

Owner's Manual

Care and Operation

INSTALLER: Leave this manual with party responsible for use and operation.

OWNER: Retain this manual for future reference.

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

NOTICE: SAVE THESE INSTRUCTIONS

HARMAN®

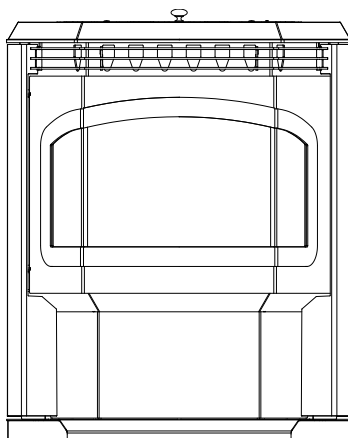
BUILT TO A STANDARD, NOT A PRICE

Model(s):

Advance Freestanding Pellet Stove



Advance
Use & Care Video



This unit 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.



CAUTION

Tested and approved for wood pellets only. 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.
- Contact local building or fire officials about restrictions and installation inspection requirements in your area.



WARNING



Please read this entire manual before installation and use of this pellet fuel-burning room heater.

Failure to follow these instructions could result in property damage, bodily injury or even death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire - If any external part starts to glow, you are overfiring. Reduce feed rate. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.



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 stove.
 - 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.harmanstoves.com

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

1 Welcome

Read this manual before operating this appliance.
Please retain this Owner's Manual for future reference.

Read the Installation Manual before making any installation or finishing changes.

A. Congratulations

Congratulations on selecting a Harman® Freestanding Pellet Stove. The Harman® Advance pellet stove you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new pellet stove, 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.

Your new Harman® Advance Freestanding Pellet Stove will give you years of durable use and trouble-free enjoyment. Welcome to the Harman® family!

Local Dealer Information

DEALER: Fill in your name, address, phone and email information here and appliance information below.

Dealer Name: _____
Address: _____
Phone: _____
Email: _____

Appliance Information:

Brand: _____ Model Name: _____
Serial Number: _____ Date Installed: _____

Listing Label Information/Location The model information regarding your specific stove can be found on the rating plate usually located in the control area of the stove.

MODEL / MODÈLE: "Advance"
Room Heater Pellet Freestanding Type
SUITABLE FOR MOBILE-HOME INSTALLATION
This pellet burning appliance has been tested and listed for use in Manufactured Homes in accordance with OAR 814-23-900 through 814-23-909

Report #/Rapport #135-S-19-2, 135-S-19b-6.2
Test to/testé à: ASTM E 2779-10, ASTM E 2515-11, ASTM E 1509-04, ULC/ORD-C1482-M1990, ULC-S627-00, EPA Method 28R
Room Heater, Pellet Fuel-Burning Type, Also For Use In Mobile Homes. (UM) 84-HUD
"PREVENT HOUSE FIRES" Install and use only in accordance with manufactures installation and operation instructions.
This wood heater needs periodic inspection and repair for proper operation. Consult the owner's manual for further information. It is against federal regulations to operate this wood heater in a manner inconsistent with the operating instructions in the owner's manual.
Contact local building or fire officials about restrictions and installation inspection in your area.
WARNING: FOR MANUFACTURED HOMES: Do not install appliance in a sleeping room. An outside combustion air inlet must be provided. The structural integrity of the manufactured home floor, ceiling and walls must be maintained. Refer to manufacturer's instructions and local codes for precautions required for passing chimney through a combustible wall or ceiling. Inspect and clean exhaust venting system frequently in accordance with manufacturer's instructions.
Use a 3" or 4" diameter type "L" or "PL" venting system.
Do not connect this unit to a chimney flue servicing another appliance.
Do not obstruct the space beneath the heater.
FOR USE WITH PELLETIZED WOOD FUEL ONLY.
Fuel Type: Wood Pellets
Route power cord away from unit.
OPERATE ONLY WITH DOORS CLOSED
DANGER: Risk of Electrical Shock. Disconnect Power Before Servicing Unit.
For Further Instruction refer to Installation and Owner's Manual.
Replace glass only with 5mm mirrored ceramic available from your dealer.
DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE

**MINIMUM CEARANCES TO COMBUSTIBLES/
DISTANCE DE SECURITE PAR RAPPORT AUX
MATERIAUX COMBUSTIBLES:**
Back Wall / Entre Mur Arrière 1" (25mm)
Side Wall / Entre Paroi Latérale 10" (254mm)
Corner Installation / En Angle
Walls to Appliance 7" (178mm)
Floor Protection/Protection du Plancher
1"

Sides/Côtés (A)
Back/Arrière (P)
Front/Avant (F)
Use a 3" or 4" diameter type "L" or "PL" venting system.
Do not connect this unit to a chimney flue servicing another appliance.
Do not obstruct the space beneath the heater.
FOR USE WITH PELLETIZED WOOD FUEL ONLY.
Fuel Type: Wood Pellets
Route power cord away from unit.
OPERATE ONLY WITH DOORS CLOSED
DANGER: Risk of Electrical Shock. Disconnect Power Before Servicing Unit.
For Further Instruction refer to Installation and Owner's Manual.
Replace glass only with 5mm mirrored ceramic available from your dealer.
DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE

Test pour / tested à: ASTM E 2779-10, ASTM E 2515-11, ASTM E 1509 à 1504, ULC / ORD-C1482-M1990, ULC-S627-00, EPA Method 28R
Appareil de chauffage à granulés (UM) 84- HUD
"Empêcher MAISON incendies" Installer et utiliser uniquement en conformité avec les instructions du fabricant d'installation et d'exploitation.
Ce poêle à bois doit inspection périodique et la réparation pour un fonctionnement correct. Consultez le manuel du propriétaire pour plus d'informations. Ce est contre les règlements fédéraux pour faire fonctionner ce poêle à bois d'une manière incompatible avec les instructions d'utilisation dans le manuel du propriétaire.
Contactez votre service des incendies à propos des restrictions et l'inspection d'installation.
POUR maisons préfabriquées: Ne pas installer l'appareil sous un toit. Une entrée d'air de combustion à l'extérieur doit être fournie à l'installation.
Tenir la porte frontale et le couvercle de trémie hermétiquement clos durant le fonctionnement de l'appareil.
Ne faites pas obstacle l'espace sous le réchauffeur. toujours fournir un approvisionnement suffisant en air frais jusqu'au lieu d'installation appliance.
Tenir la porte frontale et le couvercle de trémie hermétiquement clos durant le fonctionnement de l'appareil.

US ENVIRONMENTAL PROTECTION AGENCY
Certified to comply with 2015 particulate emission standards. Not approved for sale after May 15, 2020.
Certifié conforme aux normes 2015 d'émission de particules. Non approuvé pour la vente après le 15 mai 2020.

HARMAN®
Made in U.S.A. of US and imported parts. / Fabriqué aux États-Unis-d'Amérique par des pièces d'origine américaine et pièces importées.

Serial No. / N° de série 008

BARCODE LABEL

2016 2017 2018 JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Manufactured by / Fabriqué par: Hearth and Home Technologies 352 Mountain House Road, Halifax PA 17032

Rev G

▲ 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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➔ = Contains updated information

B. Limited Lifetime Warranty

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, 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.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	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.
- 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 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, 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 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.

2 Product Specific and Important Safety Information

A. Appliance Certification

MODEL:	Advance Pellet Stove
LABORATORY:	OMNI Test Laboratories, Inc
REPORT NO.	135-S-19b-6.2
TYPE:	Pellet Fueled/Supplementary For Residential Use
STANDARD(s):	ASTM E 1509-04, ULC/ORD-C1482-M1990, ULC-S627-00, ASTM E 2779-10, ASTM E 2515-11

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the **ASTM E1509-2004, ULC-S627-00, ULC/ORD-C-1482-M1990, (UM) 84-HUD**

The Advance is Certified to comply with 2015 particulate emission standards. Not approved for sale after May 15, 2020.



B. 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 "PL" connector pipe.

A Harman® Outside Air Kit must be installed in a mobile home installation.



WARNING

THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.

DO NOT INSTALL IN SLEEPING ROOM.

C. Glass Specifications

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

D. Electrical Rating

120 VAC, 60 Hz, Start 4.2 Amps, Run 2.8 Amps

NOTE: Some generator or battery back-up systems may not be compatible with the micro-processor electronics on this appliance. Please consult the power supply manufacturer for compatible systems.

E. BTU & Efficiency Specifications

EPA Certified Emissions:	1.82 g/hr
*LHV Tested Efficiency:	78%
**HHV Tested Efficiency:	67.4%
***EPA BTU Output:	5,400 - 29,500
****BTU Input	9,100 - 48,100
Vent Size:	3 Inch
Hopper Capacity:	60 lbs
Fuel	Wood Pellet

* 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 8,600 BTU's which is the average BTU's from a pound of pellets.

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

BTU output will vary, depending on the brand of fuel you use in your appliance. Consult your Harman® dealer for best results.

WARNING! Risk of Fire! *Hearth & Home Technologies disclaims any responsibility for, and the warranty and agency listing will be voided by the below actions.*

DO NOT:

- *Install or operate damaged appliance*
- *Modify appliance*
- *Install other than as instructed by Hearth & Home Technologies*
- *Operate the appliance without fully assembling all components*
- *Overfire*
- *Install any component not approved by Hearth & Home Technologies*
- *Install parts or components not Listed or approved.*
- *Disable safety switches*

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.


Harman® is a registered trademark of Hearth & Home Technologies.

3 General Information

A. Appliance Safety

WARNING! DO NOT operate stove before reading and understanding operating instructions. Failure to operate stove according to operating instructions could cause fire or injury.

**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 stove.
- 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.

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

- Install a physical barrier such as:
 - A decorative fire screen.
 - 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 stove, whether operating or cooling down.
- Teach children to **NEVER** touch the stove.
- Consider not using the stove when children will be present.
- Use only specified components as replacement parts. Other components may not allow your stove to operate as it was intended.

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

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

- Unplug stove from receptacle.

WARNING

THIS WOOD HEATER 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 WOOD HEATER IN A MANNER INCONSISTENT WITH OPERATING INSTRUCTIONS IN THIS MANUAL.

B. Clear Space

WARNING! RISK OF FIRE! Do **NOT** place combustible objects in front or to the sides of the appliance. High temperatures may ignite clothing, furniture or draperies.

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! RISK OF FIRE! Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do **NOT** store flammable materials in the appliance's vicinity.
- Do **NOT** use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or "freshen up" a fire in this heater.

Keep all such liquids well away from the heater while it is in use as combustible materials may ignite.

C. Control Explanation

Power Light

Indicates power to the control.

Status Light

Will be lit in either stove or room temp mode when pointer is not within off position band except after normal shut down. Blinks to indicate errors listed below.

Indicates power to distribution blower.

Indicates power to combustion blower

Indicates power to the feed motor.

Indicates igniter is on.

Temperature Dial

Allows you to adjust the room temperature setting, in Room Temp Mode, using the outer scale marked in degrees Fahrenheit. It also allows you to adjust the constant burn setting, while in Constant burn Mode, using the inner scale marked from 1 to 7.

Dealer Diagnostic Port

For dealer maintenance only. Requires special DDM monitor supplied to Harman® Dealers exclusively.

Feed limit

Sets the maximum feed rate

Test

Runs all motors at full speed for one minute to check operation. Afterwards the control will simulate a minimum burn with the combustion blower remaining on low.

Igniter switch

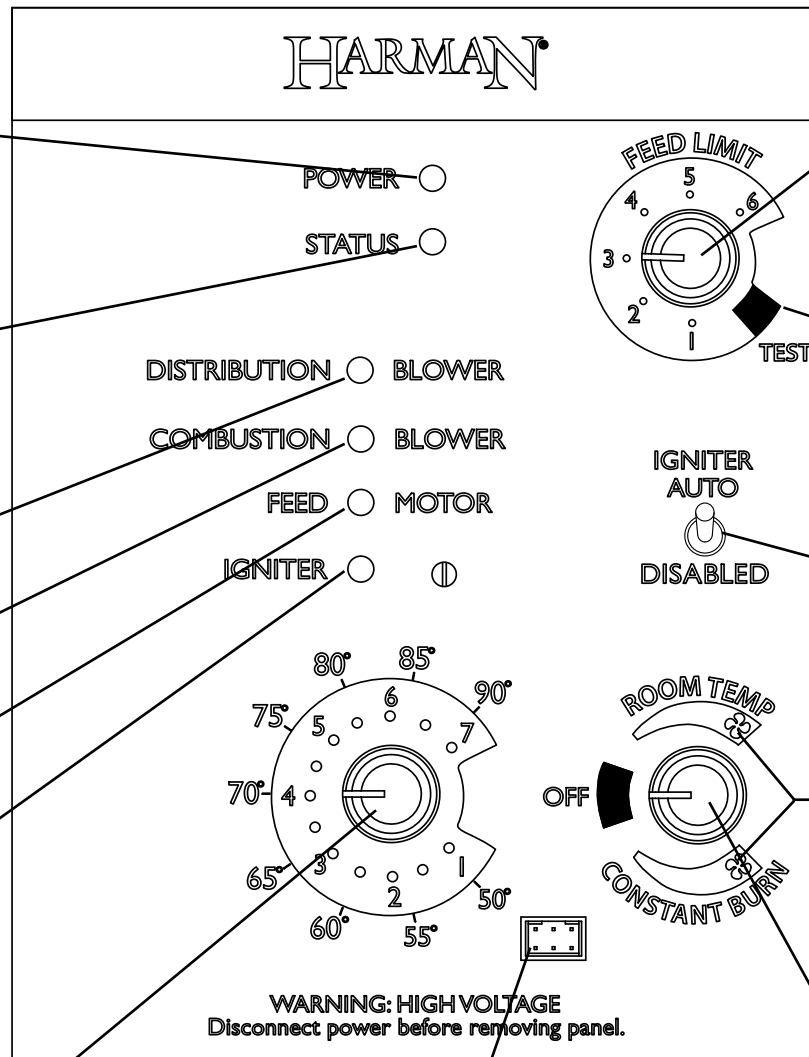
Set to appropriate Start-Up mode.

Distribution Blower speed adjustment range.

L = low
H = high

Mode Selector

Allows you to choose between Room Temp Mode, Constant burn Mode, or OFF. Also allows you to vary the distribution blower speed by turning the knob to the high or low side of each mode.



D. Fuel Specifications

Fuel and Fuel Storage

Pellet fuel quality can fluctuate from manufacturer to manufacturer, and even from bag to bag. Hearth & Home Technologies recommends using only fuel that is certified by the Pellet Fuels Institute (PFI).

Fuel Material

- Made from sawdust and/or other wood by-products
- Source material typically determines ash content

Higher Ash Content Material

- Hardwoods with high mineral content
- Bark and leaves as source material
- “Standard” grade pellets

Lower Ash Content Material

- Softwood; pine, fir, etc.
- Materials with lower mineral content
- “Premium” grade pellets



CAUTION

Do not burn fuel that contains an additive.

- May cause hopper fire
- Damage to product may result

Read the list of ingredients on the packaging.

Clinkers

Minerals and other non-combustible materials, like sand, will turn into a hard glass-like substance when heated.

Trees from different areas will vary in mineral content. For this reason, some fuels will produce more clinkers than others.

Moisture

Always burn dry fuel. Burning fuel with high moisture content takes energy to dry and tends to cool the appliance thus, robbing heat from your home. Damp pellet fuel could turn back into sawdust which does not flow properly through the feed system.

Size

- Pellets are either 1/4 inch or 5/16 inch (6-8mm) in diameter
- Length should be no more than 1-1/2 inches (38mm)
- Pellet length can vary from lot to lot from the same manufacturer.

Performance

- Higher ash content requires more frequent maintenance.
- “Premium” grade pellets will produce the highest heat output.
- Burning pellets longer than 1-1/2 inches (38mm) can cause inconsistent feeding and/or ignition.

We recommend that you buy fuel in multi-ton lots whenever possible. However, we do recommend trying different brands prior to purchasing multi-ton lots, to ensure your satisfaction.

CAUTION! *Tested and approved for use with wood pellets ONLY. Burning of any other fuel will void your warranty.*

Storage

- Wood pellets should be left in their original sealed bag until ready to use, to prevent moisture.
- Do not store fuel within the specified clearance areas, or in a location that will interfere with routine cleaning and maintenance procedures.



CAUTION

Tested and approved for use with wood pellets ONLY.
Burning of any other fuel will void your warranty.

NOTICE

Hearth & Home Technologies is not responsible for stove performance or extra maintenance required as a result of using fuel with higher ash or mineral content.

E. General Operating Information

1. Room Sensor Calls For Heat

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

When the room is up to temperature and the room sensor is satisfied, the appliance will shut down.

2. Heat Output Controls

The appliance will turn on and off as the room sensor demands. When the room sensor calls for heat, the appliance will always start up on High. After burning approximately 7-10 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 take 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 room sensor, the appliance will shut off.



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 HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER 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.

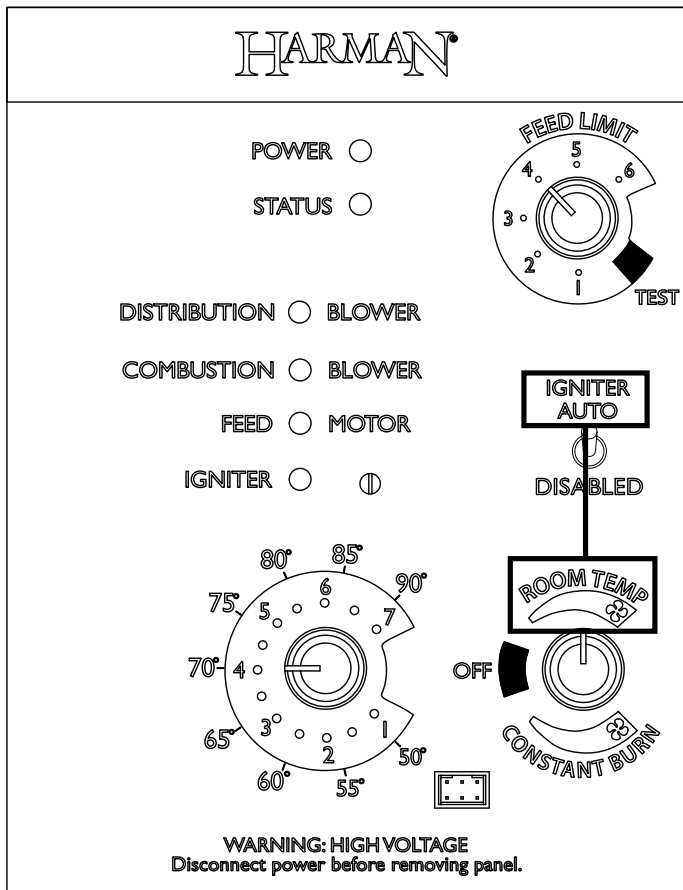


Figure 3.1

4 Operating Instructions

A. Starting Your First Fire

1. A room sensor is required for proper operation of this appliance in "Room Temp" mode. At this time, fill the hopper with pellets, insure the control is set to "OFF". Figure 4.2. Plug the power cord into a properly grounded, nearby outlet.
2. Once power is present, the unit it will run through a quick diagnostics test to insure the control is operating properly. This is normal.
3. For your first fire it may be necessary to purge the auger system by putting the feed limit knob to "Test" prior to starting the unit. Figure 4.3. This insures that plenty of fuel enters the burn pot for proper ignition.
4. Flip toggle switch to desired mode "Auto or Disabled". Figure 4.4. Set feed limit knob to desired setting and turn mode dial to "Room Temp" or "Constant burn" Figure 4.5.
Note: Feed rate of #4 is a good starting point. Adjustments may need to be made depending on fuel quality and/or heat output desired.
5. The fuel feed system and the igniter should now be on.
6. Once the appliance has ignited, let it burn for approximately 7-10 minutes. After this time, the igniter light should turn off and the unit should begin to operate per the settings at the control.

B. Fire Characteristics

A properly adjusted fire has a medium active flame pattern that extends out of the burn pot approximately 6 inches (152mm).

C. Feed Limit Instructions

The Feed Limit control is factory set at #4, and should be adequate for most fuels.

However, if the flame height is too high or too low, you will need to adjust the Feed Limit. Wait until the appliance has been burning for 15 minutes before making your adjustments and allow 15 minutes for feed adjustment to take effect.

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.

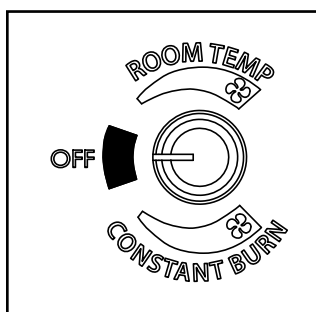


Figure 4.2

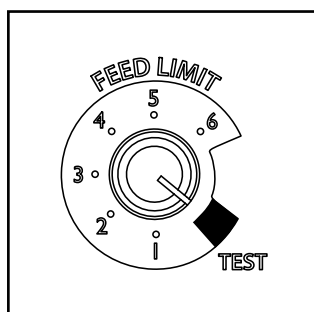


Figure 4.3

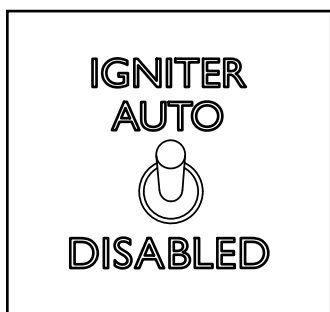


Figure 4.4

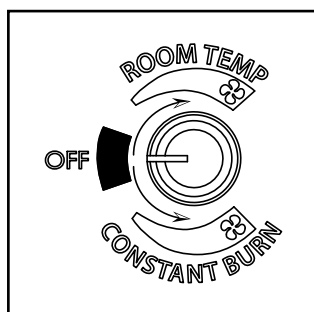


Figure 4.5

D. Ignition Cycles

1. 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 distribution 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 in “constant burn” mode at the set speed you have the control knob at. In “room temp” mode however, the blower will turn on and off in accordance to what temperature the room sensor is reading. When the room sensor is satisfied the blower will shut down until the room sensor sees a demand for heat.

3. Occasionally the appliance may run out of fuel and shut itself down. When this happens, the unit will need to be turned to the off position and restarted.

If needed, follow the instructions in Section A “Starting Your First Fire”.



WARNING



Fire Risk

Do NOT operate appliance:

- With appliance door open.
- Burnpot 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.

E. Automatic Ignition

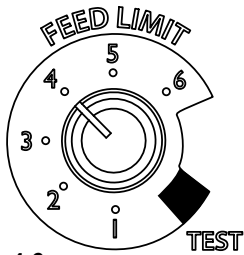


Figure 4.6

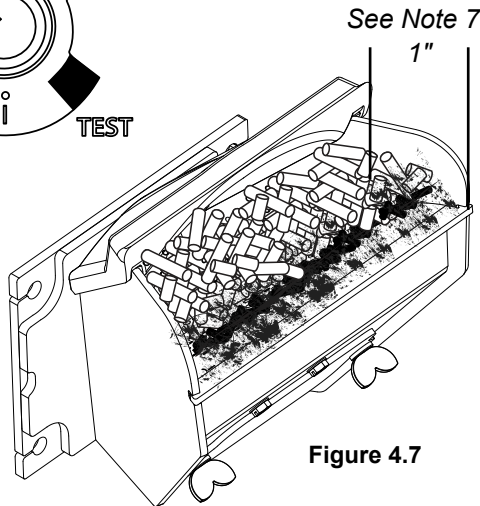


Figure 4.7

1. Fines are small pieces of broken pellets (sawdust). Fines do not flow easily and often build up on the hopper funnel bottom angles. These fines can be pushed into the feeder opening and then fill the hopper with pellets. As the system works, they will be burned.
2. The "TEST" cycle will operate the feed motor for exactly one minute. Turning to "TEST" again and again may load too much fuel into the burn pot causing excessive smoke on start-up.
3. The firebox low pressure switch will not allow the auger motor or the igniter element to operate if the view door is open.
4. Adjust Feed Limit. If this is your first fire or you are trying different pellets, set the feed limit to #4, Figure 4.6 This is a conservative number and will probably need to be increased. After you know a Feed Limit setting that works well, use that setting. Remember, if your feed rate is too high you may waste fuel.
5. This is usually a weekly maintenance procedure. Cleaning the burn pot with the scraper with a small amount of new fuel in the bottom is not a problem. First, scrape the ashes off the front of the burn pot into the ash pan. Then scrape the holed surface downward into the burn pot. When the stove feeds, these scrapings will be pushed out by the feeder.
6. The ash pan can hold the ashes from approximately 1 ton of premium fuel. This means the ashes will only need to be emptied a few times a year.
7. Setting the feed limit # for maximum burn: With the unit burning in "AUTO", turn to "Constant Burn" and put the fan on "H". Set the Temperature Dial to #7. Allow the unit to burn for about 30 minutes and check ash on front of burn pot. Figure 4.7. If the ash line is larger than 1", turn the feed limit from #4 to #5. Allow another 30 minutes of burn time and check again. If, at #6 setting, a 1" or less ash bed is not obtainable, it is not a problem. The 1" ash bed is only at maximum burn rate and during normal operation, the ash bed will be larger.

Igniter Switch to "AUTO" (up position)

Make sure the unit is plugged into a properly grounded, 120 VAC, 60 Hz electrical source. The power light should be the only light lit.

Note: Be sure there is no fuel or other combustibles in the ash pan prior to lighting.

1. Turn Mode Selector to "OFF".
2. Fill hopper with pellets.
3. Clean burn pot with scraper, if necessary.
4. If starting after an empty hopper, turn Feed Limit to "TEST" (for one 60 second cycle). This will flow pellets into the auger tube and also allow you to check the motors for operation.

NOTE: The auger motor will not operate with the view door open.

5. Turn Feed Limit to #4.
6. Flip the Igniter Switch up into the "AUTO" position.
7. Turn the Temperature Dial to the desired room temperature.
8. Turn Mode Selector to Room Temperature or Constant Burn mode.
9. Fill hopper with pellets and remove ashes as required. Keep the hopper lid and firebox doors closed while in operation. Maintain door seals in good condition. Failure to do so will affect operation of the appliance and may permit escape of smoke or gases into the living space causing smoke detectors to sound.



WARNING

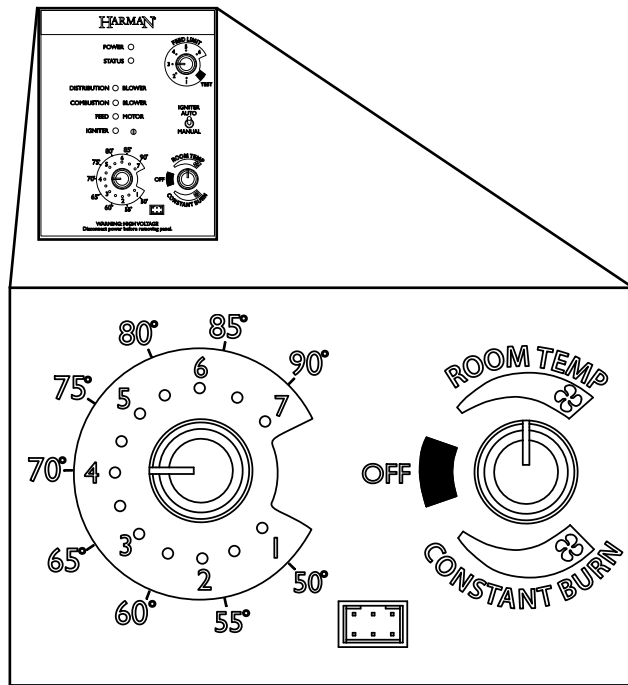
BURNING GARBAGE, USE OF IMPROPER FUELS, FIRE STARTERS OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND FOLLOW ONLY THESE OPERATION GUIDELINES.



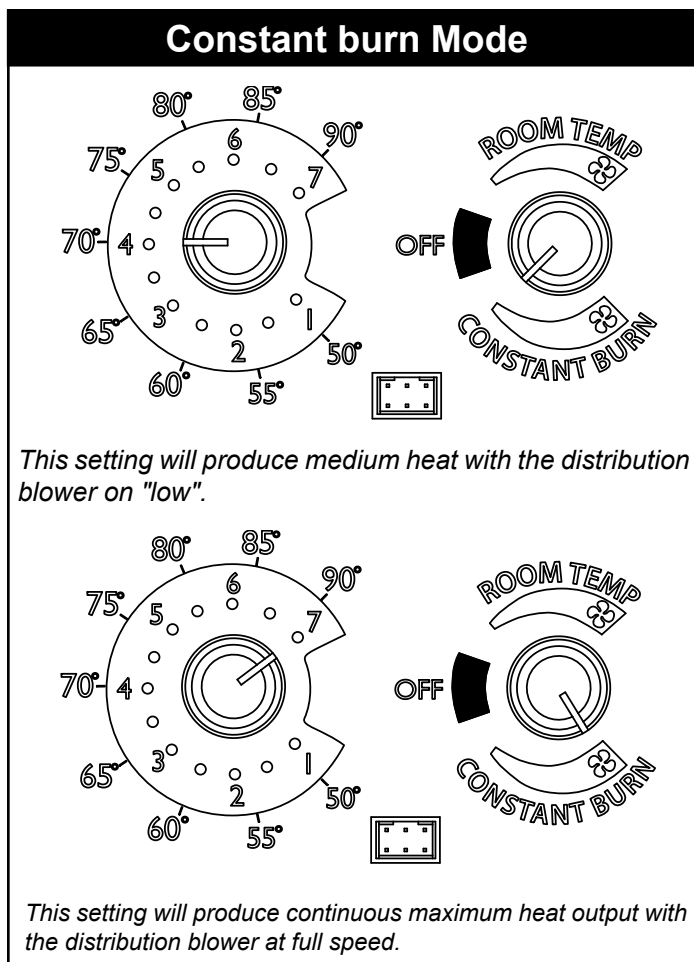
WARNING

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER, WHILE IN USE.

E. Automatic Ignition (Continued)



Room Temperature Mode: This setting will produce a room temperature of 70 degrees with the distribution blower at medium speed.



Constant burn Mode

This setting will produce medium heat with the distribution blower on "low".

This setting will produce continuous maximum heat output with the distribution blower at full speed.

The Advance Pellet Stove is more than just automatic ignition, it is also automatic temperature control. The automatic system will allow the fire size to be adjusted to match the heating needs and even put the fire out if necessary. If heat is needed after the fire is out, the Advance Pellet Stove will automatically re-ignite and adjust the fire size to match the heating need. The totally automatic room sensor mode is recommended because of its efficiency. The unit can be switched between "AUTO" and "DISABLED" at any time during operation.

Igniter switch to "AUTO"

Room Temperature Mode

In "Room Temp Mode" heat output is controlled automatically by the Room Sensing Probe. When the Room Sensing Probe calls for heat, the stove will increase output. When the Room Sensing Probe is getting close to the set temperature, the stove will begin to level off output and keep the fire burning at just the right temperature to maintain that setting.

High output is determined by the Feed Limit setting. This setting, generally on #4, can be increased if higher burn rates are necessary (Figure 4.6). The unit's maximum burn rate should not create less than 1" of ash on the burn pot front edge (Figure 4.7). Overfeeding is not a safety concern, but fuel may be wasted if unburned pellets fall into the ash pan.

In "Room Temp Mode" a constant fuel consumption rate is sacrificed for exact room temperature. Therefore, as it gets colder more pellets will be burned automatically.

The distribution blower speed will vary according to the position of the mode selector pointer, and fire size.

Igniter switch to "AUTO"

Constant Burn Mode

This allows for automatic ignition upon start-up only. The unit can then be set at any desired setting. The heat output and fuel consumption will remain constant regardless of room temperature. The unit's maximum feed rate should not create less than 1" of ash on the burn pot front edge. Figure 4.7.

The unit's low burn or maintenance setting is as low as it will go. It will not go out unless it runs out of fuel or is turned off.

Shut-Down Procedure

To kill the fire or stop burning the stove, turn the Mode Selector to "OFF". This will cause the fire to diminish and burn out. When the fire burns out and the stove cools down everything will stop.


If you pull the plug to shut down the stove, all motors will stop. This may cause incomplete combustion and smoke in the firebox. If the load door is opened, the smoke may escape.


The best way to shut down the stove is simply let it run out of pellets, the stove will shut down automatically.

5 Maintenance & Service

When properly maintained, your stove will give you many years of trouble-free service. **Contact your dealer** to answer questions regarding proper operation, trouble-shooting and service for your appliance. Visit www.harmanstoves.com to find your closest dealer. We recommend annual service by a qualified service technician.

A. Proper Shutdown Procedure


CAUTION



Shock and Smoke Hazard

- Turn unit to the off position, let appliance completely cool and combustion 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.

Follow the detailed instructions found in this section for each step listed in the chart below.

B. Quick Reference Maintenance Chart

Cleaning or Inspection	Frequency		Daily	Weekly	Monthly	Yearly
Ash Pan	Every 5 bags of fuel depending on the fuel type or ash build-up	OR		X		
Ash Removal from Firebox	Every 5 bags or more frequently depending on the fuel type or ash build-up	OR		X		
Heat Exchanger	Every 1 ton of fuel	OR			X	
Blower, Combustion (Exhaust)	More frequently depending on the fuel type	OR				X
Blower, Distribution	Every 25 bags or more frequently depending on the fuel type	OR			X	
Door Gasket Inspection	Prior to heating season	OR				X
Exhaust Path	More frequently depending on ash build-up	OR				X
Firebox - Prepare for Non-Burn Season	At end of heating season	OR				X
Burnpot - Burning pellets - hardwood	Every 3 bags	OR	X			
Burnpot - Burning pellets - softwood	Every 5 bags	OR	X			
Glass	When clear view of burnpot becomes obscure	OR		X		
Hopper / Hopper Lid Gasket	Every 50 bags of fuel or when changing fuel types	OR			X	
Venting System	More frequently depending on the fuel type	OR				X

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.**

C. General Maintenance

Types of Fuel

The type of fuel you are burning will dictate how often you have to clean your burnpot.

If the fuel you are burning has a high dirt or ash content it may be necessary to clean the burnpot more than once a day.

Dirty fuel will cause clinkers to form in the burnpot. A clinker is formed when dirt, ash or a non-burnable substance is heated to 2000°F (1093°C) and becomes glass-like.

D. Glass Maintenance

The glass used in your stove is manufactured to exact standards to withstand the high heat of the fire, but like all glass, it must be treated with common sense and care. Never slam the door shut or strike the glass with a heavy object. If the glass is broken or damaged, do not operate the stove until it has been replaced.

Glass - Replacement

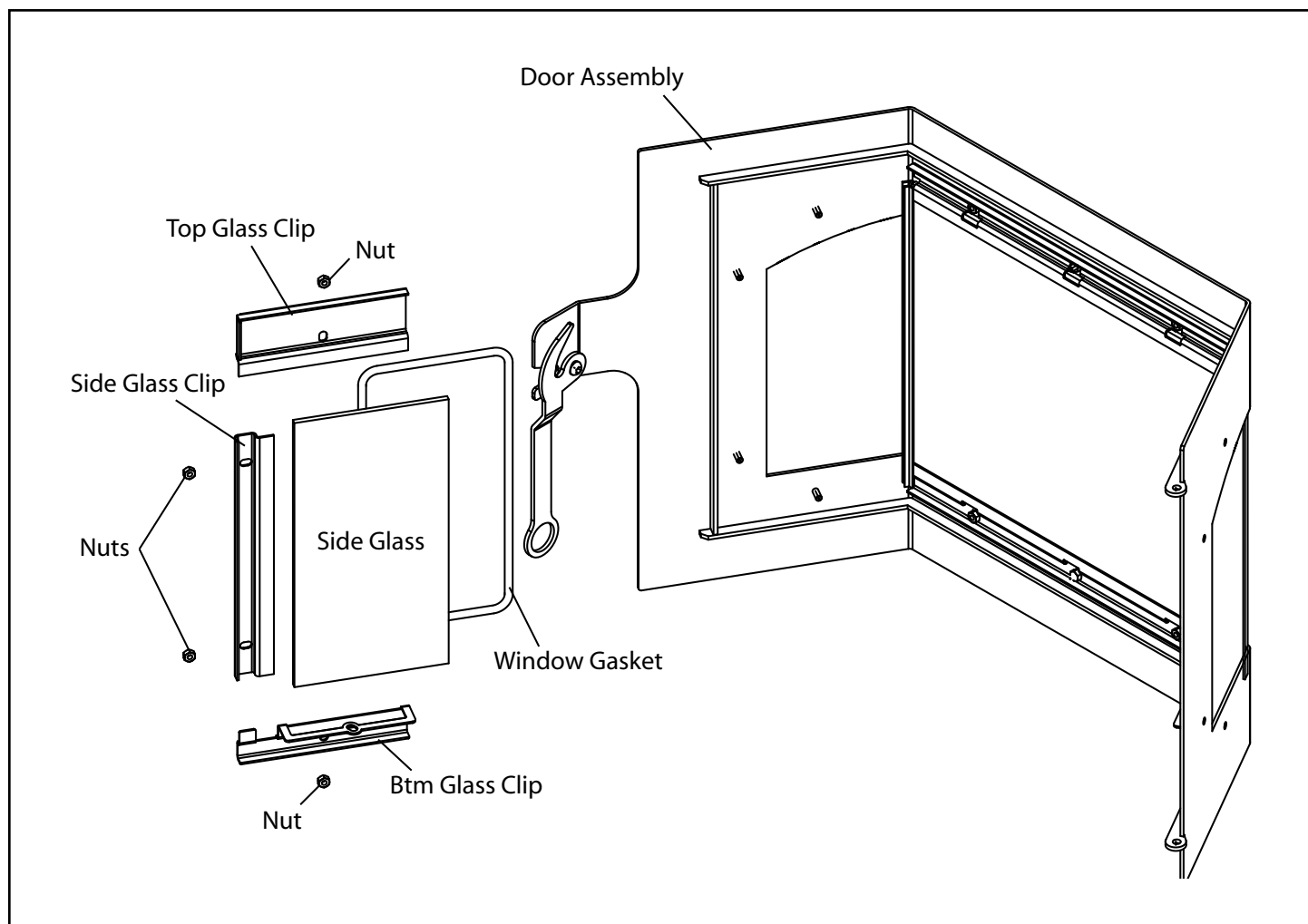
If the stove's glass is cracked or broken, you must replace it before operating your stove. Remove pieces carefully. Replace glass only with Harman® replacement glass; **do not use substitutes**.

Carefully remove damaged glass, gasket material, and glass clips (set aside).

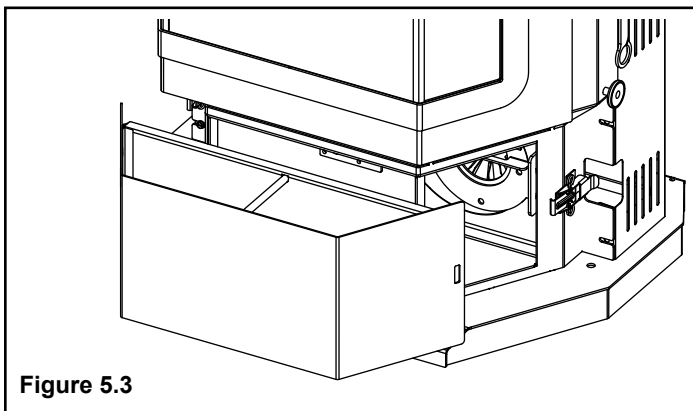
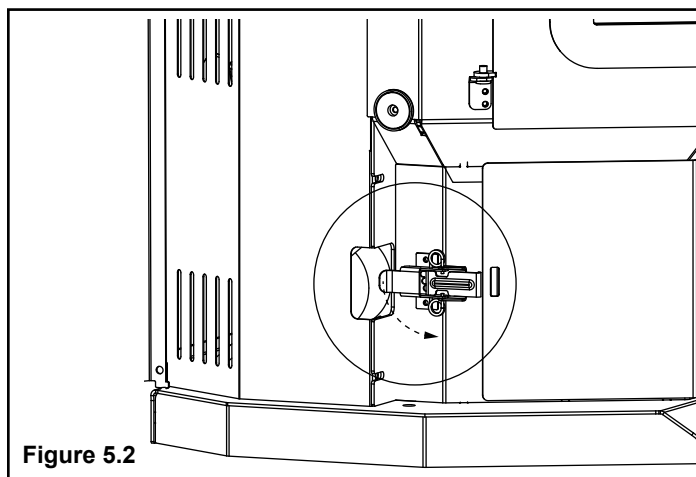
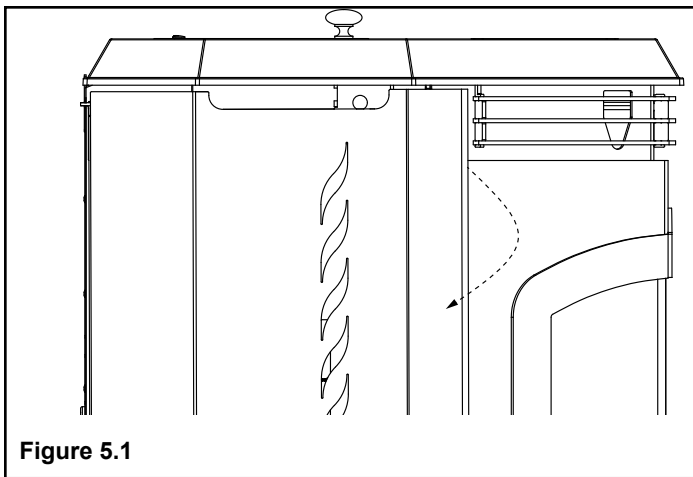
Install the self adhesive 1/4" gasket material around the front face of the glass. Set the glass panel and gasket gently onto the door. Install the glass clips and tighten.

Glass - Cleaning

Sometimes it will be necessary to clean accumulated ash from the glass surface; allowing this ash to remain on the glass for long periods can result in "etching" due to the acidity of the ash. Never clean the glass while it is hot, and **do not** use abrasive substances. Wash the surface with cool water, and rinse thoroughly. You may wish to use a non-abrasive cleaner specifically designed for use on stove glass. In any case, dry thoroughly before relighting your stove.



E. Ash Pan Removal



CAUTION: Surfaces are hot while in operation, Wear gloves to protect from burns.

1. Open side doors. Figure 5.1
2. Release spring latches on the right and left side of the ash pan. Figure 5.2
3. Slide ash pan forward enough to lift with center handle. Empty ashes and reinstall ash pan. Figure 5.3

Disposal of Ashes:

Ashes should be placed in a steel container with a tight fitting lid. The closed container of ashes should be moved outdoors immediately and placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Other waste shall not be placed in this container.

4. Inspect the gasket rope located on the back side of the ash pan for damage. Replace if necessary.
5. Insert spring latch front hooks into the ash pan side slots. Push both latches to the rear at the same time to latch.

Soot and Fly Ash

Formation and Need For Removal -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 heater, 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.

When removing the ash pan to empty ashes, you will note a build up of ash fines behind the ash pan. This space behind the ash pan was designed to allow the fines to fall out of the vertical heat exchangers and collect where they are easily cleaned out, rather than going into the flue pipe where it would be difficult to clean. These fines should not be allowed to build up. They may not allow the ash pan to be seated into its gasket properly.

NOTE: If an extreme amount of force is required to snap the latch on one or both sides of the ash pan, the area behind the ash pan should be checked for ash build up.

F. Burnpot Maintenance

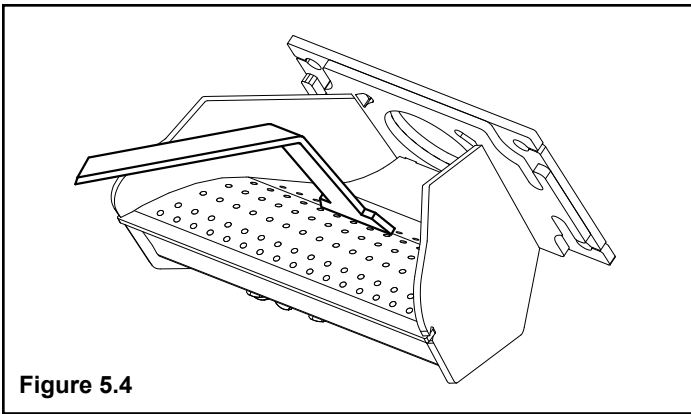


Figure 5.4

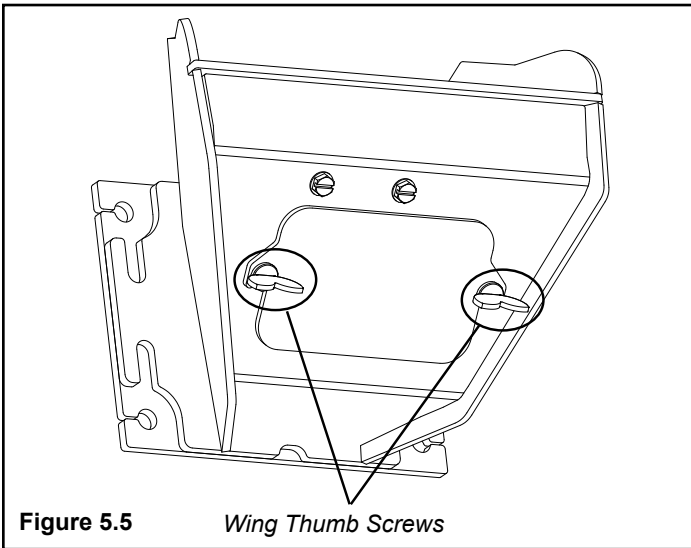


Figure 5.5

Wing Thumb Screws

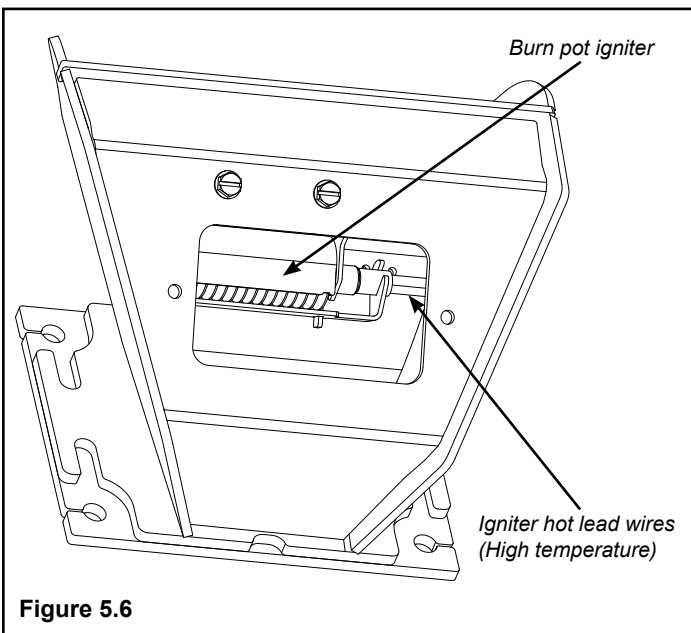


Figure 5.6

Viewed from below through the ash pan opening.

Whenever adding fuel, take the opportunity to clean the burn pot. **(Weekly at minimum)**

- Scrape the top holed surface and sides of the burn pot down to auger tube Figure 5.4. It is not necessary to completely remove all material from the burn pot. The excess will be pushed out during the next use.
- With the fire out and burn pot cold, use the supplied allen wrench to remove any build-up that may have accumulated in the holes of the burn pot grate. Simply push the allen wrench down through each hole ensuring it is clear of any build-up paying attention not to damage the igniter element in the process.

Monthly, or after each ton of fuel burned:

- Loosen the (2) wing thumb screws on the lower front angle of the burn pot. Figure 5.5
- Lift off the clean-out cover to open the bottom clean-out chamber. Figure 5.6



DANGER

Disconnect the power to the unit before removing cover.

- Clean ash buildup from inside the chamber while cover is off. Use the scraper to tap on the top front edge of the burn pot. This will help knock pieces of ash, loosened by the scraping process, down through the holes. It also helps knock scale off of the igniter element.

Figure 5.6

The igniter is made to be removable for service by insulated male/female wire connectors. These connections between the hot leads (the wires inside the burn pot) and the cold leads (the wires from the control board) are always pulled to the inside rear of the feeder body. **(Not coiled inside the burn pot.)**

It is very important that these connections are to the inside rear of the feeder body. Also, the extra wire of the igniter wire service loop must be pulled out through the rear of the feeder and tied up so that it will not be damaged by any moving parts.

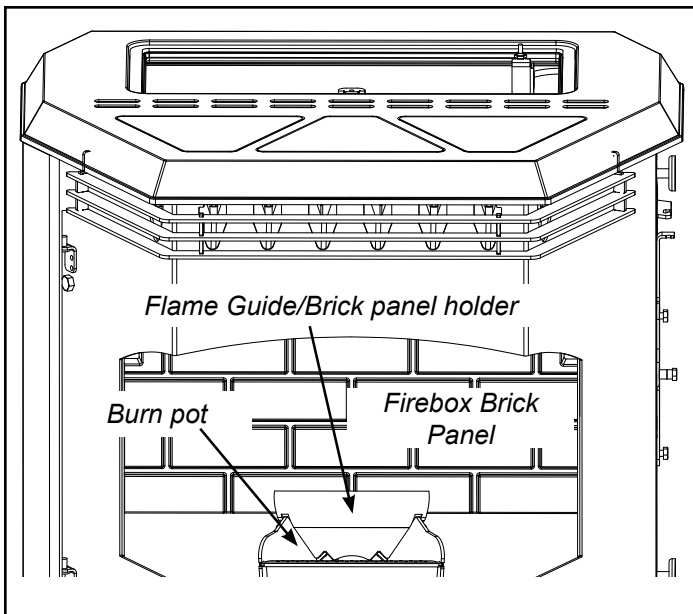


WARNING

Use caution when cleaning burn pot clean-out chamber. Do not damage the high temperature igniter wires.

Note: The hot lead/cold lead connection must always be pulled to the rear of the feeder body before operation.

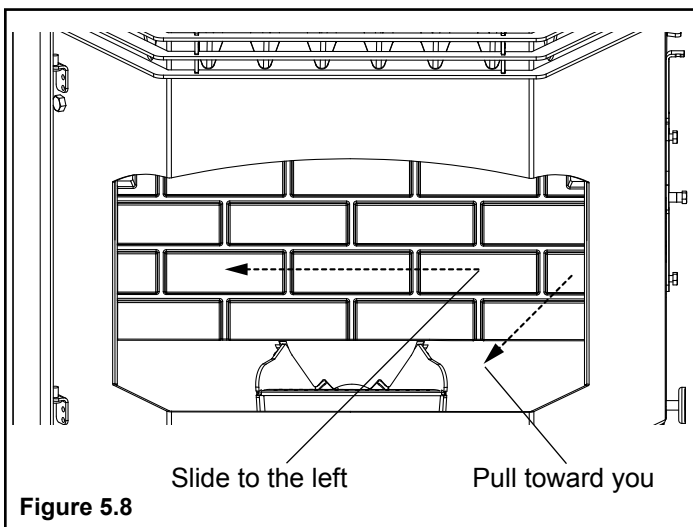
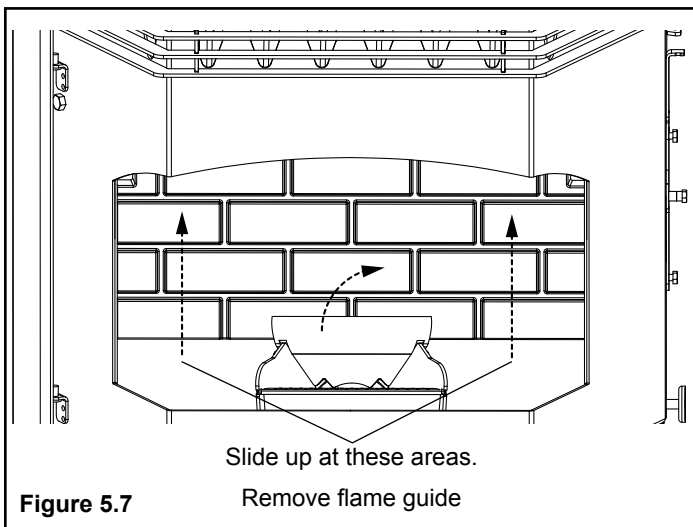
G. Brick Panel Removal



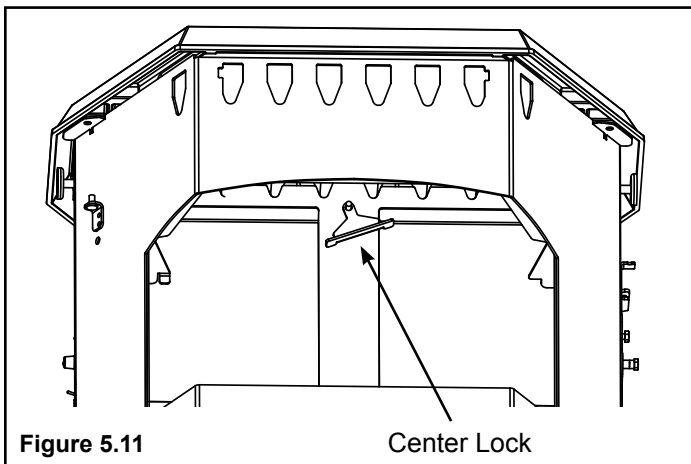
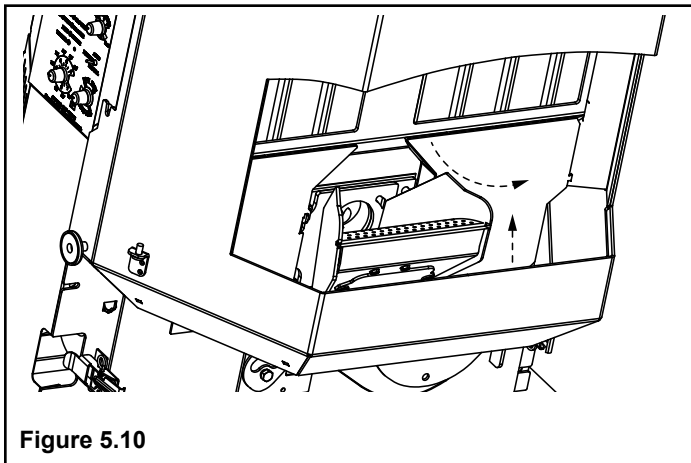
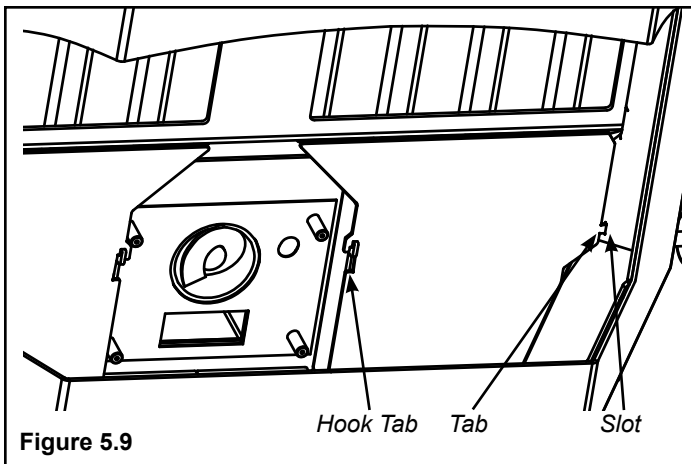
Slide brick panel straight upward with both hands. While holding the brick panel up with one hand, remove the flame guide from the top of the burn pot. Figure 5.7

Slide the brick panel into the left corner of the firebox with the panel resting on the top edges of the burn pot. Rotate the right side of the brick panel through the door opening. Figure 5.8

Reverse this operation to reinstall the brick panel after cleaning.



H. Heat Exchanger



Monthly Cleaning- continued:

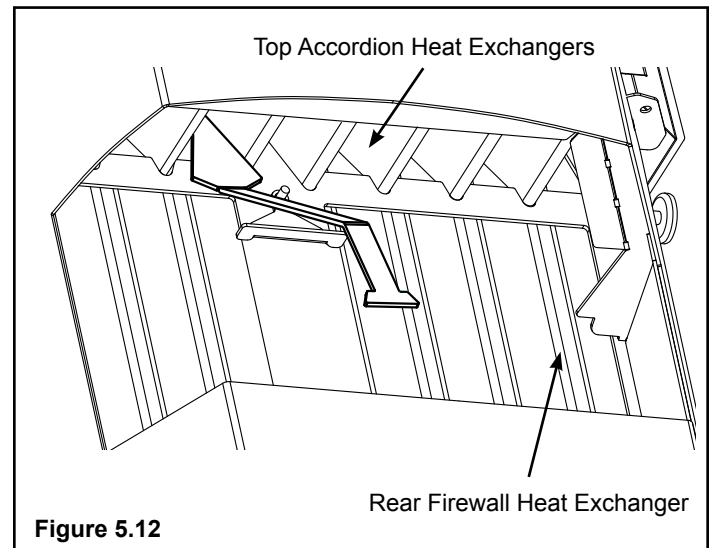
1. Remove flue baffles located on each side of the burnpot. Figures 5.9 & 5.10. The baffle is held in place by inserting the tab into the slot (located toward the outside of the firebox) and resting on the hook tab located beside the burnpot.
2. Pull the pointed end of the baffle slightly front with one hand while pushing up from below with the other hand. Figure 5.10.
3. With the baffle released from the tabs, rotate the pointed end toward the door opening. Lift baffle up and out.

The right and left baffle are interchangeable.

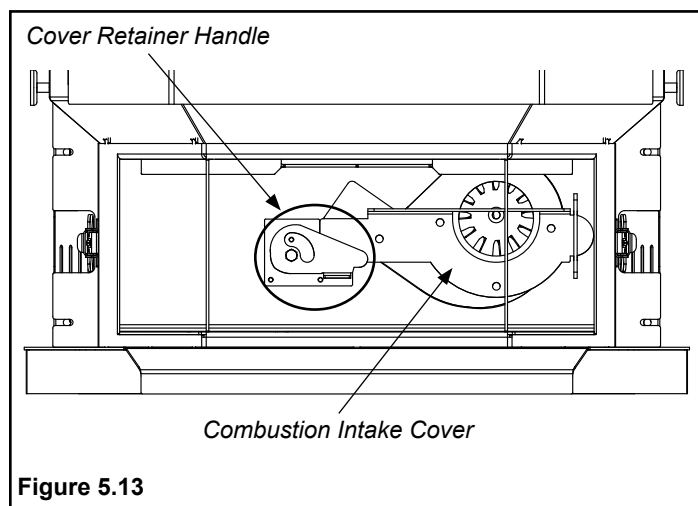
4. Now remove the heat exchanger baffle plates. Figure 5.11. To remove the left plate, slide the center lock to the right. To remove the right plate, slide the center lock to the left. (The right and left plates are interchangeable.)

This will allow access to all of the rear vertical heat exchanger surfaces.

5. With all four baffle plates removed, cleaning can be performed with the arrow end of the scraper. Figure 5.12.
6. Scrape all of the heat exchanger surfaces. (Be sure to clean any internal ledges where fly ash could have collected.)



I. Combustion Blower Chamber

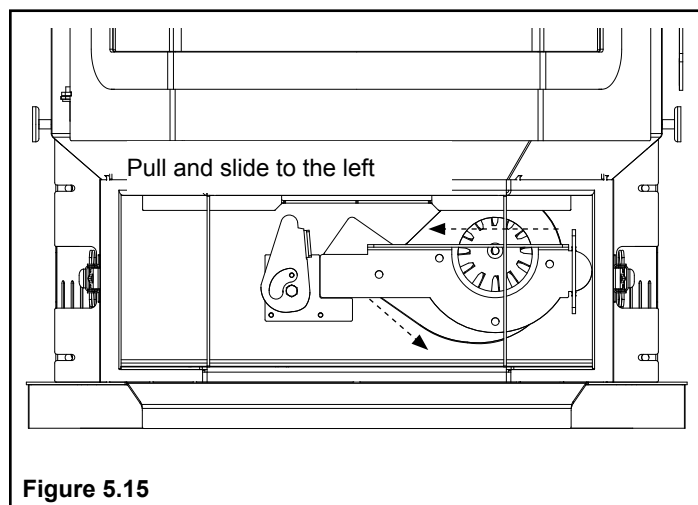
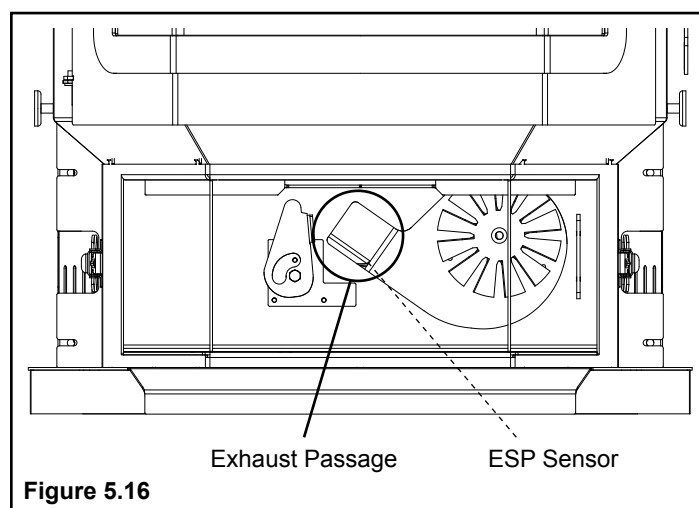
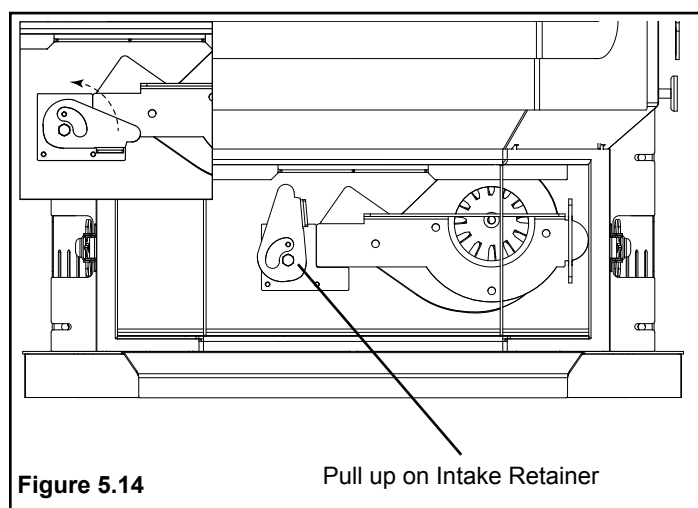


Monthly Cleaning- continued:

There is a combustion intake cover located behind the ash pan that must be removed to properly clean the combustion blower fan blade. Figure 5.13. In order to remove the combustion intake cover you must pull up on the intake retainer. Figure 5.14. This will allow the combustion intake cover to be removed. To remove the combustion intake cover pull towards the front of the unit while sliding to the right. Figure 5.15.

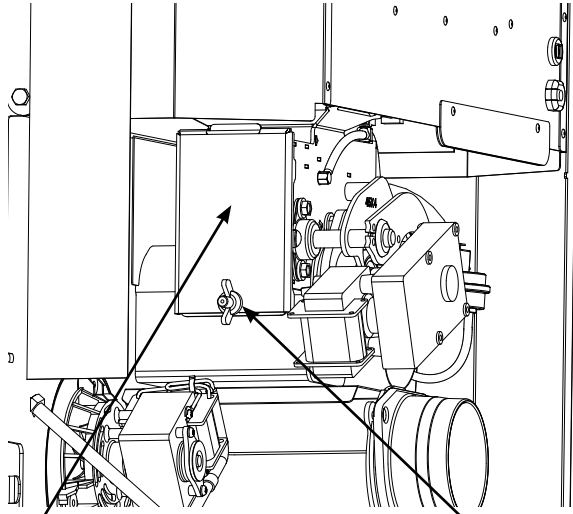
Now that the combustion intake cover is removed you can remove any flyash or debris that has collected around combustion blower fan blade and areas around it.

The exhaust passage may need cleaned as well. Keep in mind the ESP Sensor is located just inside the exhaust passage Figure 5.16. Be sure not to damage the ESP Sensor while cleaning this area.



J. Pellet Feeder Chamber

Figure 5.17



Feeder clean out cover

5/16" Wing Nut

Feeder Chamber

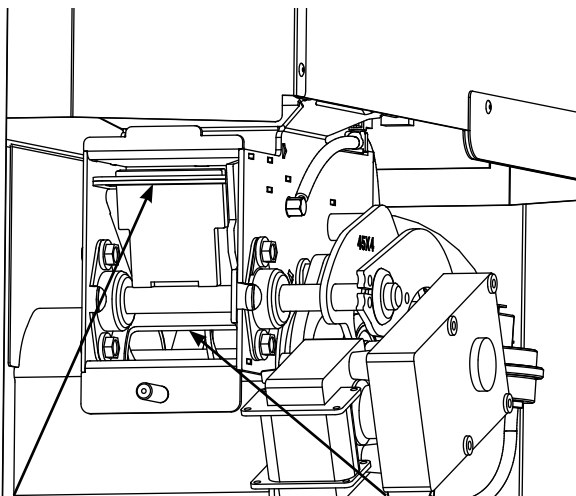
This chamber may get a buildup of fines from the feeder mechanism movement. This area should be checked and cleaned at least once a year.

To remove the feeder cover:

- Loosen the 5/16" wing nut. Figure 5.17.
- Lift up and slide the cover off of the threaded stud.
- Inspect and clean the inner chamber if necessary Figure 5.18.
- Reinstall the cover making certain it is seated properly on the feeder body and tighten as tightly as you can by hand.

NOTE: Views are shown with the rear motor covers removed.

Figure 5.18



Pellet Metering
Slide Plate

Possible pellet fines
buildup area.

6 Troubleshooting and Frequently Asked Questions

A. Error Code Description

Status light error messages:

3 Blinks: Indicates that the ESP (Exhaust Sensing Probe) has failed, has a broken connection, or has gone out of range too many times. This requires a manual reset*.

4 Blinks: Can occur only in Room Temp Mode and indicates Room Sensing Probe failed or not installed. If a Room Sensing Probe is then installed, the status light will automatically reset.

NOTE: Unit will not start in "AUTO" with this status error.

5 Blinks (In Igniter Auto. Mode Only): Indicates that the unit has failed to light within the 36 minute start cycle. To reset - Turn Mode Selector to "OFF", then turn to either mode again.)

6 Blinks : Indicates that the control has calculated poor or incomplete combustion occurring for more than 25 minutes.

A six blink status may be set if the stove is allowed to run out of pellets. To reset, turn mode selector to "OFF" then back on to the desired mode. If the unit was not out of pellets, see Troubleshooting section for more details.

* **Manual reset-** disconnect power cord for a few seconds and reconnect. If error still occurs call your Dealer.

B. 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. White ash buildup on glass.	2. This is normal. Clean the glass using any non-abrasive glass cleaner.
3. Glass has buildup of black soot	3. Excessive build-up of ash. See solution #4. 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. Glass has turned dirty.	4. 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.
5. Fire has tall flames with black tails and is lazy.	5. The feed rate needs to be reduced or the burnpot needs cleaning. Heat exchanger or exhaust blower needs cleaning.
6. Smoky start-up or puffs of smoke from the airwash.	6. Either the burnpot is dirty or there is too much fuel at start-up and not enough air.
7. Large flame at start-up.	7. This is normal. Flame will settle down once the fire is established.

Contact your dealer for additional information regarding operation and troubleshooting. Visit www.harmanstoves.com to find dealer.

C. Troubleshooting

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.

STOVE DOES NOT FEED

1. No fuel in hopper.
2. Firebox draft may be too low for sensing switch in feeder circuit to operate. **Check for closed doors**, loose or missing gasket on doors or hopper lid.
3. Feed motor will not run until the ESP control senses a certain temperature. Maybe you did not put enough fuel or starting gel in the burn pot before manually lighting the fire.
4. Restriction in the hopper or feeder. Remove all fuel and examine. Clear the obstruction.
5. Feed motor has failed.

PARTIALLY BURNED PELLETS

1. Feed rate too high.
2. Poor air to fuel mixture. (Check burn pot clean-out cover and air intake).
3. Burn pot or heat exchanger tubes may need to be cleaned.
4. Combination of all the above.
5. #6 status blink: A 6 blink control board status indication is caused by poor or incomplete combustion. The circuit board has the ability to track the combustion through feed settings and ESP temperatures. When the control board has calculated poor or incomplete combustion, it will shut down the unit as a safety feature. (Poor or incomplete combustion is a contributor of creosote which may cause a chimney fire)

A 6 blink status may be caused by several things:

1. Blocked or partially blocked flue.
2. Blocked or partially blocked inlet air.
 - a. Backdraft damper on the inlet pipe may be stuck closed.
 - b. If outside air is installed, the inlet cover may be blocked.
3. The air chamber under the burnpot may be filled with fines and small bits of ash.
4. The holes in the burnpot may be getting filled with ash or carbon buildup.
5. Combustion blower fan blades may need cleaned.
6. Fuel restrictions as noted above.

SMOKE SMELL

Seal the vent pipe joints and connection to stove with silicone. The exhaust vent is the only part of the system that is under positive pressure.

FIRE HAS GONE OUT- Check for status light.

1. No fuel in hopper.
2. Draft is too low, blocked flue.
3. Something is restricting fuel flow.
4. Hopper lid not closed properly.
5. Feed motor or combustion blower has failed.

SMOKE IS VISIBLE COMING OUT OF VENT

1. Air-fuel ratio is too rich.
 - a. Feed rate too high.
 - b. Draft too low caused by a gasket leak.

LOW HEAT OUTPUT

1. Feed rate too low
2. Draft too low because of gasket leak.
3. Poor quality or damp pellets
4. Combination of 1 and 2.

HELPFUL HINTS

1. Cleaning Burn Pot

Whenever your stove is not burning, take the opportunity to scrape the burn pot to remove carbon buildup. A vacuum cleaner is handy to remove the residue. Be sure the stove is cold if you use a vacuum.

Carbon buildup can be scraped loose with the fire burning using the special tool provided with your stove. Scrape the floor and sides of the burn pot. The carbon will be pushed out by the incoming fuel. Always wear gloves to do this.

2. Removing Ashes

Turn the Temperature Dial to number 1 approximately 30 minutes before removing ashes. This will result in a cooler stove and ash pan.

Maximum Feed Limit settings are not needed in most cases. Operating in the normal range (#4) is recommended when maximum heat output is not required. The ESP probe prevents the stove from being over-fired.

Keep the stove free of dust and dirt.

Fuel

The Advance Pellet Stove is approved for burning any grade of pelletized bio-mass fuel.

It should be noted, however, that higher ash content will require more frequent ash removal, scraping of the burn pot, and may provide less BTU's per pound.

The moisture content of pellets must not exceed 8%. Higher moisture will rob BTU's and may not burn properly.

Fuel should **not** be stored within the stove installation clearances or within the space required for cleaning and ash removal.

7 Reference Material

A. Safety Reminders

When operating your Harman® Advance Pellet Stove, respect basic safety standards. Read these instructions carefully before you attempt to operate the Advance Pellet Stove. Failure to do so may result in damage to property or personal injury and may void the product warranty.

Due to high temperatures, this stove should be placed out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn to skin and/or clothing.

Young children should be carefully supervised when they are in the same room as the stove.

Clothing and other flammable materials should not be placed on or near this stove.

Installation and repair of this stove should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning will be required. It is imperative that control compartments and circulating air passageways of this stove be kept clean.

Disposal of ashes: 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 thoroughly cooled.

Soot and fly ash: Formation and need for removal. The products of combustion contain small particles of fly ash. The fly ash will collect in the exhaust venting system and will restrict the flow of the flue gases. Pellet fuels have different ash contents depending on what type of wood has been used to make the pellets. **We recommend to clean the system after approximately 1 ton of pellets have been burned and judge from that how often the stove should be cleaned, remember if you change pellets it may change how often you have to clean your stove.**

When burning wood slowly, the potential exists for creosote to form. The venting system should be inspected periodically throughout the heating season to determine if a creosote buildup has occurred. If a significant layer of creosote has accumulated (3mm or more), it should be removed to reduce the risk of a chimney fire. If a fire occurs, call the fire department, shut down the stove, and evacuate the residence. Before using the appliance, have the venting system thoroughly inspected and replace any damaged components.

CAUTION

THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.

CAUTION

**THE STOVE IS HOT WHILE IN OPERATION.
KEEP CHILDREN, CLOTHING AND FURNITURE AWAY.
CONTACT MAY CAUSE SKIN BURNS.**

CAUTION

This appliance must be vented to the outside.

WARNING

MOBILE/MANUFACTURED HOME GUIDELINES DO NOT ALLOW INSTALLATION IN A SLEEPING ROOM.

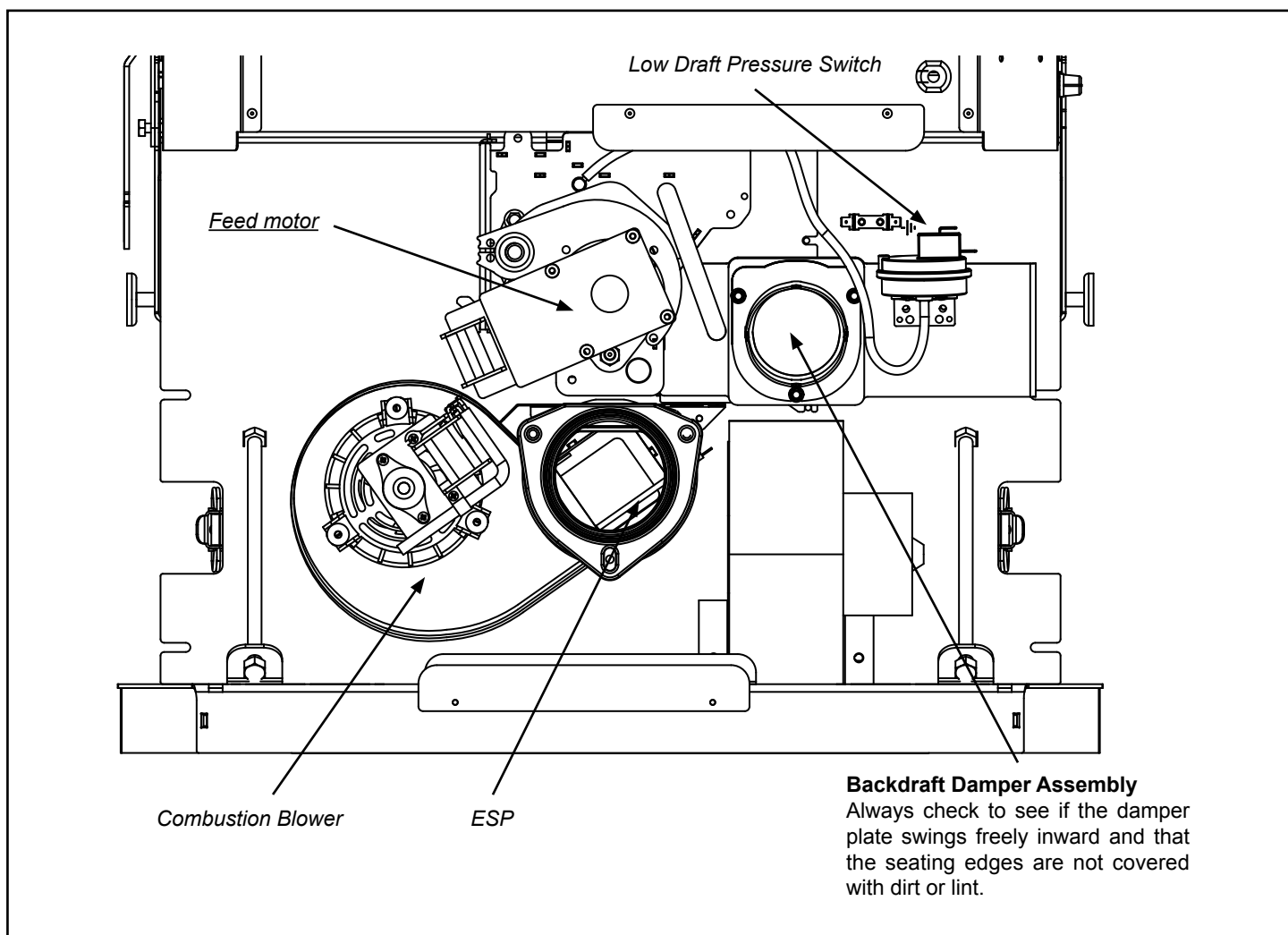
WARNING

KEEP COMBUSTIBLE MATERIALS SUCH AS GRASS, LEAVES, ETC. AT LEAST 3 FEET AWAY FROM THE POINT DIRECTLY UNDER THE VENT TERMINATION.

WARNING

USE OF IMPROPER FUELS, FIRESTARTERS OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND OPERATION GUIDELINES

B. Motor and Component Location



Advance Pellet Stove Safety Devices

The **Control Board/ESP** combination is responsible for all high limit safety control. There are 2 high limits, one normal operation high limit and one backup high limit. The control has an automatic diagnostic circuit that continuously monitors the ESP and Room Sensor for faults. If a fault should occur, the control sends a status alert and at the same time the unit goes down to minimum feed/minimum burn as a safety condition.

The **Low Draft Pressure Switch** is a differential pressure switch that monitors the negative pressure (Draft) in the firebox. If the draft becomes too low for proper combustion, the switch opens, cutting power to the feed motor and the igniter circuits. This switch is connected into the AC (high voltage) wiring.

C. Loss of Power

Minimizing Smoke During Loss of Power Using Battery Back-up

Harman® strongly recommends installing battery back-up to minimize entry of smoke into the room in the event of power loss.

Your pellet/biomass burning appliance relies on a combustion blower to remove exhaust. A power failure will cause the combustion blower to stop. This may lead to exhaust seeping into the room. Vertical rise in the venting may provide natural draft. It is, however, no guarantee against leakage.

There are two Harman® approved battery back-up options for your appliance:

Uninterruptible Power Supply UPS battery back-ups are available online or at computer and office equipment stores. Your Harman® appliance with Rev E or later software available beginning in November 2010 may be plugged directly into a Harman® approved UPS:

- The APC (American Power Conversion) model #BE750G and the TrippLite model INTERNET750U are tested and approved. Other brands or models may not be compatible.

When power is lost, a fully charged UPS will power a safe, combustion blower only shut-down. Your appliance will pulse the blower every few seconds to clear exhaust until the fire is out. **NOTE: The UPS provides safe shut-down only. It is not intended for continued operation.**

- The Surefire 512 connects to a 12 volt deep cycle battery that will run your appliance for up to eight (8) hours. It includes a trickle charge feature that keeps your battery charged when power is available. **NOTE:** If the power is out for longer than battery life, smoke leakage may still occur unless your stove has been safely shut down.

Your appliance will recognize when power is restored. What happens depends on ESP temperature and whether it is equipped with automatic ignition:

- In **“Automatic” Mode**, units equipped with automatic ignition will respond to the set point and ESP temperature and resume normal operation.
- In **“Idle” Mode**, or for units without automatic ignition:
 - If the ESP is cool, the appliance will remain shut down.
 - If the fire is out and the ESP is still warm, the feeder may restart. Since the fire is out, the ESP temperature will not rise. The unit will then shut-down, and may flash a six-blink status error. (See ESP error codes)
 - If the fire is still burning, it will resume normal operation.

Contact your dealer if you have questions about UPS compatibility with your appliance.



WARNING

Use only Harman® approved battery back-up devices. Other products may not operate properly, can create unsafe conditions or damage your appliance.



CAUTION

Always keep appliance doors and hopper lid closed and latched during operation and during power failures to minimize risk of smoke or burn-back.

D. Emergency Manual Ignition

Harman® pellet stoves and inserts should be lit using the automatic ignition system. This is the safest and most reliable way for igniting the unit. In the event the automatic igniter is not functioning, the steps below may be followed to manually light the stove or insert in the “Constant Burn” mode. Manual lighting is for emergency purposes only, and the igniter should be repaired or replaced as soon as practical.



WARNING

Only use firestarter commercially marketed for pellet stoves and inserts, including wax coated wood chips, pellet starter gel and pellet igniter blocks. Use of any other type of firestarter is prohibited.

To avoid serious injury or death read and follow manufacturer’s warning and instructions for use of firestarter. Use of firestarter is only permitted when performing a cold start.

Never attempt to manually light a stove or insert that has been operated recently and is not at room temperature. If automatic ignition was attempted, be sure to give the stove or insert at least 30 minutes or longer to cool to room temperature.

Be sure that the stove or insert is in the “Igniter - Disabled” mode of operation.

Once all the precautions have been taken, follow these steps:

1. Turn the Mode Selector to “OFF”.
2. Fill burn pot with pellets, only half way. (Do Not Over Fill).
3. Add firestarter to pellets following manufacturer’s instructions.
4. Light pellet gel with a match, and close the door, turn Mode Selector to Constant Burn. Operation will begin when the fire reaches the proper temperature.

E. Contact Information



352 Mountain House Road, Halifax, PA 17032
www.harmanstoves.com

Please contact your Harman® dealer with any questions or concerns.
For the location of your nearest Harman® dealer,
please visit www.harmanstoves.com.

- NOTES -

NOTICE



- Important operating and maintenance instructions included.

DO NOT DISCARD THIS MANUAL

- Read, understand and follow these instructions for safe installation and operation.

- Leave this manual with party responsible for use and operation.

