating season
- By: Homeowner

The door latch is non-adjustable but the gasketing between the glass and firebox should be inspected periodically to make sure there is a good seal.

NOTE: There is no gasket on the bottom of glass.

10. Cleaning the Hopper

- Frequency: Monthly or every 1 ton of fuel
- By: Homeowner

After burning approximately 1 ton of fuel you will need to clean the hopper to prevent sawdust build-up. A combination of sawdust and pellets on the auger reduces the amount of fuel supply to the fire pot. This can result in nuisance shutdowns and mis-starts.

- 1. The appliance must be in complete shutdown. Allow the appliance to completely cool down.
- 2 Empty the hopper of any remaining pellets.
- 3. Vacuum the hopper and feed tube.

11. Cleaning Exhaust Blower - Requires No Lubrication

- Frequency: Yearly or as needed
- By: Quality Service Technician/Homeowner
 - a. Remove left & right brick. The exhaust blower path is behind the right brick. Vacuum this area thoroughly. See page 21 for removing bricks. Re-install bricks when done.

12. <u>Cleaning Convection Blower - Requires No</u> <u>Lubrication</u>

Frequency: Yearly or as neededBy: Qualified Service Technician

Task: Contact your local dealer.

13. <u>Soot and Fly Ash: Formation & Need for Removal in Exhaust Venting System.</u>

• **Frequency:** Yearly or more frequently depending on ash build-up

By: Qualified Service Technician/Homeowner

The products of combustion will contain small particles of fly-ash. The fly-ash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room appliance will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary.

The venting system may need to be cleaned at least once a year or more often depending upon the quality of your fuel or if there is a lot of horizontal pipe sections. Ash will build up more quickly in the horizontal sections.

14. Preparing Firebox for Non-Burn Season

- Frequency: At the end of the heating season
- By: Homeowner
 - a. Be sure the appliance is allowed to cool, has been unplugged and the exhaust blower is off.
 - b. Remove all ash from the firebox and vacuum thoroughly.
 - c. Paint all exposed steel, including cast-iron.
 - Use the Touch-Up paint supplied with the appliance; or,
 - Purchase paint from your local dealer.
 - Must use a high-temperature paint made specifically for heating appliances.

A

WARNING

Fire Risk.

- High ash fuels, or lack of maintenance, can cause the fire pot to overfill. Follow proper shutdown procedure if ash build up exceeds half way point.
- Failure to do so could result in smoking, sooting and possible hopper fires.

C. High Ash Fuel Content Maintenance

• **Frequency:** When the ash build-up exceeds more than half way up the fire pot.

• By: Homeowner

Poor quality pellet fuel, or lack of maintenance, can create conditions that make the fire pot fill quickly with ashes and clinkers.

This condition makes the appliance susceptible to overfilling the fire pot with pellets which may result in smoking, sooting and possible hopper fires. **Figure 15.1** shows an example where the fire pot overfills, pellets back up into the feed tube and ash has accumulated in the firebox.

An inefficient and non-economical method of burning of fuel caused by poor quality pellet fuel is shown in **Figure 15.2**.

The correct flame size when good quality, premium pellet fuel is burned is shown in **Figure 15.3**.

If the ash buildup exceeds the half way point in the fire pot **IMMEDIATE ATTENTION AND CLEANING IS REQUIRED.**

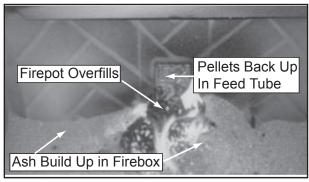


Figure 15.1

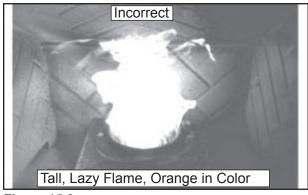


Figure 15.2

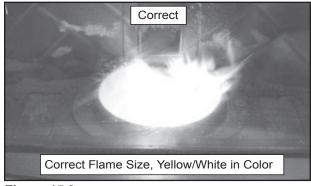


Figure 15.3

D. Thermostat Battery Installation and Replacement

NOTE: 2 AA batteries are included with the thermostat and must be installed before the appliance can be operated.

Install fresh batteries immediately when the **REPLACE BATTERY** warning begins flashing. The warning flashes about two months before the batteries are depleted. Even if the warning does not appear, you should replace batteries once a year (see **Figure 16.1**). If batteries are inserted within two minutes, the time and day will not have to be reset. All other settings are permanently stored in memory.



Figure 16.1

Thermostat Operation

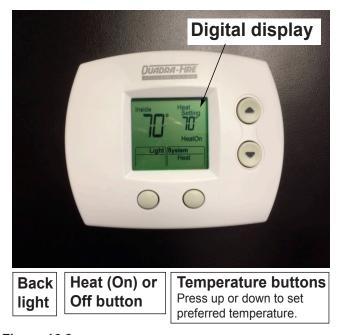


Figure 16.2



Troubleshooting Guide

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

Symptom	Possible Cause	Corrective Action
Plug in appliance - No	No current to outlet.	Check circuit breaker at service panel.
response.	7 amp fuse defective.	Replace fuse.
	#3 snap disc tripped or defective.	Reset or replace snap disc.
	Control box defective.	Replace control box.
Call light on. No fire.	Out of fuel.	Check hopper. Fill with fuel.
No fuel in fire pot.	#2 snap disc may be defective.	Replace snap disc.
	Vacuum switch not closing, no vacuum.	Check exhaust blower is plugged in and operating. Check vacuum switch is plugged in. Check vacuum hose is in good condition, clear and connected at both ends. Check thermocouple is in good condition and plugged in properly. Make sure venting system is clean. Make sure front door is closed.
	Control box defective.	Replace control box.
Call light on. No fire. Partially burned fuel in	Fire pot clean-out plate not closed.	Check that fire pot clean-out plate is fully closed.
fire pot.	Fire pot is dirty (missed ignition).	Clean fire pot. Make sure there is no clinker in the fire pot. See page 12 .
		Clinkers may have to be broken up with fire pot clean-out tool or other means.
Call light on. No fire. Unburned pellets in fire	Fire pot clean-out plate not closed.	Check that fire pot clean-out plate is fully closed.
pot.	Fire pot is dirty.	Clean fire pot. Make sure there is not a clinker in the fire pot. Clinkers may have to be pushed out of fire pot with fire pot clean-out tool or other means.
	The ignition hole between the igniter bracket and fire pot is blocked.	Scrape with solid piece of wire or fire pot tool.
	Igniter not working.	Remove ash drawer to see if igniter is glowing red on start-up. Check igniter wires for good connection. Replace igniter using 1/4 inch (6mm) male / female spade connectors.
	Control box defective.	Replace control box.
Slow or smoky start-up.	Fire pot clean-out plate not closed.	Check that fire pot clean-out is fully closed.
	Fire pot is dirty.	Clean fire pot. Make sure there is not a clinker in the fire pot. Clinkers may have to pushed out of fire pot with fire pot clean-out tool or other means.
	Excessive amount of fuel at start-up.	Reduce feed rate using feed rate adjustment control rod located inside hopper.

Symptom	Possible Cause	Corrective Action
Slow or smoky start-up (Cont'd)	Dirty exhaust and/or venting system.	Check for ash build up in appliance, including behind rear panels, firebox, heat exchanger, exhaust blower and venting.
Feed system fails to	Out of fuel.	Check hopper, fill with fuel.
start.	#2 snap disc may be defective.	Replace snap disc.
	Vacuum switch not closing. No vacuum.	Firebox door must be closed securely. Check exhaust blower is plugged in and operating. Check vacuum switch is plugged in. Check vacuum hose is in good condition, clear and connected at both ends. Check thermocouple is in good condition and plugged in properly. Make sure venting system is clean. NOTE: High winds blowing into the venting system can pressurize the firebox causing loss of vacuum.
	Feed system jammed or blocked.	Empty hopper of fuel. Use a wet/dry vacuum cleaner to remove remaining fuel, from hopper, including feed tube. Check feed chute for obstructions. Loosen 2 screws and jiggle feed assembly.
	Feed spring not turning with feed motor.	Check that set screw is tight on feed spring shaft at end of feed motor.
	Feed motor defective or not plugged in.	Check connections on feed motor, replace if defective.
No call light. Appliance does not begin start	Thermostat not set to a high enough temperature.	Adjust thermostat above room temperature.
sequence.	Snap Disc #3 tripped.	Reset snap disc.
	No power.	Connect to power.
	Fuse blown.	Replace fuse.
	Connections at thermostat and/or appliance not making proper contact.	Check connections at thermostat and appliance.
	Defective thermostat or thermostat wiring.	Replace thermostat or wiring. NOTE: To test thermostat and wiring, use a jumper wire at the thermostat block on the appliance to by-pass thermostat and wiring.
	Control box defective.	Replace control box.
Appliance fails to shut off.	Call light on.	Turn thermostat off. If call light does not go out, disconnect thermostat wires from appliance. If call light does go out, thermostat or wires are defective.

Symptom	Possible Cause	Corrective Action
Convection blower fails to	#1 snap disc defective.	Replace snap disc.
start.	Blower not plugged in.	Check that blower is plugged into wire harness.
	Blower is defective.	Replace blower.
	Control box is defective.	Replace control box.
Exhaust blower fails to start or does not shut off.	Blower not plugged in.	Check that blower is plugged into wire harness.
	Blower is clogged with ash.	Clean exhaust system.
	Blower is defective.	Replace blower.
	Control box is defective.	Replace control box.
Large, lazy flame, orange color. Black ash on glass.	Dirty appliance. Poor fuel quality, high ash content.	Clean appliance, including fire pot, heat exchangers and venting system. Remove stainless steel baffle from firebox to clean ash from on top of baffle. Clean behind rear brick panels. Change fuel brand to premium.
	Fire pot clean-out plate not completely closed.	Check that fire pot clean-out plate is fully closed.
	Excessive amount of fuel.	Reduce feed rate using feed rate adjustment control rod located inside hopper.
Nuisance shutdowns.	Low flame.	Increase feed by opening feed rate adjustment control rod located inside hopper.
	Sawdust buildup in hopper.	Clean hopper, see page 13.
	Feed motor is reversing.	Check for good connections between feed motor and wire harness.
	Defective thermocouple.	Replace thermocouple.
	Defective control box	Replace control box.
	Fire pot more than 1/2 full	See page 14 for detailed instructions for "High Ash Fuel Content Maintenance"
Appliance calls for heat. Call light illuminates. Exhaust blower starts. No feed or igniter.	Thermocouple is defective or not properly plugged in.	Check connections on thermocouple or replace if defective. A flashing yellow light on the control box indicates a problem with the thermocouple.
	Defective control box	Replace control box.
Hopper lid not closed all the way	Switch or magnet is out of adjustment (auger will not function)	Close the lid. If that doesn't work, adjust or replace the switch or magnet

5

Service Parts Replacement

A. Blower Replacement

1. Combustion (Exhaust) Blower Replacement

- a. If you have adequate clearance you will not have to remove the panel set and disconnect flue, if not then you will have to remove the panel set and disconnect the flue.
- b. Pull appliance out onto the hearth.
- c. Remove right cast side.
- d. Disconnect the white and blue wires from the blower.
- e. Remove blower mounting screws (not housing bolts), Figure 20.1, from blower housing and remove blower. The replacement blower is shipped with a housing. If you do not need the housing, discard it. If you do need to the replace the housing you will also need to replace the gasket. See Service Parts List for the part number.
- f. Re-install in reverse order.

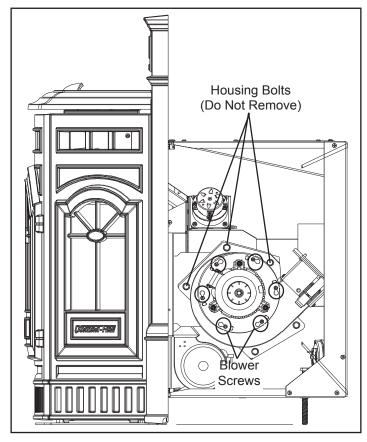


Figure 20.1

2. Convection Blower Replacement

- a. The blower is located at the bottom rear of the insert. If an outside air kit is also installed, you will first need to remove the outside air flange by removing the 2 screws using a Phillips head screwdriver. You do not need to remove the flex pipe from the flange.
- b. If you have adequate clearance you will not have to remove the panel set and disconnect flue, if not then you will have to remove the panel set and disconnect the flue.
- c. Pull appliance out onto the hearth.
- d. Remove left cast side.
- e. Disconnect the wires from the blower. The wires coming from the wiring harness are purple & white and the wires from the blower are black.
- f. The blower is held in place with a wing screw.
- g. Re-install in reverse order.

B. Baffle & Brick Replacement

- 1. Follow proper shutdown procedures in Section 10.
- 2. The top baffle has a hook on the bottom left side that rests on the top lip of the cast brick. There is a tab on the bottom right side that hooks into the side bracket. Remove the top baffle by first pulling the baffle forward until back edge drops down. Then slide baffle back until the front edge clears the shelf that it had been resting on. Figure 21.1.
- 3. The top baffle must be removed before you can remove the right and left brick. Remove the right brick by holding top lip of brick and lifting up, then push outside edge back. Slide brick to the right until it is flush with the firebox. Rotate the inside edge of the brick forward and remove brick. Repeat for left brick. Figure 21.2.

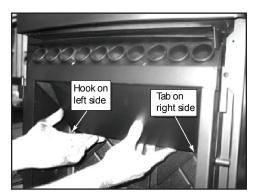


Figure 21.1



Figure 21.2

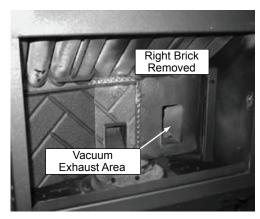


Figure 21.3

C. Re-installing Baffle & Brick Set

- 1. Place right brick in behind the right bracket, and then slide to the left so the tabs are behind the center brick. Figure 21.4.
- 2. The brick will be flush against the back wall and notches exposed in the side bracket. **Figure 21.5.**
- 3. Lift slightly and pull the right edge of the brick forward until it stops and then drops down into both top and bottom notches of right bracket and locks into place. **Figures 22.1 and 22.2.**
- 4. Repeat for left brick.
- 5. Insert baffle into top front inside the firebox and pull forward. Then raise up the bottom end and insert baffle tab into slot on the top of the right bracket to lock into place. Figure 22.3. Place the left side hook at the bottom of the baffle over the top edge of brick for stability. Figure 22.4.
- 6. The baffle does not completely cover the top of the firebox. There is an opening on the left as shown in **Figure 22.5**.

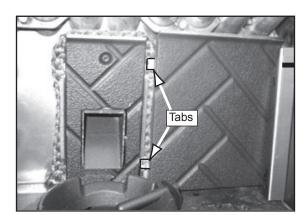


Figure 21.4

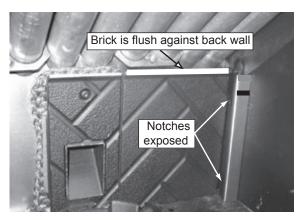


Figure 21.5

Re-installing Baffle & Brick Set (Cont'd)

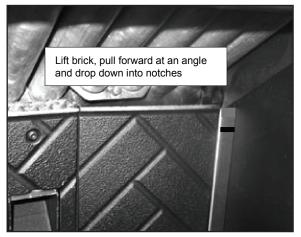


Figure 22.1

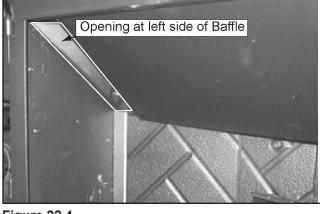


Figure 22.4



Figure 22.2

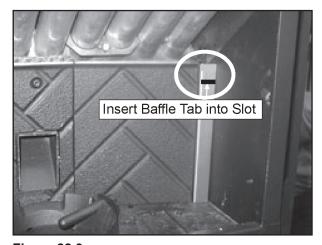


Figure 22.3

D. Igniter Replacement

- Shut down the appliance by turning down the thermostat and let the appliance completely cool down. After the appliance has cooled down, unplug it and remove the ash drawer.
- 2. The wire leads to the igniter are connected to the wire harness with 1/4 inch (6mm) male / female spade connectors. These wires will pull forward approximately 4 to 5 inches (102mm to 127mm) through the grommet at the back of the ash drawer chamber. Disconnect the spade connections and remove the igniter from the chamber. Loose the thumb screw and slide igniter out.
- Install new igniter into the chamber and tighten the thumb screw. Re-connect the wires to the 2 leads with the spade connectors.
- 4. Push excess wire leads back through the grommet, one wire at a time, to take-up the 4 to 5 inches (102mm to 107mm) previously pulled out. This will keep the wires out of the way of the ash drawer. Double check that the igniter wires are clear of any movement, i.e. ash drawer, fire pot cleaning rod, cleaning slide plates, etc.
- 5. Re-install the ash drawer and then re-install the side panel and re-connect the power.

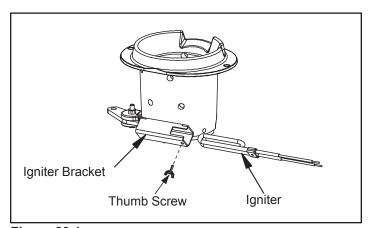


Figure 23.1

E. Glass Replacement

- 1. Open the face and remove door from the appliance by lifting door off of hinge pin and lay on a flat surface face down.
- Using a screwdriver, tap the bottom of the rope retainer rod to push it up out of the hole. The top end of the rod will slide up. Swing the rod toward you from the bottom and remove the rod. Repeat for other side.
- 3. Remove old glass and replace with new glass.
- 4. Slide the retainer rod into the top hole first, and then line up the bottom crimped end with the hole in the door. The crimped end must be parallel with the glass in order to insert it into place. **Figure 23.2.**

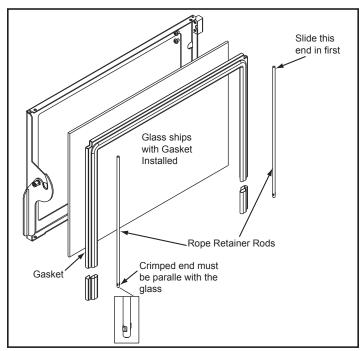


Figure 23.2

A WARNING



- Glass is 5mm thick high temperature heat-resistant ceramic glass.
- · DO NOT REPLACE with any other material.
- Alternate material may shatter and cause injury.



Reference Materials

A. Component Functions

1. Control Box

- a. The control box is located on lower right side of appliance, on top of the junction box.
- b. There is a light located inside of the control box. The internal light will turn green when the appliance has reached a temperature of 200°F (93°C) in the fire pot. and will turn red when it reaches 600°F (315°C).
- c. There is also an internal blue light located in the upper left corner of the control box. When you plug in the appliance the blue light will automatically start blinking 6 blinks every 10 seconds for 60 seconds (depending upon setting) and then will stop.

NOTE:

Do **NOT** open the control box. This will void the warranty. If you need to plug in or remove the control box you must first **unplug the appliance**.

2. Convection Blower

The convection blower is mounted at the bottom rear of the appliance. There are 2 impellers, one on each side of the motor. The convection blower pushes air through the heat exchange system into the room.

3. Exhaust Blower

The exhaust blower is mounted on the right side of the appliance behind the right side panel. The exhaust blower is designed to pull the exhaust from the appliance and push it out through the venting system.

4. Feed System

The feed system is located behind the firebox and can be removed as an entire assembly. The assembly includes the feed motor, mounting bracket, bearing and feed spring (auger). The hollow feed spring (auger) pulls pellets up the feed tube from the hopper area and drops them down the feed chute into the fire pot at a set rate. The feed motor starts and stops every 7 seconds.

5. Fire pot

The fire pot is made of high quality ductile iron and has a cleaning pull-out rod. The floor of the fire pot opens for cleaning when you pull out the rod. Be sure that the floor returns to a completely closed position or your appliance will not operate properly.

6. Fuse

The fuse is located on the side of the junction box near the red call light. The fuse will blow should a short occur and shut off power to the appliance.

7. Heat Exchangers

The heat exchangers transfer heat from the exhaust system into convection air. There are 2 clean out rods located under the heat exchangers.

When describing the location of a component, it is always AS YOU FACE THE FRONT OF THE APPLIANCE.

8. Heat Output Switch

The heat output switch is located on the lower right side of firebox, behind the front access door and above the reset button. The function of the heat output switch is to regulate the burn rates; low, medium and high settings.

9. Hopper Switch

The hopper switch is located in the upper right hand corner, outside of the hopper. This switch is designed to shut down the feed motor whenever the hopper lid is opened.

10. laniter

The igniter is mounted on the base of the fire pot. Combustion air travels over the red hot igniter creating super heated air that ignites the pellets.

11. Junction Box And Wiring Harness

The junction box is located on the lower right side of the appliance, behind the left front access door. The junction box and wiring harness are replaced as one component.

12. Power Supply

The power outlet is located on the lower right side of the appliance on the front of the junction box. Check the wall receptacle for 120 volt, 60 Hz (standard current). Make sure the outlet is grounded and has the correct polarity. A good surge protector is recommended. When operating with a generator you need a least 600 watts of power, or with an inverter at least 800 watts of power available for the appliance during the start cycle.

13. Red Call Light

The red call light is on the top of the junction box by the fuse. The function of the red call light is to indicate that the thermostat is calling for heat.

14. Reset Button

The reset button is located on the lower right side of firebox in behind the access door and below the heat output control switch. The function of the switch is to momentarily open the thermostat circuit, which restarts the system.

15. Thermocouple

The thermocouple is located on top of the fire pot inside the thermocouple cover (ceramic protection tube). The thermocouple sends a millivolt signal to the control box indicating the preset temperatures of the green and red lights have been obtained.

16. Thermostat

The appliance is designed to run on a 5 volt DC thermostat. The heat anticipator, if present, should be set on the lowest setting available.

17. Snap Disc #1 (Convection Blower) 110°F

Snap disc #1 is located on the right side of the firebox. There are 2 purple wires connected to it. This snap disc turns the convection blower on and off as needed. Power is always present at snap disc #1 if the appliance is powered up.

18. Snap Disc #2 (Fuel Delivery Interrupt) 250°F

Snap disc #2 is located on the back side of the feed drop tube. There is 1 orange wire and 1 black wire connected to it. This snap disc will turn off the feed system, which will turn off the appliance if an over fire condition should occur or if the convection blower should fail to operate. If this occurs the snap disc with automatically reset itself.

19. Snap Disc #3 (Burn Back Protector) 250°F

Snap disc #3 is mounted on the back of the auger tube in the center of the appliance and has a reset button. To access it remove the right side panel. If the fire tries to burn back into the feed system or push exhaust up the feed tube, this snap disc will shut the entire system off. This disc must be manually reset. Power is always present at snap disc #3 if the appliance is powered up.

20. Vacuum Switch

The vacuum switch is located on the lower right side of the appliance behind left access panel. This switch turns the feed system on when vacuum is present in the firebox. The vacuum switch is a safety device to shut off the feed motor if the exhaust or the heat exchanger system is dirty or plugged or if the firebox door is open.

21. Wiring Schematic

See Figure 25.1 below

The power outlet is located on the right rear of the appliance beneath the heat output switch and reset button.

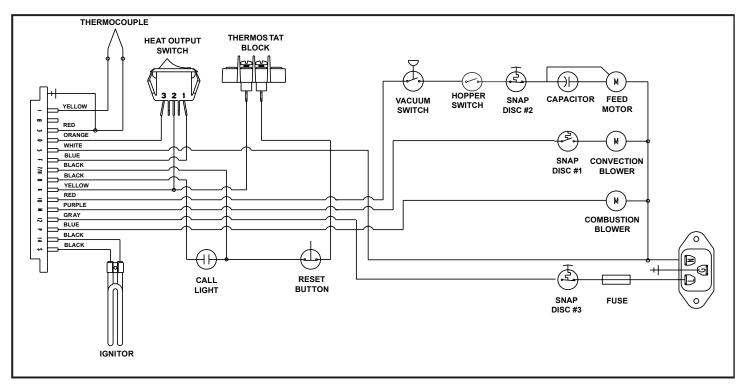


Figure 25.1

B. Component Locations

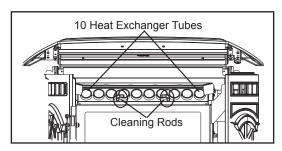


Figure 26.1 - Cleaning Rods & Heat Exchanger Tubes

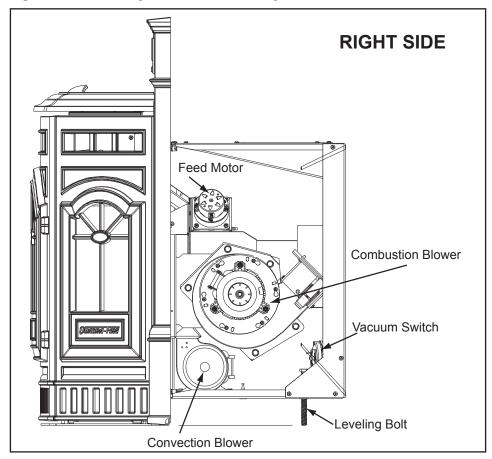


Figure 26.2

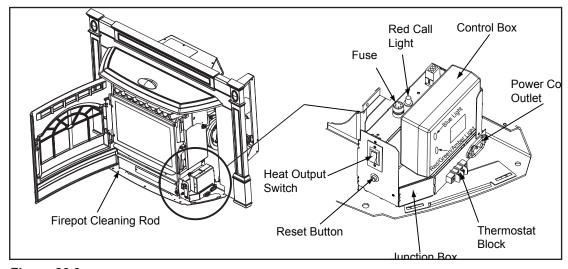


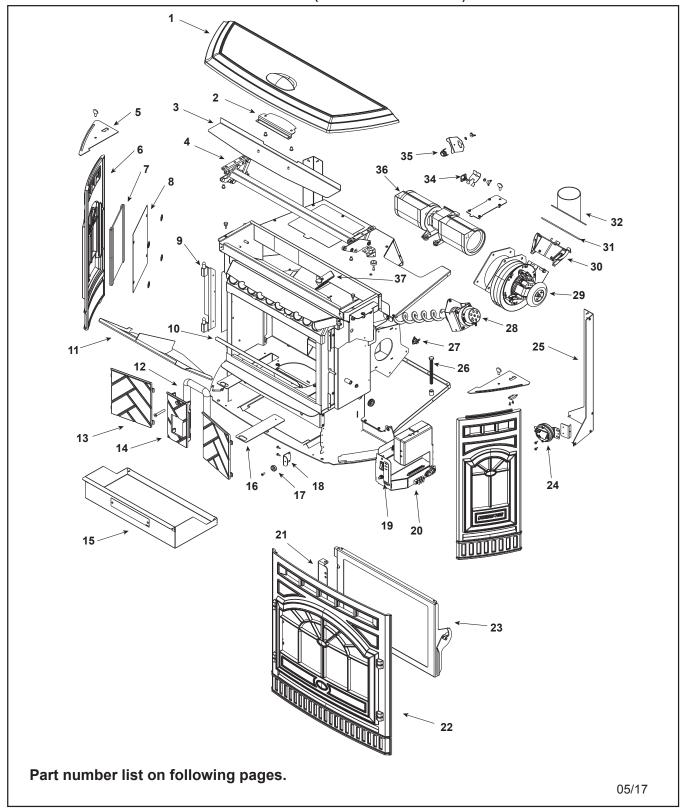
Figure 26.3



Castile Pellet Insert

Beginning Manufacturing Date: Feb 2011 Ending Manufacturing Date: Active

CASTILEI-MBK, CASTILEI-PMH, CASTILEI-CSB CASTILEI-CWL (Feb 2011 Thru June 2011)





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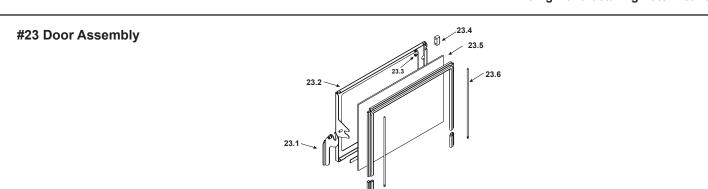
D. Service Parts List

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. Hearth and Home Technologies does not sell directly to consumers. Provide model number and serial number when requesting service parts from your dealer or distributor.

V.	•

	Imber and serial number when requesting service parts from your			at Depot
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
		Matte Black	7022-129BK	
1	Top Cast - Must specify color	Porcelain		
		Powder Coat	7022-129PWD	
2	Handle Cover Plate		SRV7022-144	
3	Heat Shield, Top		SRV7022-143	
4	Hinge Assembly, Top		SRV7036-006	
5	Side Cast Hook		SRV7022-132	
	Thumb Screw, 1/4-20 x 1/2	Pkg of 10	7000-617/10	Υ
		Matte Black	414-0050BK	
6	Side - Must specify color	Porcelain Color	414-0050POR	
		Powder Coat	SRV7022-144 SRV7022-143 SRV7036-006 SRV7022-132 7000-617/10 414-0050BK color 414-0050PWD eable SRV414-5380 7000-377/10 eable 414-0280 SRV7022-012 SRV450-2810 413-0680 7001-034 842-2350 414-0270 414-0260 SRV414-6240 7001-186 SRV7000-140 414-0930 SRV7000-704 812-3780/10 SRV7022-138	
7	Glass Assembly, Side, 1 Piece - 5-7/8 in. W x 9 in. H	Interchangeable	SRV414-5380	Y
	Gasket, Channel 1/8 x 1-1/4	10 Ft.	7000-377/10	Υ
8	Backer, Side Window	Interchangeable	414-0280	
9	Door Hinge Assembly		SRV7022-012	Υ
	Hinge, Door, Male		SRV450-2810	
10	Deflector, Bottom Airwash		413-0680	
11	Baffle Assembly		7001-034	Υ
12	Door Rope, 7/8"	8 Ft		Y
13	Brick, Left / Right, Cast			
14	Brick, Center, Cast			
15	Ash Pan Assembly			
16	Plate, Ash Cleanout			
17	Magnet Round			Υ
18	Bracket, Magnet			•
19	Wire Harness			Υ
20	Control Board 3 Speed			Y
	Fuse, 8 Amp, Control Box	Pkg of 10		Y
21	Face Hinge	1 kg or 10		
	1 doc rinige	Matte Black	414-0040BK	
22	Face - Must specify color	Porcelain Color	414-0040POR	
22	r ace - Must specify color	Powder Coat	414-0040PWD	
		1 Owder Coat	714-00405 000	
		1		

Beginning Manufacturing Date: Feb 2011 Ending Manufacturing Date: Active



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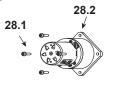


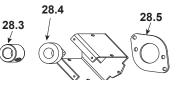
Stocked at Depot

29

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
23	Door Assembly		SRV7021-007	
23.1	Door Latch Assembly		7021-006	
23.2	Door Frame		SRV7021-114	
23.3	Screw, Pan Head Philips, 10/32 x 1/4	Pkg of 24	229-1230/24	Υ
23.4	23.4 Hinge, Female SI		SRV450-2910	
23.5 Glass Assembly (w/gasket) 17-1/4" W x 11-5/8" H		SRV7001-038	Υ	
	Gasket, Tadpole		842-5130	Υ
	Tape, 1/2" x 1/16	10 Ft	240-0290/10	Υ
	Tape, Door Corner		SRV7027-227	Υ
23.6	Retainer, Rope		SRV7001-192	Υ
24	Vacuum Switch		SRV7000-531	Υ
25	Corner Post		SRV7022-104	
26	Bolt, GRD 2 Tap 3/8 x 4		223-0140	
27	Snap Disc, 110-20		SRV230-1220	Υ

#28 Feed Assembly







28	Feed Assembly		812-4760	Υ
28.1	Screw, 8-32 x 3/8 PH,TF	Pkg of 40	225-0500/40	Υ
28.2	Feed Motor		812-4421	Υ
28.3	Collar, Set, 7/8		229-0520	
28.4	Bearing, Feed System, Nylon		SRV7000-598	Υ
28.5	Gasket, Feed Motor		SRV240-0731	Υ
28.6	Feed Spring Assembly		SRV7001-046	Y
28.7	Set Screw 5/16-18 x 1/4	Pkg of 25	225-0550/25	Υ



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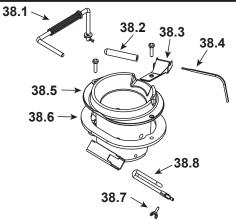
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Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
11 - 141		COMMITTION	TAKT NOMBER	
29	Exhaust Combustion Blower, 45 CFM		812-4400	Υ
	Ocalest Februari Ocasharting Plants (hatasara)		SRV240-0812	Υ
	Gasket, Exhaust Combustion Blower (between)	Housing & Motor	812-4710	Υ
30	Exhaust Transition Assembly		414-5100	
	Latch, Draw		229-0230	
31	Gasket, Flue Adapter		SRV7036-180	Υ
32	Exhaust Adapter Assembly		SRV414-5850	
33	Blower Retainer		SRV7058-148	
34	Snap Disc, #2		SRV7000-268	Υ
35	Snap Disc, Manual Reset, #3		SRV230-1290	Υ
36	Convection Blower, 150 CFM		812-4900	Υ
37	Feed Adjustment Plate		SRV7022-119	

#38 Firepot and Associted Parts



38.1	Firepot Pull Rod Assembly		414-5270	Υ
	Spring, Firepot		200-2050	
	Washer, 1/4 Sae	Pkg of 24	28758/24	Υ
38.2	Thermocouple Cover	Pkg of 10	812-4920	Υ
38.3	Thermocouple Clamp		SRV7001-203	Υ
38.4	Thermocouple		812-4470	Υ
38.5	Firepot Assembly		SRV414-5200	Υ
	Bushing, Firepot		410-8320	Υ
	Floor, Firepot		414-0290	Υ
38.6	Gasket, Firepot		SRV240-0930	Υ
	Nut, Lock 1/4-20	Pkg of 25	226-0090/25	Υ
	Bolt, Firepot, 1-1/4" Long	Pkg of 25	225-0120/25	Υ
38.7	Wing Thumb Screw 8-32 x 1/2	Pkg of 24	7000-223/24	Υ
20.0		Pkg of 1	SRV7000-462	Υ
38.8	Heating Element Assembly 18" (Loop Igniter)	Pkg of 10	SRV7000-462/10	Υ



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	iber and serial number when requesting service parts from your dealer or distributor.		at Debo	
ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
		Mahogany	SRV7022-023	
	Component Pack Assembly (Includes Firepot Cleanout Tool, Touch-Up Paint, Power Cord, Thermostat Wire	Matte Black	SRV7022-020	
	Harness, Owners Manual, Warranty Card, "How-To" Dvd	Sienna Bronze	SRV7022-021	
	, , , , , , , , , , , , , , , , , , , ,	Willow	SRV7022-022	
	Cleanout Tool		414-1140	Υ
	Dvd Original Energy Insert		7000-441	
		Matte Black	812-0910	
	Paint Touch-Up	Mahogany	855-1450	
	Faint Touch-Op	Sienna Bronze	TOUCHUP-CSB	
		Willow	TOUCHUP-CWL	
	Power Cord		812-1180	Υ
	Harness, Thermostat Wire		SRV230-0810	
	Fuse, 7 Amp, Junction Box	Pkg of 10	812-0380/10	Υ
	Hose, Vacuum, 5/32 Id	3 Ft	SRV240-0450	Υ
	Hopper Lid Magnetic Switch		SRV7000-375	Υ
	Reset Button Assembly		SRV7000-040	
	Wire Harness, Hopper Switch		SRV414-1220	Υ
	OPTIONAL ACCESS	ORIES		
	Adjustable Hearth Support - 12" x 50", 2-10" H		ADJSPT-12	
	Damper, 3 Inch - Tall Vertical Installs Only		PEL-DAMP3	Υ
	Damper, 4 Inch - Tall Vertical Installs Only		PEL-DAMP4	
	Log Set		LOGS-30-OE	
	Log Rear, Left		7050-144	
	Log Rear, Right		7050-143	
	Outside Air Kit, Rear		811-0872	
	Channel, Air Intake		SRV413-7040	
	Cover, Outside Air Kit, Floor		411-1071	
	Hose, Alum Flex, 2 Inch x 3 Ft	3 Ft	SRV200-0860	
	Outside Air Cap Assembly		7001-044	
	Outside Air Collar Assembly		SRV7001-045	
	Trim Plate, Outside Air Kit		412-7100	
	Pullrod Handle		PULLROD-HNDL	
		Black	TRIMKIT-4331-BK	
	Surround Trim Assembly 43 X 31	No Longer Available	TRIMKIT-4331-GD	
		Nickel	TRIMKIT-4331-NL	
		Black	TRIMKIT-5134-BK	
	Surround Trim Assembly 51 X 34	No Longer Available	TRIMKIT-5134-GD	
	I	Nickel	TRIMKIT-5134-NL	



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EM	DESCRIPTION	COMMENTS	PART NUMBER	
	Surround, Basic, Large		SP-CSTLI5134	
	Component Pack		SRV7022-055	
	Surround, Basic, Standard		SP-CSTLI4331	
	Component Pack		SRV7022-055	
	Surround, Standard	Use With Cast Trim	SP-CSTLI4230-CM	
	Component Pack		SRV7022-054	
	Surround, Standard	Use With Cast Trim	SP-CSTLI4834-CM	
	Thermostat		WALL-STAT	Υ
	Thermostat, Programmable		WALL-STAT-P	
	Trim Cast	Matte Black	811-0930	
	Footer, Left		414-7090MBK	
	Footer, Right		414-7100MBK	
	Header		414-7110MBK	
	Trim Leg, Left		414-7120MBK	
Ī	Trim Leg, Right		414-7130MBK	
	Trim Cast	Mahogany	811-0960	
Ì	Footer, Left		414-7090PMH	
Ì	Footer, Right		414-7100PMH	
Ì	Header		414-7110PMH	
Ì	Trim Leg, Left		414-7120PMH	
Ì	Trim Leg, Right		414-7130PMH	
	Trim Cast	Sienna Bronze	TR-CAST-CSB	
İ	Footer, Left		414-7090CSB	
Ì	Footer, Right		414-7100CSB	
Ì	Header		414-7110CSB	
Ì	Trim Leg, Left		414-7120CSB	
Ì	Trim Leg, Right		414-7130CSB	
	Trim Cast	Willow	TR-CAST-CWL	
Ì	Footer, Left		414-7090CWL	
Ì	Footer, Right		414-7100CWL	
Ì	Header		414-7110CWL	
Ī	Trim Leg, Left		414-7120CWL	
Ī	Trim Leg, Right		414-7130CWL	
	Trim Support, adjustable (standard panel surround only)	No Longer Available	811-0980	
	Brackets for Trim installation		SRV7022-503G	



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TENAT	DESCRIPTION	COMMENTO	DART NUMBER	at Depot
TEM	DESCRIPTION	COMMENTS	PART NUMBER	
	FASTEN	IERS	D. 4.1.T. DEDAID	1 34
	Avk Rivnut Repair Kit	DI (10	RIVNUT-REPAIR	Y
	Bolt, Hex Head, 1/4-20 X 1	Pkg of 10	25221A/10	Y
	Bumper, Rubber	Pkg of 12	SRV224-0340/12	Y
	Leveling Bolt	Pkg of 25	220-0080/25	Y
	Nut, Capped, Push, 1/4	Pkg of 24	7000-157/24	Υ
	Nut, Ser Flange Small 1/4-20	Pkg of 24	226-0130/24	Υ
	Nut, Wing, 8-32	Pkg of 24	226-0160/24	Υ
	Screw Flat Head 1/4-20	Pkg of 24	7000-130/24	Y
	Screw, 1/4-20X3/8 Phillips Button Head	Pkg of 24	7000-401/24	Υ
	Screw, Flat Head Philips 8-32X1/2	Pkg of 12	220-0490/12	Υ
	Screw, Machine Screw 1/4-20X5/8	Pkg of 24	220-0440/24	Υ
	Screw, Pan Head Philips 8-32 X 3/8	Pkg of 40	225-0500/40	Υ
	Screw, Pan Head Philips Tc 8-32X1/2	Pkg of 25	220-0030/25	Y
	Screw, Pan Head Philips, 10/32 X 1/4	Pkg of 24	229-1230/24	Y
	Screw, Sheet Metal #8 X 1/2 S-Grip	Pkg of 40	12460/40	Y
	Speed Nut 5/16	Pkg of 24	7000-422/24	Y
	Thumb Screw, 1/4-20 X 1/2	Pkg of 10	7000-617/10	Υ
	Washer, 1/4 Sae	Pkg of 24	28758/24	Υ
	Wing Thumb Screw 8-32X1/2	Pkg of 24	7000-223/24	Υ
\longrightarrow				



CONTACT INFORMATION

Hearth & Home Technologies 352 Mountain House Road Halifax, PA 17032 Division of HNI INDUSTRIES

Please contact your Quadra-Fire dealer with any questions or concerns. For the number of your nearest Quadra-Fire dealer log onto www.quadrafire.com

CAUTION

Important operating and • maintenance instructions included.

- follow these instructions for safe installation and operation.
- DO NOT DISCARD THIS MANUAL Read, understand and • Leave this manual with party responsible for use and operation.

We recommend that you record the following pertinent information for your heating appliance.

Date purchased/installed:	
Serial Number:	Location on appliance:
Dealership purchased from:	Dealer phone:1()
Notes:	

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.

