#### America's Heat Pellet Stoves Benchmark Model: B-100 Wood Pellet Stove U.S.ENVIRONMENTAL PROTECTION AGENCY Certified to comply with 2020 particulate emission standards using pellet fuel



LMF Manufacturing Ltd. 51 Koppers Ln Montgomery, Pa 17752. 570-769-7775. "Made In the USA"

Installer: After installation give this manual to the homeowner and explain operation of this stove.

- 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.
- Contact local building or fire officials about restrictions and installation inspection requirements in your area.
- Save these instructions

#### Dear America's Heat Pellet Stoves Owner:

Congratulations, on the purchase of your America's Heat Pellet Stove! You have selected the finest in residential wood pellet heating technology.

Let us here at LMF Manufacturing pass on a few "tips" about installing your stove and heating with wood pellets.

Whether you install your stove yourself or hire a professional installer, a quality installation is a must for the safety of your family and for efficient, satisfactory operation of your stove.

Know the quality and characteristics of the pellets that you burn. Pellets can vary greatly from company to company, from load to load and occasionally from bag to bag. Be extra diligent in your cleaning program. Remember that 90% of operational dilemmas with a pellet stove are directly traced to improper installation, poor quality pellets and/or a lack of timely cleaning.

With just a minimum of daily care your America's Heat Pellet Stoves will provide years of clean, efficient, comfortable and environmentally sound heating.

Thank you, for selecting an America's Heat Pellet Stove.

Sincerely,

LMF Manufacturing Ltd

#### You must consult the authority's that have jurisdiction (such as municipal building department, fire department, fire prevention bureau, etc.) before installation to determine the need to obtain a permit.

LMF Manufacturing Ltd. 51 Koppers Ln Montgomery, Pa 17752. 570-769-7775. "Made In the USA"

#### TABLE OF CONTENT

Welcome	2
Table Of Contents	3-4
Introduction	5
Definitions	5
Cautions	6
Safeties	6
Tamper Warnings	7
Installation Options	7
Installation Notices	7
Building Permit	7
Safety Testing and Listing	7
Installation Cautions and Warnings	8
Installation Checklist	8
EXHAUST SYSTEMS	9-10
Existing Chimney's	10
Exhaust System Termination	10-11
Exhaust System Sizing	11-12
Outside Air	12
Clearances	13,14,15
Alcove	14
Dimensions	14-15
Stove Installation	15-16
Venting Through The Wall Installation	16
Venting Vertical Through The Ceiling	
Mobile Home Installation	16-17
Operating Your Stove	17
How Your Stove Works	17-18
Before Starting Your Stove	18-19
Instructions and Procedures	19
Building and Maintaining The Fire	19
Startup Procedure	19
The Controls	20-22
Error Codes And Possible Meanings	23
Shutting The Stove Off	24
Performance Enhancement Tips	24
Tuning The Stove	25 25
Extended Operation Periods	25 25
Stepping Up Your Stove Tightening Up Your Stove	25
rightening op four Stove	20
PELLETS	27
Pellet Quality	27
PFI Pellet Standards	27
Do NOT Burn	27
Pellet Consumption	27
Factors Effecting Pellet Feed Rates	28

Ash and Clinkers	28
STA-CLEAN Grate	28
Fines	29
Combustion	29
REQUIRED CLEANING	30 - 31
Daily Stove Maintenance	32
Bi-Weekly Stove Maintenance	33
Monthly Stove Maintenance	34 - 35
Seasonal Stove Maintenance	33 - 38
REQUIRED MAINTENANCE	39
Disposal of Ashes	39
TROUBLE SHOOTING	40
LIMITED WARRANTY	41
REPLACEMENT PARTS	42

#### **Introduction:**

Heating with wood pellets has many challenges, but the cost savings and the environmental benefits far outweigh the challenges. Pellet fuel is "Green House Gas Neutral", meaning that the carbon products emitted from burning are absorbed by the trees used for the pellets when growing. Unlike fossil fuels that release greenhouse gases to the environment, pellet fuels come from renewable resources.

Pellet fuels are produced using national standards established by the Pellet Fuel Institute. The standards guarantee that the fuel produced at a particular plant overall has the characteristics that were agreed to by the Institute. These include a maximum pellet length of 1.25", minimum fines (or sawdust), ash, moisture, salt, and mineral contents. Does this mean that every bag coming from that plant adheres to the standard? No, it does not.

Pellets are made from sawdust, and although inspection techniques are very sophisticated, the occasional bad log gets through. The wood may have high bark content, have mud mixed in or simply be old rotting timber. These variations in pellet fuels lead to most of the irregularities in burn characteristics, efficiency and stove failure. Although the America's Heat Pellet Stove was designed to work with all types of wood pellet fuel efficiently, there may need to be adjustments made to the stove to make it operate properly.

This manual will help you to optimize the efficiency and reliability of your stove.

#### **Definitions:**

Air Intake:	Air used for the combustion of the pellets.	
Air Damper:	Located on the round air intake at the rear on the stove	
<u>Automatic Co</u> temperature o		
Burn Pot:	Stainless box inside stove in which the pellets burn	
Circulation Fa	n: Right side fan for distributing air through the room	
Cleaning:	Removal of ash and combustion resins from the stove	
Clinkers:	Hard Deposits that accumulate in the burn-pot, obstructing air flow	
<u>Exhaust:</u>	Smoke from combustion of the pellets	
<u>Exhaust Fan:</u>	n: Induced draft fan connected to chimney to expel the smoke	
Feed-rate:	The amount of pellets dropped into the burn-pot per minute or hour. (1 being lowest, 15 being highest)	

- <u>Inspection:</u> Should be done daily while the stove is cool to check for clinkers and ash accumulation, integrity of the stove from overheat conditions, and clear exhaust paths.
- <u>Heat Capacity:</u> The amount of heat that can be generated from the burning of pellets. Typically, Hardwood pellets contain 8,000 to 9,000 BTU's per pound. Simple math assuming a feed-rate of 5 lbs per hour at 8000 would produce 40,000 BTUs.

<u>Melt-away Tube:</u> Plastic vacuum tube, which if melted from high heat, creates loss of Vacuum and stops pellet auger from feeding

<u>Modulation:</u> Automatic Variation of the feed rate and exhaust motor speed to meet the heating requirements of the space (set-point vs. room temperature)

<u>Over-heat Condition</u>: Stove is burning beyond the capacity of the heat exchanger to remove heat. Two safeties stop the auger from feeding (250 snap and melt-away tube)

<u>Safeties:</u> Built-in safe guards to protect the integrity of the stove and the users of the stove.

#### **Cautions:**

The pellet stove is really an advanced version of the original wood stove popularized by Benjamin Franklin. The advantage of the stove over the fireplace is that more of the heat stays in the building and less goes up the chimney. As such, the big problem initially was getting the smoke from the stove to the outside world safely. As piping technology evolved, specialized pipe and procedures were developed for each type of stove to ensure the safety of the customers. Pellet Vent rated pipe is required for the America's Heat Pellet Stove. Make absolutely sure that you have the stove installed according to local codes, ordinances and the owner's manual. These pipe installation procedures are designed to remove the smoke of burning pellets safely, but in addition to this they are designed to allow the piping to survive a chimney fire and protect the house and its occupants.

The stove itself is designed to the ASTM 1509 standard. Along with "U.S.ENVIRONMENTAL PROTECTION AGENCY Certified to comply with 2020 particulate emission standards using pellet fuel." Among the many provisions of the standard is that the design and construction of the stove is such that it will contain a fire inside the stove, not allowing it to escape into the space. The shell is made from steel weldments of sufficient thickness to contain any fire in the stove. Improper maintenance, inspection and cleaning of the stove can lead to undesired release of smoke into the premises. This is a hazard to health and life. It is required that smoke detectors and carbon monoxide monitors be installed in the room in which to stove is installed.

## Improper installation and operation of the pellet stove can lead to the accumulation of smoke in the house, loss of health and life.

**TAMPER WARNINGS:** 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 the operating instructions in this manual.

#### Safeties:

<u>250 Degree Overheat Snap Switch:</u> The auger that delivers pellets will stop if the stove overheats. If this condition happens, very often the stove will appear to be shutting down, the exhaust motor continues to run and the stove burns up all the pellets. As soon as the overheat condition goes away, the stove may feed pellets again if the FA1 error has not yet occurred. If this happens, the burn-pot may fill up with pellets until the fire either re-ignites or goes out and causes an FA1 error. If you suspect that your stove has overheated consult a service person. Running at a feed rate that is too high or having a failed circulation fan may cause this.

<u>FA1 Error</u>: Loss of Fire. The Exhaust motor continues to run for 30 minutes to make sure all embers are out and the stove cools down. The most common reason for this is running out of pellets. This error can also occur on warm days when the feed rate is very low, but this is rather uncommon. As stated above, if this error occurs and burn pot is full of pellets or there is a pellet jam, a service person should be consulted before refiring the stove.

<u>140 Degree Snap Switch:</u> After the stove is shut-down, this blower safety will continue to make the circulation fan run as long as the internal temperature of the stove is more than 120 degrees. If this switch has failed, the circulation fan will always run.

<u>Vacuum Pod</u>: This safety is wired to the auger motor through the red wires. If there is a loss of vacuum in the stove, it will open and not allow the feed of pellets. This can occur if the exhaust fan fails, the exhaust fan fuse blows, or the chimney gets plugged up. An open door or pedestal door can lead to a lack of a vacuum reading. As with the melt-away tube and the 250 overheat, a loss of vacuum will cause no pellets to drop.

<u>Fuse Block:</u> The permanent fuses on the fuse block are designed as safeties. The fuse for the exhaust blower, for example, is designed to blow if the chimney is plugged. Because each fuse is labeled on the board, it makes it easy to diagnose the failure of the stove. The fuses are permanently affixed to the board so that improper fusing cannot happen.

<u>Melt-away Tube:</u> In the event of an extreme overheat condition; the special tube will be breached, causing a lack of vacuum and no feed to the auger motor.

<u>110 Degree Snap Switch:</u> This snap switch is located on the exhaust motor and connected with control wiring to the control board. The purpose of this switch is to sense the presence of fire in the stove. If the stove is hot, during shut-down, this snap switch is sensed constantly, keeping the exhaust motor running until the fire is completely out

## **INSTALLATION OPTIONS**

The **America's Heat Pellet Stove** model "B-100" may be installed to code in both **conventional** and **mobile homes. INSTALLATION OPTIONS INCLUDE:** 

1. A FREESTANDING STOVE: Set on a pedestal and placed on a non-combustible floor pad.

## INSTALLATION NOTICES

#### SAFE INSTALLATION NOTICE

Your America's Heat Pellet Stove must be properly installed to meet the safety listing of the stove. Failure to strictly follow these installation instructions could result in the possibility of a house fire, property damage, bodily harm or even death.

#### **BUILDING PERMIT**

Local **building codes** must be followed and necessary **building permits** obtained from local building officials.

#### SAFETY TESTING AND LISTING

America's Heat Pellet Stoves have been tested and listed by Intertek Laboratories, an accredited testing laboratory, in accordance with the requirements in UL1482 and ASTM standards for solid fuel heaters, hearth stoves, fireplaces and inserts. The safety label is located on the right side of the pellet hopper cover. This safety label contains installation specifications that must be followed in all installations of America's Heat Pellet Stoves.

#### HEAT OUTPUT RANGE

9,000 - 18,000 Btu/hr

#### **INSTALLATION CAUTIONS & WARNINGS**

The installation drawings shown in this manual are only a few examples of many appropriate installation designs. Many other designs that meet local code, stated installation requirements of this manual, the stove's label and "PL" vent manufacturer's requirements may be acceptable. **NOTE**: All stove owners, operators and installers will want to read and become thoroughly acquainted with the information in this manual before installation and operation of the stove begins.

- 1. THIS WOOD HEATER NEEDS PERIODIC INSPECTION AND REPAIR FORPROPER OPERATION. IT IS AGAINST FEDERAL REGULATIONS TO OPERATE THIS WOOD HEATER IN A MANNER INCONSISTANT WITH OPERATING INSTRUCTIONS IN THIS MANUAL.
- 2. "WARNING" America's Heat Pellet Stoves MAY NOT BE INSTALLED IN A SLEEPING ROOM
- 3. All stoves must be placed on non-combustible material.
- 4. Caution must be taken to avoid cutting any electrical wires or water pipes that might be in the vicinity of holes used for the exhaust venting and outside air systems.
- 5. America's Heat Pellet Stoves operate with a slightly positive venting system. For the safety of all people, animals and plants in the vicinity of your stove, the exhaust system MUST BE CORRECTLY INSTALLED AND MUST BE AIR TIGHT!
- 6. All installations must meet all codes, "PL" vent manufacturer's requirements an all requirements in this manual. NOTE: A FAULTY INSTALLATION MAY PRESENT A SERIOUS SAFETY HAZARD AND MAY RESULT IN LOSS OF PROPERTY, LIFE AND VOID THE WARRANTY.

- 7. CAUTION: Any alteration of your stove voids the warranty and may cause a safety hazard.
- 8. CAUTION: THE STRUCTUAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED

## INSTALLATION CHECK LIST

Complete this checklist prior to lighting the first fire in your stove.

Unless you are knowledgeable and experienced in stove installation, we **RECOMMEND** your **America's Heat Pellet Stove** receive a **Pre-delivery Check** and be installed by an **Authorized** America's Heat pellet stoves Dealer or Factory Service Representative.

- Stove owner has read and understood this manual. SAVE THIS MANUAL!
- Stove owner has obtained all necessary permits for installation.
- The Stove received a "Pre-delivery" check by the **AMERICA'S HEAT PELLET STOVES** Dealer or factory sales representative.
- Installed by an Authorized **AMERICA'S HEAT PELLET STOVES** Dealer or factory installation representative.
- Stove inspected after installation by an Authorized **AMERICA'S HEAT PELLET STOVES** Dealer or factory technician. .
- Installation meets all requirements listed in this manual.
- Installation passed all local code requirements.
- Complete Limited warranty registration card mailed to: LMF Manufacturing Ltd.

## EXHAUST SYSTEMS

#### **GENERAL**

- 1. SAFETY LISTED, 3 OR 4 INCH "PL"vent must be used on all FREESTANDING AND BUILT IN STOVE installations. A 3 to 4 inch safety listed adapter must be used on your stove when 4-inch vent pipe is used (See item 14 below.)
- 2. Horizontal exhaust system runs of over 15 feet are not recommended
- 3. Exhaust systems must not be run in a downward direction (always maintain some vertical rise).

- 4. Exhaust systems with over 3 tees and/or elbows may not draft properly.
- 5. All areas of the exhaust system must be installed so both vertical and horizontal runs may be periodically inspected and cleaned.
- 6. A clean out tee must be used at the bottom of all vertical runs to collect fly ash and for easy cleaning. In some installations, 4 way tees may be needed for easy cleaning.
- 7. The "PL" vent manufacturer's installations and clearance requirements must be followed.
- 8. All exhaust system joints must be fastened with at least three screws. System joints within the building should be sealed with RTV silicone to assure a long term, exhaust tight seal.
- Some exhaust pipe surfaces can get hot enough to cause burns if touched by people or animals. Shields or guards, with proper "PL" vent clearance may be required for some installations.
- 10. Hearth stoves must be installed with "PL" vent for that portion of the venting system between your stove and a damper plate or to a fireplace shroud if one is used.
- 11. Your stove may not be placed in or vented into a gas fireplace.

#### EXISTING CHIMNEYS

12. Existing chimneys must be thoroughly cleaned when they are used in a pellet-stove installation.

#### 13. DONOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

# 14. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE. (Ex. stoves, furnaces, fireplaces etc.)

- 15. Single wall, 3 or 4 inch, solid or flexible pipe, **stainless steel only**, may be used for the portion of the exhaust system that is behind a metal shroud and is inside a fireplace or chimney when inserts are placed in a masonry or factory built wood or coal burning fireplace.
- 16. When venting a stove or insert into an unlined masonry chimney, a stainless steel liner must be used inside the masonry chimney. When a chimney liner is used, extend the liner to the top of the chimney. Seal the top of the chimney with a steel chimney cap.

#### EXHAUST SYSTEM TERMINATION (Figures 3 & 4)

17. **Provide at least 5 feet of vertical rise** when the exhaust system is terminated on the prevailing wind side of the building. In this type of installation, a power interruption may potentially cause smoke to escape from the stove into the house if the exhaust system does not have at least 5 feet of vertical rise.

- 18. Do not terminate the exhaust system in any enclosed or semi-enclosed area such as carports, garage, attic, crawl space or any space where exhaust gases can concentrate.
- 19. Exhaust gases must be directed so they are not a hazard to people entering the building or cause fires.

20. The exhaust system **MUST NOT TERMINATE LESS THAN:** 

- 1 foot away from the wall it penetrates through
- 2 feet above the roof line when extending through the roof
- 5 feet from any building opening through which the exhaust gases may enter, (i.e. doors, air intakes an windows which can be opened)
- 7 feet above a public walkway
- 2 feet from adjacent buildings
- 3 feet from plants
- 1 foot above grade

Figures 3 and 4 are a guide to the application of exhaust system termination requirements.

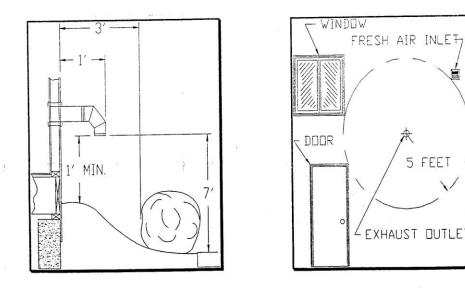


Figure 3

Figure 4

## "Install vent at clearances specified by the vent manufacturer"

#### **EXHAUST SYSTEM SIZING**

The exhaust pipe on all America's Heat Pellet Stoves are 2.875 inch OD. A3 inch exhaust system pipe will slip over the outside of your stove's exhaust pipe. For installations requiring a 4-inch "PL" vent, a 3 or 4 inch "PL" adapter must be placed on your stove's exhaust pipe.

Elbows, tees, vertical rise, horizontal run and length of pipe all effect how exhaust gases flow through an exhaust system. Adjusting the size of the exhaust system to compensate for these variables may help improve exhaust gas flow and overall performance of your stove. Apply the **"VARIABLES"**, listed in the table below, to the different pieces of exhaust system materials and to venting pipe run in a horizontal direction.

**Example 1**: An exhaust system going straight out the wall with 2 feet horizontal "PL" vent, into a TEE with a clean out cap, then running vertical for 5 feet, then into a 90 degree elbow and terminating with a 45 degree elbow, installed at sea level. Total length of the system is approximately 10 feet.

**Example 2**: The same system as in example 1 installed at an elevation of 6,000 feet. To estimate the size of the exhaust system use the following factors:

VARIABLES	Example 1	Example 2
* The total length, in feet, of the exhaust system	10	10
* Add 3 feet for each foot of horizontal run.	(3 x ?) 6	= 6
* Add 5 feet for each 90 degree elbow or tee	(5 x ?) 10	= 10
* Add 3 feet for each 45 degree elbow	(3 x ?) 3	= 3
* Add 2.5 feet of each 1,000 feet of altitude	(1.5 x ?) 0	= 0
Total Factored Length	29	38
Required size of exhaust system	3 or 4"	4"

If the total factored length is **under 30**, **use a 3 or 4-inch exhaust system** 

If the total factored length is **30 or greater**, use a **4-inch exhaust system NOTE: 4 inch "PL" vent may be used in any installation.** 

#### NOTE: Always increase the size up to a 4" exhaust system if in question of the size.

The above are guidelines only. The importance of proper sizing of the exhaust system is to assure adequate exhaust draft. Inadequate exhaust draft results in a poor flame and inefficient burning.

## **OUTSIDE AIR**

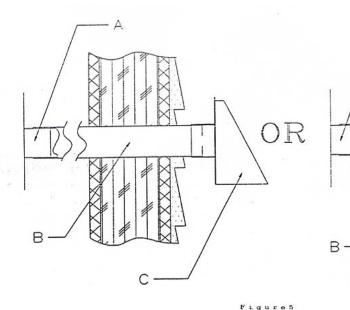
- 1. Outside air is **REQUIRED ON ALL MOBILE HOME INSTALLATIONS**.
- 2. **Outside air is recommended for all other installations**, especially if installed in a well-insulated house.
- 3. Steel pipe, (B) only, either solid or flexible must be used in all outside air installations.
- NOTE: Non-metallic material MUST NOT BE USED for outside air installations.
- 4. A wind shield, ©, over the termination of the outside air pipe or a 90 degree elbow or bend directed away from the prevailing winds MUST be used when an outside air pipe in installed

through the side of a building. Keep the outside air pipe termination at least 1 foot away from the exhaust system termination.

- 5. When outside air is taken from an existing chimney the exhaust system must not terminate in the same chimney.
- 6. The outside air pipe on your stove is 2" OD. The outside air-connecting pipe must be at least 2" ID. The outside air-connecting pipe must be as short and free of elbows as possible, and it must fit over (A), not inside, the outside air pipe of your stove. You must use a piece of 1/4" rodent screen over the inlet.

## **CLEARANCES**

Δ



Minimum STOVE clearances Mini to mum distance the noncombustible Combustible s, Figures 6,7, & 8 FLO OR PAD must extend beyond

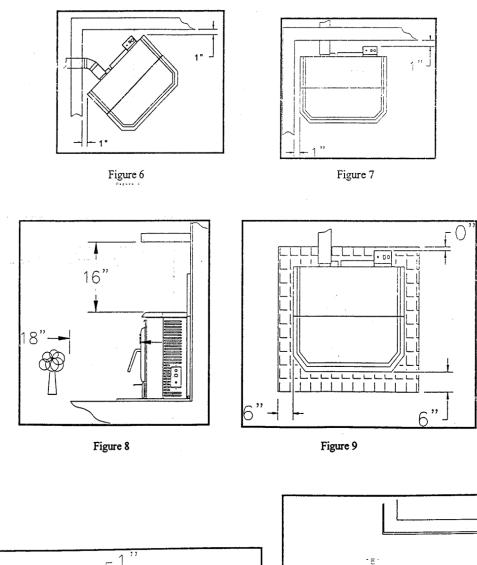
#### Your stove. Figure 9

- inch from the back
- Inch from the sides
- 1 inch from the corners
- 16 inches from the top
- 18 inches from the front of your stove to items such as furniture, plants and draperies
- 6 inches from front of pad

С

- 0 inches from the back
- 6 inches from the sides

All stoves must sit on a noncombustible floor pad/material.



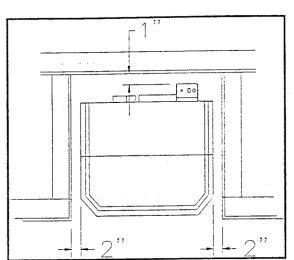
#### <u>ALCOVE</u>

Minimum clearances to combustibles for a stove. (Figures 10 and 11)

1 inch from the back

2 inches from the sides

16 inches from the top



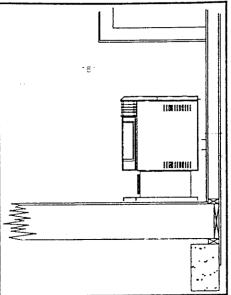


Figure 10

Figure 11

**<u>DIMENSION</u>**: Leg, pedestal, exhaust outlet and outside air outlet dimensions are (Figure 12)

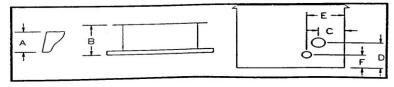


Figure 12

### **STOVE INSTALLATION**

(Figure 13)

#### Through the wall, direct installation.

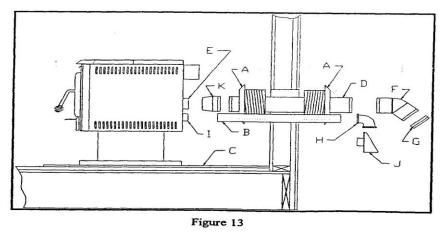
**1.** Select the location for your stove, design and exhaust system and determine the brand and size of "PL" vent to be used.

2. Following the "PL" vent manufacturer's specifications, mark and cut a hole through the wall to accommodate the wall thimble, (A), and the outside air pipe, (B), if outside air is to be used. Install the wall thimble, (A).

3. Position the floor pad, (C). Insert the proper size of "PL" vent, (D) through the wall thimble, (A). Place your stove on the floor pad, (C) close to its final position. Leave room to connect the "PL" vent to your stove. Place a bead of RTV silicone around the end of your stove's exhaust pipe, (E). Connect the length of "PL" vent, (D) which is in the thimble, (A), onto the stoves exhaust pipe (E). Place your stove in its final position on the pad. Note: If 4" PL vent is required, use an increaser, (K), on the stove exhaust pipe.

4. Required: On the outside of the building attach a 45 degree "PL" type elbow, (F) onto the end of the horizontal "PL" vent, (D). Optionally, place a rodent screen cap, (G), (may be required in some locals), on the end of the elbow, (E), (<u>HIGHLY RECOMMENDED:</u> RATHER THAN A 45-DEGREE ELBOW outside of the bldg. AFTER ITEM D FIRST ATTACH a 90-degree elbow to the horizontal "PL" vent. Place a 5' length section of "PL" vent (NOT SHOWN IN DIAGRAM) going up, and then attach a 90-degree elbow to the vertical section. This will give system some natural draft, which will evacuate smoke in the event of a power failure.

5. If outside air is used, install the outside air pipe, (B). Seal the outside air pipe, (B), to your stove's outside air pipe, (I) with RTV silicone. Make sure the outside air pipe fits over, (**not inside**) your stove's outside air pipe, (I). Install either a 90-degree elbow on the end of the outside air pipe, (H) or install a windshield, (J).

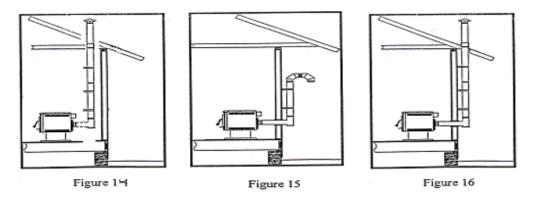


#### VERTICAL INSTALLATIONS

(Figures 14, 15, 16, 17, & 18)

Your America's Heat Pellet Stove may be installed using many different vertical designs. Follow the same basic steps in locating your stove, attaching the exhaust system and outside air intake to your stove as described in "STOVE INSTALLATION" and the "PL" vent manufacturer's procedures for installing through a wall, ceiling, eve and roof. **Common, (but not inclusive), vertical installation designs are:** 

- 1. **Vertical, through the ceiling,** through another room or space, or attic, then through the roof terminating with a rain cap. Figure 14
- 2. Horizontal, out the wall, then vertical to a minimum of 5 feet, into a 90-degree elbow and terminating with a 45-degree elbow pointed downward. Figure 15
- 3. Horizontal, out the wall, then vertical through the eves and roof, terminating with a rain cap. Figure 16



6. Either single wall stainless steel rigid or flexible pipe "PL" vent may be used as the exhaust vent for the portion of the insert's exhaust system that extends past the clean out TEE that is attached to your insert.

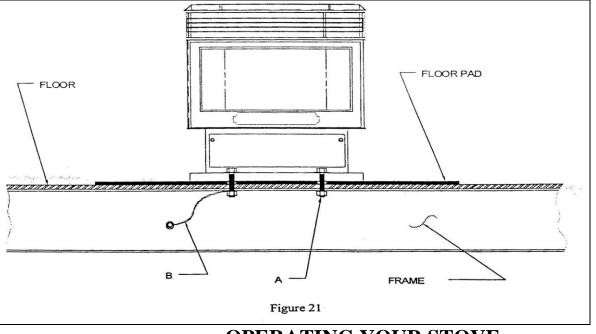
## MOBILE HOME INSTALLATION

Your America's Heat Pellet Stoves has been tested and listed for mobile home installation. In addition to all previously detailed installation requirements, mobile home installations must meet the

following requirements and must be in accordance with the **Manufactured Home and Safety Standard (HUD), CRF 3280, Part 24.** 

- 1. Permanently bolt your stove to the floor, (A). (Figure 21)
- 2. Electrically ground your stove or the pedestal to the steel frame of the home. Use a number 8 gauge copper, (B) or equivalent.
- 3. The stove must have a permanent outside air source with a 1/4 inch rodent screen over the inlet.
- 4. **"CAUTION"** The structural integrity of the mobile home floor, wall ceiling and roof must be maintained.

**NOTE:** Your America's Heat Pellet Stoves may be installed in a mobile home as a "Free Standing Stove", a "Hearth Stove"



**OPERATING YOUR STOVE** 

Your America's Heat Pellet Stove is neither a cordwood stove nor a furnace, the operations and maintenance of your America's Heat Pellet Stove are unique and should not be considered to be like a wood coal stove, gas, electric propane or oil heater.

#### HOW YOUR AMERICA'S HEAT PELLET STOVE WORKS

Fuel in the form of wood pellets is stored in the hopper. An auger delivers the pellets to the burn pot. When you flip the power switch from the off position to the on position the stove starts the boot up process. When the power is switched on the display will flash startup codes and display the current temperature. The fuel rate is set by adjusting the current set temperature.

A fan provides combustion air to the burn box. The amount of combustion air in the burn box automatically changes as the fuel rate changes. The higher the fuel rate, the larger the amount of combustion air and visa versa. The fuel burns in the burn pot, producing heat. Some heat radiates out the front of your stove. The majority of the heat passes around the heat exchange tube. Room air is blown into the exchange tubes, is heated and moved into the room by the room air fan. A small amount of heat must pass out of your stove, along with exhaust gases, into the atmosphere. The ever-clean oscillating grate reduces ash build up in the burn grate.

Your stove's heat output can be adjusted by setting the built in thermostat. The thermostat display window, displays the current temperature inside the room and may flash any errors that the have occurred.

When the room temperature is below the set point the stove automatically feeds pellets into the burn pot. The combustion chamber fan will start, and after the pot has filled the automatic igniter will begin to glow and light the pellets inside the burn pot. After the burn pot has reached a specific temperature the room air fan will startup and blow hot air from the air tubes. The stove will continue to burn until the room temperature has reached the set point.

You will learn what the noises are that your stove makes. When the auger is running you will hear the pellet fall gently down the feed shoot and into the burn pot. You will also hear a small hum from the exhaust chamber fan and the room air fan. You will soon be able to distinguish the normal operating sounds that your America's Heat Pellet Stove produces.

Your stove can run efficiently over extended periods of time and at different heat output levels as along as the fuel supply is uninterrupted and **timely cleaning and maintenance is performed.** An example of how improper cleaning effects operations of the exhaust pressure switch will shut the pellet supply off and your stove will shut off if the exhaust system becomes plugged.

The bottom plate in the "Sta-Clean" burn grate moves back and forth constantly forcing incoming combustion air under the burning pellets. This constant movement of combustion air greatly decreases the amount of ash build up, reduces clinker formation, gives a cleaner burn and prolongs the life of the burn grate.

#### **BEFORE STARTING THE STOVE FOR THE FIRST TIME**

(Figures 22, 23 & 24)

- 1. Carefully read this "Owner's" Manual. Complete the "Installation Check List"
- 2. Obtain final inspection and approval by local building officials.
- 3. Carefully clean all marks off the gold plated parts before the first fire is lit. Use a soft cloth and a "Windex" type cleaner. Caution: Never use an abrasive cleaner on any part of your stove.
- 4. Polish the hopper to remove the oil type coating used to prevent rusting.

- 5. Have your Authorized America's Heat Dealer demonstrate all the operational, cleaning and maintenance steps necessary for your stove.
- 6. Sign and mail the limited warranty card.
- 7. Before STARTING THE STOVE check to make sure the burn grate is clean and the Ash Pan is not full. Verify that the stove door is securely shut.

# Caution: 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

#### Instructions and procedures for building and maintaining the fire.

#### Start Up

- 1. Fill the hopper with quality pellets.
- 2. Close the hopper door.
- 3. Plug in the stove to any single 110 outlet. Flip the toggle switch from the off position to the on position.
- 4. Press and hold the Set button and adjust the set temperature with the High and Low buttons.
- 5. After the burn pot has a fair amount of pellets in it, the igniter will begin to glow and the pellets will begin to burn. You can observe this by looking directly at the burn pot.
- 6. The stove will light in 1 to 5 minutes.

**NOTE:** If the fire does not start your stove will continue to feed pellets and the fans will run for approximately 30 minutes. The stove will then automatically shut off. If this happens, some unburned pellets will build up in the burn grate. **You must turn off the toggle switch and unplug the stove**. You should have no more than <sup>3</sup>/<sub>4</sub> of a cup of pellets inside the burn pot. If you do you must, clean the excess pellets out of the burn pot and follow the above "Using the Stove for the First Time" steps.

**NOTE:** Never use colored paper, cardboard, solvents, trash or garbage to light your stove or maintain a fire.

**NOTE:** Some odors may be given off a new stove during the initial few hours of burning while the stove and the paint are being cured. These odors are not harmful. However, ventilating the room until the odors disappear is strongly recommended. **CAUTION:** Never use liquid or volatile fire starters to start a fire in your stove! Do not install or operate your stove in any room where any liquid or volatile fuels or any other highly combustible items are in the air or stored in the room. These could cause a safety hazard.



Figure 22

## THE CONTROLS

- Power Toggle Switch, controls electricity to flow to your stove's electrical components. When it is switched to the on position it will allow codes to be displayed in the "Temp Display" window and then it will display the current room temperature. When an error code is displayed this must be switched to the off position and the stove must be unplugged for 1-2 minutes. When the switch is in the off position the stove will not operate. Refer to the Error codes in (Figure 22a)
- **Temp Display**, this window will display all the information that the computer needs to tell you. If the stove is operating correctly the current room temperature will be displayed. If there are other errors please refer to the error guide for help. **Refer to the Error codes in (Figure 22a)**
- **High Button**, adjusts the stove temperature higher. (When pressed in conjunction with the Set Button).
- Low Button, adjusts the stoves temperature lower. (When pressed in conjunction with the Set Button).
- Set Button, the set button when depressed will display the temperature at what the stove is currently set to maintain. When the Set button is pressed and held, and the High button is depressed the set temperature will rise. When the Set button and the Low button are depressed the set temperature will be lowered.
- Fresh Air Intake Control, (Located on the rear of the stove), you can fine-tune the flame and the speed at which the pellets burn by adjusting this intake. When the intake is open it allows the maximum amount of air into the firebox, burns the pellets the fastest. When the intake is closed it limits the amount of air allowed into the firebox and burns pellets slower. This is how you adjust the quality of the fire.

To access the control panel, slide the front cover forward approximately 4.25" to its fully extended position. The control panel is located on the left side of the hopper between just behind the open front cover (Figure 5).



The main power switch for the stove is located at the top right corner of the control panel. This switch controls the main power to the stove. Please note that if power to the stove is turned off while there is still a fire in the burn chamber or when the stove is still hot, the exhaust blower will continue to run until all exhaust fumes have been evacuated from the burn chamber and the burn chamber has been cooled to below 110 degrees F. This will eliminate getting unwanted exhaust fumes in the home if power is turned off while there is still a fire in the stove.

**NOTE**: If the power cord is disconnected from the wall (or if there is an unexpected power outage) while there is still a fire in the burn chamber, unless there is significant positive draft on the stove via the exhaust system, it is possible that smoke will leak from the stove into the home.

**Power switch** – Controls power to the stove's electrical components and control board. When in the "ON" position the stove will display information to the operator through the 3 segment Temp Display Window located just above the Low and Set buttons on the Control panel. Any time an error code is displayed in the Temp Display Window, after all pellets have burned out and the stove has cooled, the power switch must be toggled to the "OFF" position for a minimum of 1 minute to reset the stove.

**Note:** If the Power Switch is toggled to the "OFF" position when the stove is still hot or when there is still a fire in the burn chamber, the exhaust blower will continue to run until the fire in the stove is out and the stove has cooled.

**Temp Display Window** – Displays information that will identify the current operational status of the stove, the current room temperature, current set point temperature if in Automatic Temperature Control Mode, current User Control Mode (manual setting) when in User Control Mode, error codes, etc.

**High Button** – Adjusts the set point temperature, user control mode level, feed rate table up when depressed in

conjunction with the Set button (depending on what mode the stove is in, Automatic Temperature Control Mode, User Control Mode or Set-Up Mode). This button also used in conjunction with Low Button to toggle stove operation between Automatic Temperature Control Mode and User Control Mode.

Low Button - Adjusts the set point temperature, user control mode level,

feed rate table down when depressed

in conjunction with the Set button (depending on what mode the stove is in, Automatic Temperature Control Mode, User Control Mode or Set-Up Mode). This button also used in conjunction with Low Button to toggle stove operation between Automatic Temperature Control Mode and User Control Mode.

**Set Button** – Used in conjunction with the High Button and Low Button to adjust the set point temperature of the stove, adjust the User Control Mode of the stove, to get into and out of Set-Up Mode when adjusting the base feed rate of the stove and to adjust the feed rate table being used to operate the stove (when in Set-Up Mode).

Note: 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 in necessary.

A HIGH QUALITY FIRE should burn with a brisk yellow flame. A flame exhibiting a lazy orange or sooty characteristic is a poor quality and inefficient flame. A poor flame produces less heat, increases sooting and may cause a smoky exhaust. If a poor flame exists for any period of time, clean your stove and exhaust system. Refer to the "Trouble Shooting Guide" section of this manual and if necessary call your authorized America's Heat Pellet Stove Dealer.

Error Code	Possible Explanation	Corrective Action
FA1	Pellets not reaching burn pot.	Fill Hopper with Pellets/Unplug hopper shoot.
4	Thermostat wire not plugged in or damaged	Plug in thermostat/Replace thermostat wire.
	Figure 22 A	

#### **Error Codes and Possible Meanings**

Note: When operated correctly, your America's Heat Pellet Stove cannot be over fired. Continuous operation at a maximum burn will, however consume excess amounts of fuel and require that the stove be cleaned more often. Also extended operations at a maximum burn can, shorten the life of the electrical components (blowers, motors, and electrical controls), and it is not recommended.

#### Shutting the Stove Off

- 1. Press the Set Button and take note of the current room temperature displayed on the control board.
- 2. Press and hold the Set Button, then depress the Low Button, and lower the set temp to at least three degrees below the current room temperature.
- 3. The feed wheel will stop turning.
- 4. The fire will go out.
- 5. The room air blower will stop when the heat exchange tubes cool, (approximately 20-30 minutes).
- 6. The chambers exhaust fan stops blowing, when the chamber is cool and all smoke has been removed.
- 7. Now can you turn the Power Toggle Switch to the off position,

Note: If you do not follow these instructions you run the risk of smoke entering the house.

8. Now it is safe to follow the cleaning instructions.

#### PERFORMANCE ENHANCEMENT TIPS

**Quality care** and **quality pellets** will help your stove operate at its peak efficiency. Consider:

- 1. If any fines are noticed in the pellets or in the hopper, screen the pellets
- 2. Periodically check the hopper to make sure there are no fines or pellets building up in the corners of the sloping sides. Clean and polish the hopper as needed.
- 3. Be diligent in performing your CLEANING and MAINTENANCE requirements.
- 4. Store your pellets in a dry environment away from any moisture.
- 5. At least 90% of all service calls are due to not performing good weekly and season cleaning the stove/piping

#### **Tuning the Stove:**

Based on your installation and your heat load of the building, the pellets you are burning and the environmental conditions, you stove may need to be tuned beyond the factory settings. The factory settings are developed from an extensive burn-in test conducted on each and every stove.

Variables: Feed Rate, Air Damper Position, Upper Air Wash seal, Door Tightness

#### Feed Rate:

Selecting the proper feed rate is based on the drop rate of your stove using the pellets you are burning. Based on repeated three minute tests, the proper starting table can be determined. Use this table, or the one slightly lower as your starting point. Move the set-point to 6 degrees above the room temperature and start your stove. You may have to raise the set-point during the test to make sure that the set-point is at least 5 degrees above the room temperature during the entire test. Observe the fire characteristics of your stove. After one hour of burning, evaluate the level of pellets in the burn pot visually. The burn-pot should be no more than 1/3 full.

- 1. If it is more than 1/3 full, back off the feed rate by one level (ex. 5 down to 4) and continue running for another hour.
- 2. If the pellets are not visible and the flame is less than three inches high, move the feed rate up one level (ex. 5 to 6)
- 3. Repeat as necessary until you can continue to run at 100% and not over or under fill the pot. Hint: You may need to open some doors and windows in order to keep the room cool enough to conduct the test.

Overfeeding the pellet stove and producing more heat than the stove is designed for can damage the igniter, burn-pot and heat exchanger, leading to stove failure. During this tuning operation, pay particular attention to the Overheat snap switch. If the set-point is more than 5 degrees above the room temperature, the auger feed should be feeding almost continuously. If it stops for any reason, your over heat snap switch is telling you the stove is overheated. Lowering the feed rate until the stove operates at 100% without overheating is imperative. The stove may have to be observed closely for several hours to confirm that the high heat limit does not stop the auger feed.

#### 100% Operation for extended Periods:

Once you have set your feed rate properly, it theoretically should be possible to run your stove at 100% for extended periods of time. This allows the stove to be installed in a basement or an area that exceeds the fully rated heat capacity of the stove. Many users will then set the stove at 80 degrees and find that the stove runs constantly but does not heat the space up beyond 75 degrees. Determining you hourly feed rate is simple in this case. Calculate the pounds per hour of pellets consumed and then multiply by 8000 to arrive at you BTU hour number. The stove is rated for 42,000 BTUs, which equates to about 5 pounds per hour, or three bags per day. If your stove is using more than 5 lbs per hour, it is operating above its rated heat output and various components could fail: Igniter, burn-pot, brick backer plate, exhaust motor, etc. In effect, you are running the stove at 110-120% and this is not recommended.

Running the stove at 100% and "overfeeding" the stove will void the warranty on the stove and result in an extremely hazardous situation. The maximum heat output can be accomplished safely by "stepping up" your temperature on your stove, lowering your actual feed rate to achieve 5 lbs per hour, or lowering the set-point so that it differs no more than 2-3 degrees from the actual room temperature.

#### Stepping-up your stove:

This procedure will give you valuable insight into the heating capacity of the stove without causing the stove to overheat or run at higher than the 100% rate.

Once the stove is started, compare your set temperature to the room temperature. The set temperature should be no more than 4 degrees above the room temperature. As the room temperature approaches the set temperature, raise the set temperature by 1 or 2 degrees. Repeat this process unit the room temperature is approximately your desired temperature. If the stove will not achieve your desired temperature, you may have a situation where the heat out-put of the stove is not sufficient to heat the entire space. It is not unusual to have a different between the set-point and the actual room temperature. If your set-point is no more than 4 degrees above the actual room temperature, your stove is sized appropriately and functioning properly.

#### Tightening up your Stove:

Ideally, a majority of the airflow for combustion should come through the air damper and then up through the burn pot. This keeps the burn pot and igniter clean and cool. The damper should always be in the 50% open position unless a technician has changed it based on you installation. The rod that controls the damper should be at 3:00 for 50% open. (12:00 for 100% open) The Air Wash system in the door is another source of air for combustion, but because it does not come through the burn pot, it can reduce efficiency, cause the stove to become prematurely dirty, and reduce the "splash". We know that when the splash is reduced, there will be a quicker accumulation of ash and clinkers in the burn pot leading the increased cleaning.

Having the Burn Pot properly seated, with the front support plate flush with the burn box is very important because all the air will then come through the burn pot and grate. Daily inspection of the position of the burn pot is necessary to make sure it has not popped up or become dislodged due to clinkers or the occasional foreign object in the pellets.

The upper air wash is adjustable. Remove the upper air wash (5 nuts) inside the door on the top. Behind this you will see between 8-11" of open space behind the glass, with seals in the corners. These open areas provide air to wash over the glass and keep the ash from settling on it. Reducing the air wash and sealing some of the space behind the glass can dramatically increase airflow through the pot. This can be done by using gasket material, 3/8" fireplace rope gasket, or high temp caulk. It is not recommended that it be totally sealed, but leave at least 2-4" of space for air wash. Some folks have sealed it completely, however the glass would have to be cleaned more often. Replace the upper air wash cover and carefully replace and tighten the nuts. You should immediately see a more active flame with some increased splash from the pellets falling in.

The door is the other source of combustion air that does not come through the air intake on the rear of the stove. The door adjustment can be accessed by removing the right side panel (facing the stove) where the door latch is located. While the fire is burning, inspect the gasket to see if the fire can be viewed in the space between the door and the stove. This is a sign the door may need to be tightened up at the latch. You first must loosen the screws into the stove slightly and turn the adjusting screw to move the latch. Try to keep the latch level as you do so. Re-tighten the hold downs and test the door tightness. Slight gaps are normal, but if you are losing a lot of air through the gaps, the door gasket may need to be replaced or flat gasket applied to door itself for a better seal.

## PELLETS

#### PELLET QUALITY

Your America's Heat Pellet Stoves with is standard "STA-CLEAN GRATE", (B) figure 23, is designed to burn APFI/FFI, "Premium" or "Standard Quality" wood pellets. Pellets that are soft, contain excessive amounts of loose sawdust, have been or are wet, produce clinkers and/or heavy ash will result in reduced performance and may actually cause the fire to go out.

#### PFI PELLET STANDARDS

The Pellet Fuel Institute standards for residential quality pellets are:

Length	1.5 ir	nches, maximum	
Diameter	.235	to.350 inches (approx. ¼" to 3/8")	
Fines	.2# n	naximum per 40# bag	
Salts	.005	% by weight, maximum	
Ash Content	:		
•	Premium Quality	.75% by weight, maximum (.3# per 40# of	pellets)
•	Premium Quality	.75% by weight, maximum (.3# per 40# of	pellets)

• Standard Quality 2.5% by weight, maximum (1#per 40# of pellets)

Note: Never use colored paper, cardboard, solvents, trash, or garbage in your pellet stove.

#### **DO NOT BURN:**

- a. Garbage;
- b. Lawn Clippings;
- c. Materials containing rubber, including tires;
- d. Materials containing plastic;
- e. Waste petroleum products;
- f. Materials containing asbestos;
- g. Construction or demolition debris;
- h. Railroad ties or pressure treated wood;
- i. Paper products, cardboard, plywood, or particleboard. The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax and similar substances for the purpose of starting a fire in an affected wood heater.

#### PELLET CONSUMPTION

Fuel consumption will vary somewhat between fuel brands and stoves. The following "**ROUGH GUIDE**" to pellet usage's may be useful in assessing your stove's operation in ordering fuel and in providing information to your Authorized America's Heat Pellet Stove Dealer.

<u>Fuel Consumption Range Selector....</u>(all feed rates are approx. based on varying flow rates for pellets)

	1.75-2.25 pounds per hour	temp w/in 2 degrees of desired set point of thermostat.
Average Load	2.50-3.00 pounds per hour	Current Room
Conditions	3.25-3.75 pounds per hour	temp w/in 5
		degrees of desired
		set point of
		thermostat.
Heavy Load Conditions	4.00-4.50 pounds per hour	Current Room
	4.75-5.50 pounds per hour	temp more than 5
		degrees below
		desired set point of
		thermostat.

#### FACTORS EFFECTING PELLET FEED RATES

Generally, the smaller, harder and cleaner, (free from fines) the pellets are the faster they will feed at a given setting and visa versa. The extremes in pellet size and quality can cause a considerable difference in burning time for a 40-pound bag of pellets. Heat production is directly related to the pounds of fuel burned per hour. As fuel consumption goes down so will heat output and visa versa. Pellet feed rate, at the same fuel settings, may vary appreciably from brand to brand and may vary somewhat from batch to batch within the same brand.

#### ASH AND CLINKERS

Ash is a by-product of all pellets. Clinkers may be produced from some pellets and not from others. High quality pellets will produce less ash and fewer clinkers than lower quality pellets.

**ASH** is a natural product of burning wood. As the amount of ash in the wood increases the amount of ash left after burning high ash wood pellets will increase

**CLINKERS** are those solid, glassy or porous accumulations that may result from burning some types of wood pellets. Clinkers are formed in the bottom of the burn grate and if left undisturbed will accumulate and shut off the combustion air. As clinkers grow and shut off combustion air the fire becomes orange/brown and lazy. Pellets may build up in the burn grate. The firebox and window becomes sooty. Exhaust gases may become smoky.

America's Heat Pellet Stoves are equipped with a **STA-CLEAN grate**. These grates reduce the amount of clinkers formed by lower quality pellets. The STA-CLEAN grate system automatically move the bottom of the grate back and forth. If ashes are quickly blown out of the grate they cannot easily stay in one spot, heat up to the melting point and fuse into a clinker. Clinkers form when pellets are of such poor quality their ashes contain materials that easily melt under high firebox temperatures, are not blown out of the grate, and stay there until larger and larger clinkers are produced.

NOTE: A "STA-CLEAN" grate is standard on all America's Heat Pellet Stoves. Understand the operation and maintenance details of the grate. See cleaning guide for detailed cleaning procedure.

#### **FINES**

FINES in pellets are pieces of sawdust that were not properly pelletized or are the results of pellets breaking down from handling, transporting and/or storage. Fines adversely affect the operations and heat production of a pellet stove and greatly increase the requirements for daily and periodic stove cleaning. Fines cause pellets to feed slower thus reducing the amount of heat produced at any given heat control setting.

**NOTE:** It is much easier to remove fines from pellets before they are placed in the stove than it is to service your stove for a plugged hopper, jammed auger and plugged exhaust system. Pellets with excessive sawdust may be screened to remove most of the fines. Pellet screeners may be built or purchased from most pellet stove dealers.

#### **COMBUSTION**

Even the poorest quality pellets can be burned efficiently if the feed rate is set properly. Generally speaking, when you switch from one type of pellets to another, adjustment of the feed rate must be evaluated. Pine pellets are known to burn hot and fast, hardwood pellets have a higher BTU content, but may burn harder with more soot and darker ash. How often the stove must be cleaned is directly related to combustion. Overfeeding the stove may not only overheat the stove, it may cause incomplete combustion. As a stove becomes dirty, airflow suffers and the feed rate may seem too high. Cleaning the stove and re-evaluating the feed rate is crucial. Lowering the feed rate may allow the stove to go longer between cleanings as the lower feed rate will allow more airflow through the burn pot, lofting the embers and ash out of the pot while they are still burning. This "splash" effect is beneficial and should be seen every time pellets hit the fire. This tends to keep the burnpot cleaner between cleanings, even with poor quality pellets. If you cannot achieve this splash effect and your stove needs to be continually cleaned even at a low feed rate, refer to the "Air Flow" section.

## **REQUIRED CLEANING**

Proper care of your America's Heat Pellet Stove is required for peak, sustained performance.

The need for and frequency of cleaning depends on the amount of pellets burned, pellet quality, length of time since last cleaning and the quality of the fire. While becoming acquainted with your new stove and type types of local pellets, **inspect the burn grate, heat tubes, ash pan and ash traps DAILY UNTIL A PATTERN OF CLEANING REQUIREMENT IS DETERMINED.** As heating demands increase the need for stove and exhaust system cleaning and ash removal will increase.

WARNING: Disconnect the electrical cord prior to opening the sides of your stove or opening the exhaust system for any inspection, cleaning, maintenance or service work.

NEVER perform any inspection, cleaning, maintenance or service on a HOT STOVE or when the electrical cord is plugged in. Follow the shut down procedure on page 24 of this manual.

Refer to figure 23 for identification and location of the following parts of your stove.

- 1. BURN GRATE: {COLD STOVE ONLY} Items, the BURN BOX and the BURN POT GRATE bottom. Clean with a brass toothbrush
- 2. BURN POT: {COLD STOVE ONLY} Items Remove the burn grate and burn grate bottom Clean out the burn pot. CAUTION: when replacing the grate bottom make sure it fits properly on the drive lug.
- **3. HEAT TUBES**: With your stove's main door closed and the combustion fan on, pull the HEAT TUBE SCRAPER ROD forward and backwards a few times.

**NOTE:** This operation may be performed on a stove that is burning **IF** they wear heavy leather gloves that covers most of the lower arms.

**CAUTION:** On a burning stove the heat tube scraper rod will be hot. Turn the **FAN** switch back {ON} at the completion of cleaning the heat tubes.

- 4. ASH TRAY: {COLD STOVE ONLY} Remove the ash tray and dump the ash as needed. NOTE: Place the ash in a metal container with a tight fitting lid. Place container on a non-combustible surface well away from all combustible materials. Retain all ash material in container until all cinders have been thoroughly cooled.
- 5. ASH TRAPS: {COLD STOVE ONLY} Each time the ashtray is removed clean the two ash traps, Rake the ash forward and into the ashtray.
- 6. WINDOW: {COLD STOVE ONLY} Wiping the window daily with a soft cloth or paper towel will normally keep the window clean. NEVER use a glass cleaner to remove heavy build up on the window, the "glass" is actually ceramic. Certain glass cleaners will cause clouding of the ceramic viewing window.
- 7. INSPECT AND CLEAN THE CHIMNEY: {ELECTRICAL CORD UNPLUGGED} Under some conditions fly ash build up in the chimney system may occur rapidly. Check the clean out tees in the exhaust system periodically to determine the cleaning schedule. Three or 4 inch chimney brushed are available for chimney cleaning. If the exhaust system or outside air pipe have screens on them, frequently clean the screen. A plugged screen will shut off combustion air and cause a fire to die or burn poorly.
- 8. CHECK AND CLEAN THE HOPPER: {ELECTRICAL CORD UNPLUGGED} Check the hopper periodically to determine of there is any sawdust or pellets that are sticking to the hopper surface. Clean as needed.

9. **PERIODIC CLEANING: {ELECTRIC CORD UNPLUGGED}** Clean the electrical motors and the motor area located in the back of your stove under the hopper. Be careful not to disconnect any electrical wires.

**NOTE:** Your America's Heat Pellet Stove Dealer or Factory Representative may offer a periodic stove cleaning service. Check with time on timing and cost of this service.

Burn Pot	
Burn Box	
Burn Pot Grate	

#### Daily Stove Maintenance Procedure.

- 1. Locate the Control Panel on the top Left Hand side of your stove.
- 2. Take note at what the current room temperature is.
- 3. Depress and hold the set button, and then depress the lower button until it is about 10 degrees below the current room temperature. This will stop the flow of pellet fuel to the stove if the stove was running. Allow the stove to cool this takes approx. 15-20 minutes for the fans to come to a complete stop.
- 4. When the fans come to a stop push on/off switch to the off position and unplug 110 volt power cord from the wall. Wait about 10 minutes after the fans stop to being the cleaning operation.
- 5. Open both hinged doors.
- 6. Push and pull top door center manifold handle. Make sure that you use both hands evenly to push and pull straight back. Also make sure that you use full top and bottom strokes. If you do not use full strokes you may eventually need to use channel locks to get a full top to bottom stroke
- 7. Pull the burn box cleanout tray to the out position. This will allow the ash below the burn pot to fall into the ash drawer.
- 8. Push the burn box clean out tray back to the in position.
- 9. Shut both vertical doors.
- 10. Plug in the 110-volt power cord.
- 11. Fill the hopper with pellets.
- 12. Slide top control door open and turn control board switch to the on position.
- 13. Select desired heat temperature.

This is the daily cleaning schedule that should be followed for your America's Heat Pellet Stove. Due to the fact that certain grades of pellets contain more ash and that other conditions impact how your stove performs you may have to adjust this cleaning procedure. If you notice an excess amount of ash buildup or a reduction in heat out put you can do this cleaning more frequently.

#### Bi-Weekly Stove Maintenance Procedure.

- 1. Locate the Control Panel on the top Left Hand side of your stove.
- 2. Take note at what the current room temperature is.
- 3. Depress and hold the set button, and then depress the lower button until it is about 10 degrees below the current room temperature. This will stop the flow of pellet fuel to the stove if the stove was running. Allow the stove to cool this takes approx. 15-20 minutes for the fans to come to a complete stop.
- 4. When the fans come to a stop push on/off switch to the off position and unplug 110-volt power cord from the wall. Wait about 10 minutes after the fans stop to being the cleaning operation.
- 5. Open both hinged doors and gather the following tools.
  - Flat head screwdriver
  - "Cheeta-Ash Vac" or comparable Vacuum.
- 6. Push and pull top door center manifold handle. Make sure that you use both hands evenly to push and pull straight back. Also make sure that you use full top and bottom strokes. If you do not use full strokes you may eventually need to use channel locks to get a full top to bottom stroke.
- 7. Vacuum throughout the entire enclosure making sure you don't leave any ash behind.
- 8. Remove the fire log with a gentle upward motion. (Be sure the vacuum the ash off of the inside of the log or ash could end up on the floor)
- 9. Using your screwdriver reach into the burn pot and gently scrape any clinker's that may have formed around the air holes. Be gentle around the cartridge heater when scraping. Scraping the cartridge heater will cause it to build up with carbon deposits and not function as it should. The more you scrap it the quicker it builds up with carbon.
- 10. Pull the burn box cleanout tray to the out position.
- 11. Vacuum inside of the burn pot from the top.
- 12. Reinstall the fire log into the original position.
- 13. Push the burn box clean out tray back to the in position.
- 14. Vacuum fire glass door all around and on top of firebrick plus surrounding areas again.
- 15. Pay special attention to the fresh air inlets at the bottom of the glass and metal guarding. Keeping this area clean will allow fresh air from outside of the stove to clean the window evenly.
- 16. Use plain water in a spray bottle and clean the inside of door glass with a few paper towels.
- 17. Shut both vertical doors.
- 18. Plug in the 110-volt power cord.
- 19. Fill the hopper with pellets.
- 20. Slide top control door open and turn control board switch to the on position.
- 21. Select desired heat temperature.

This is the bi-weekly cleaning schedule that should be followed for your America's Heat Pellet Stove. Due to the fact that certain grades of pellets contain more ash and that other conditions impact how your stove performs you may have to adjust this cleaning procedure. If you notice an excess amount of ash buildup or a reduction in heat out put you can do this cleaning more frequently.

#### Three to Four Week Stove Maintenance Procedure.

- 1. Locate the Control Panel on the top Left Hand side of your stove.
- 2. Take note at what the current room temperature is.
- 3. Depress and hold the set button, and then depress the lower button until it is about 10 degrees below the current room temperature. This will stop the flow of pellet fuel to the stove if the stove was running. Allow the stove to cool this takes approx. 15-20 minutes for the fans to come to a complete stop.
- 4. When the fans come to a stop push on/off switch to the off position and unplug 110-volt power cord from the wall. Wait about 10 minutes after the fans stop to being the cleaning operation.
- 5. Open both hinged doors and gather the following tools.
  - Flat head screwdriver
  - "Cheeta-Ash Vac" or comparable Vacuum.
  - 7/32" Allen Head Wrench
- 6. Push and pull top door center manifold handle. Make sure that you use both hands evenly to push and pull straight back. Also make sure that you use full top and bottom strokes. If you do not use full strokes you may eventually need to use channel locks to get a full top to bottom stroke.
- 7. Vacuum throughout the entire enclosure making sure you don't leave any ash behind.
- 8. Remove each of the internal clean out doors from the left and right hand side of the stove.
- 9. Vacuum out each of the internal clean out doors. Failure to do this step will result in a drastic decrease in the stoves heat output.
- 10. Remove the fire log with a gentle upward motion. (Be sure the vacuum the ash off of the inside of the log or ash could end up on the floor)
- 11. Using your screwdriver reach into the burn pot and gently scrape any clinker's that may have formed around the air holes. Be gentle around the cartridge heater when scraping. Scraping the cartridge heater will cause it to build up with carbon deposits and not function as it should. The more you scrap it the quicker it builds up with carbon.
- 12. Pull the burn box cleanout tray to the out position.
- 13. Vacuum inside of the burn pot from the top.
- 14. Reinstall the fire log into the original position.
- 15. Using the 7/32" Allen head wrench remove the two screws that hold the ash drawer in place.
- 16. Remove the ash drawer and dispose of the ashes in a fireproof container.
- 17. Vacuum out the inside of the ash drawer area.
- 18. With the burn box cleanout tray in the out position vacuum out the bottom side of the burn box. This is accomplished by entering this area through the ash drawer opening.
- 19. Inspect the seal around the ash drawer and reinstall the ash door into the pedestal. Install the 7/32" Allen head bolts and washers. Snug up the 7/32" Allen head bolts and washers making sure that you do not over tighten and bend the drawer. Tighten bottom drawer bolts evenly.
- 20. Push the burn box clean out tray back to the in position.
- 21. Vacuum fire glass door all around and on top of firebrick plus surrounding areas again.
- 22. Pay special attention to the fresh air inlets at the bottom of the glass and metal guarding. Keeping this area clean will allow fresh air from outside of the stove to clean the window evenly.

- 23. Use plain water in a spray bottle and clean the inside of door glass with a few paper towels.
- 24. Shut both vertical doors.
- 25. Plug in the 110-volt power cord.
- 26. Fill the hopper with pellets.
- 27. Slide top control door open and turn control board switch to the on position.
- 28. Select desired heat temperature.

This is the 3-4 week cleaning schedule that should be followed for your America's Heat Pellet Stove. Due to the fact that certain grades of pellets contain more ash and that other conditions impact how your stove performs you may have to adjust this cleaning procedure. If you notice an excess amount of ash buildup or a reduction in heat out put you can do this cleaning more frequently.

#### Seasonal Stove Maintenance Procedure.

- 21. Do a complete shutdown on the stove.
- 22. Unplug the 110-volt power cord from the wall.
- 23. Scoop as many of the pellets out of the hopper as you can.
- 24. Remove the thermostat wire from the stove.

WARNING: Unplug your stove's electrical cord prior to opening the sides of the stove or opening the exhaust system for any inspection, cleaning, maintenance or service work.

25. Open both hinged doors and gather the following items.

- Flat head screwdriver
- "Cheeta-Ash Vac" or comparable Vacuum.
- 7/32" Allen Head Wrench
- 5/32" Allen Head Wrench
- 5/16" End Wrench
- 7/16" End Wrench
- 7/32" End Wrench
- A supply of hi-temp Silicone Sealant 600°F or better is required.
- A small supply hi-temp grease
- Cleaning rags
- Paper towels
- •
- 26. Push and pull top door center manifold handle. Make sure that you use both hands evenly to push and pull straight back. Also make sure that you use full top and bottom strokes. If you do not use full strokes you may eventually need to use channel locks to get a full top to bottom stroke.
- 27. Vacuum throughout the entire enclosure making sure you don't leave any ash behind.
- 28. Remove each of the internal clean out doors from the left and right hand side of the stove.
- 29. Vacuum out each of the internal clean out doors. Failure to do this step will result in a drastic decrease in the stoves heat output.
- 30. Remove the fire log with a gentle upward motion. (Be sure the vacuum the ash off of the inside of the log or ash could end up on the floor)
- 31. Using your screwdriver reach into the burn pot and gently scrape any clinker's that may have formed around the air holes. Be gentle around the cartridge heater when scraping. Scraping the cartridge heater will cause it to build up with carbon deposits and not function as it should. The more you scrap it the quicker it builds up with carbon.
- 32. Pull the burn box cleanout tray to the out position.
- 33. Vacuum inside of the burn pot from the top.
- 34. Using the 7/32" Allen head wrench remove the two screws that hold the ash drawer in place.
- 35. Remove the ash drawer and dispose of the ashes in a fireproof container.
- 36. Vacuum out the inside of the ash drawer area.

- 37. With the burn box cleanout tray in the out position vacuum out the bottom side of the burn box. This is accomplished by entering this area through the ash drawer opening.
- 38. Remove the burn pot from the burn box being careful of the leads on the Igniter. Pick it straight up and move it directly to one side or the other.
- 39. Remove the stay clean grate from its mounting position on the shaker rod.
- 40. Vacuum out all ash, clinkers and pellets from the burn box area.
- 41. Replace the stay clean grate.
- 42. Replace the burn pot into its mounting location being very cautions not to disturb the leads on the igniter.
- 43. Inspect and if it is at all frayed, crushed, broken or missing have an authorized America's Heat Pellet Stove dealer replace the ash drawer gasket.
- 44. Reinstall the ash door into the pedestal. Install the 7/32" Allen head bolts and washers. Snug up the 7/32" Allen head bolts and washers making sure that you do not over tighten and bend the drawer. Tighten bottom drawer bolts evenly.
- 45. Push the burn box clean out tray back to the in position.
- 46. Vacuum fire glass door all around and on top of firebrick plus surrounding areas again.
- 47. Pay special attention to the fresh air inlets at the bottom of the glass and metal guarding. Keeping this area clean will allow fresh air from outside of the stove to clean the window evenly.
- 48. Use plain water in a spray bottle and clean the inside of door glass with a few paper towels.
- 49. On the bottom of the door you must locate and remove the five 11/32" nuts that retain the air wash cover.
- 50. After the air was cover has been removed you must vacuum out the ash that is left.
- 51. Replace the air wash cover and the five 11/32" nuts that retain the air wash cover. Make sure you do not over-tighten the nuts.
- 52. Now inspect the door gasket if it is at all frayed, crushed, broken or missing have an authorized America's Heat Pellet Stove dealer replace the gasket.
- 53. Remove both side panels from the stove.
- 54. Vacuum out the inside area of the stove making sure not to disturb any of the wires.
- 55. Vacuum around the motors making sure to get as much dust out of each motor as possible
- 56. Disconnect the Pellet Vent pipe from the stove and clean and inspect the pipe. Replace the pipe if any damage is present or suspected.
- 57. Go outside the house to where the pellet vent pipe exits the house and remove and clean the cleanout tee.
- 58. Use a three-inch pipe brush to clean out the inside of the entire pellet vent pipe. Verify that you can see through the pipe and that it is unobstructed.
- 59. Reconnect all external pellet vent pipes that have been disconnected and apply hitemperature silicone sealant between pipes.
- 60. Remove the Vacuum pod line and the combustion chamber power leads.
- 61. Remove the combustion chamber fan. This fan is located on the same side as the control panel. You will have to take off the five 7/16" retaining nuts. The fan assembly will then pull straight out.
- 62. Vacuum the inside of the fan and the back inside portion of the engine assembly.
- 63. Before reattaching the fan you must inspect and if necessary replace the gasket assembly. If an additional gasket is required you need to call your authorized America's Heat Pellet Stove dealer to obtain a replacement.

- 64. Reattach the combustion chamber fan to the engine assembly and snug up the 7/16" nuts.
- 65. Reattach the vacuum pod line and the power leads.
- 66. Place two drops of SAE30 into the oil bath of the combustion chamber fan and the room air fan.
- 67. Reach into the middle of the engine assembly and grease the bronze 'sta clean; grate bushing with hi-temperature bearing grease. Do not use an excessive amount!
- 68. Place two drops of SAE30 into the oil bath of the room air fan on the opposite side of the control panel.
- 69. Remove the auger assembly by removing the 7/32" Allen head shoulder bolts.
- 70. Vacuum out the entire auger Assembly housing.
- 71. Vacuum out the inside of the auger and dislodge any debris that may be caught in the paddles.
- 72. Vacuum out the inside of the hopper making sure that all fines have been removed.
- 73. Remove auger from drive motor and inspect for wear and replace if necessary.
- 74. Clean behind the auger and remove all debris
- 75. Reassemble the pellet auger to the drive motor.
- 76. Reassemble Pellet auger assembly to stove.
- 77. Use the 7/32" Allen head wrench and tighten in a criss-cross fashion.
- 78. Reattach all internal pellet vent pipes and apply hi-temperature silicone sealant between all pellet vent pipes
- 79. Wipe down all internal surfaces with a rag.
- 80. Wipe down both inside and outside panels with a rag.
- 81. Replace both side panels and secure them with the 5/16" self-threading bolts.
- 82. Shut both vertical doors.
- 83. Plug in the 120 Volt power cord.
- 84. Plug in the thermostat wire
- 85. Put a few cups of pellets the hopper with pellets.
- 86. Slide top control door open and turn control board switch to the on position.
- 87. Select desired heat temperature.
- 88. Allow the stove to begin a startup operation.
- 89. Verify and adjust the vacuum pod if necessary.
- 90. Let the stove run until the room are fan comes on.
- 91. Do a complete standard shutdown.

If you have followed all of the instructions above your stove is ready for another season of use. We recommend that you schedule this cleaning schedule for mid to late July. This will ensure that the dealers have sufficient time to schedule the in house cleaning.

Most America's Heat Pellet Stove dealers offer a yearly service and cleaning. A fee may be charged for this

#### **REQUIRED MAINTENANCE**

With proper cleaning and the use of quality pellets, your America's Heat Pellet Stove requires very little maintenance. However, **the following maintenance is required.** 

**WARNING:** Unplug your stove's electrical cord prior to opening the sides of the stove or opening the exhaust system for any inspection, cleaning, maintenance or service work.

**NEVER** perform any inspections, cleaning, maintenance or service on a HOT STOVE.

- 1. **DOOR GASKET**: Inspect the main door gasket periodically. The main door may be removed to have frayed, broken or compacted gaskets replaced by your Authorized America's Heat Pellet Stove Dealer.
- 2. **FAN MOTOR LUBRICATION:** Lubricate the **COMBUSTION AND THE ROOM AIR** fan motors annually with two drops of high temperature turbine oil.
- 3. **SPRING SHUTDOWN: {COLD STOVE AND COLD ASHES ONLY}** After the last burn in the spring remove pellets from the hopper and the auger. Run the stove until pellets are gone. Vacuum out the hopper. Thoroughly clean the burn grate, burn box, ashtray and ash traps. It's desirable to spray the inside of the cleaned hopper with an aerosol silicone spray if your stove is in a high humidity area. The **exhaust system** should be thoroughly cleaned.
- 4. **FALL START UP:** Prior to Starting the stove for the first time check the outside area around the exhaust and air intake systems for obstructions. Clean the screens on the exhaust system and the outside air intake pipe. Turn all controls on to make sure they are working prior to lighting the first fire.
- 5. YEARLY SERVICING: A yearly servicing and cleaning by your Authorized America's Heat Pellet Stove Dealer or factory representative is recommended A fee may be charged for this service

#### **DISPOSAL OF ASHES**

Note: Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor on 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."

## **TROUBLE SHOOTING**

Proper cleaning, maintenance and the use of quality pellets will prevent the more common stove operational problems. However, when your stove is simply operating poorly or not at all, the following trouble shooting tips may be helpful.

**WARNING:** Disconnect the electrical cord prior to opening the sides of your stove for any inspection, cleaning, maintenance or service work. NEVER perform any inspection, cleaning, maintenance or service on a HOT STOVE.

PROBLEM	SOLUTION
Orange, lazy	<ul> <li>Clean out the burn grate and burn pot</li> </ul>
flame	<ul> <li>Check the ash traps, clean as needed</li> </ul>
	<ul> <li>Check exhaust system, clean as needed</li> </ul>
Window soots	<ul> <li>Check outside air and exhaust screens, unplug if necessary</li> </ul>
	<ul> <li>Check to make sure the main door and ash door are tightly closed</li> </ul>
Pellets build up	<ul> <li>Check main and ash door gaskets, replace if worm</li> </ul>
in burn grate	<ul> <li>Check pellet, replace if moist, wet, dirty or high in ash or "fines"</li> <li>Check with your America's Heat Pellet Stove Dealer for service</li> </ul>
Fire goes out, fans will not run	<ul> <li>Check to see that your stove is plugged in and</li> </ul>
when toggle button is pushed	electricity if flowing from the electrical outlet
	<ul> <li>Check with your America's Heat Pellet Stove Dealer for service</li> </ul>
Pellets will not feed (FA1)	<ul> <li>Hopper is empty, fill the hopper</li> </ul>
	<ul> <li>Fuel switch has not been pushed to "on"</li> </ul>
	•Feed Auger system or controls need service
	•Exhaust system is plugged, clean chimney
	•Check with your America's Heat Pellet Stove Dealer for service
Stove runs 30 minutes then	•Start up fire did not catch, light new fire
shuts off	•Check with your America's Heat Pellet Stove Dealer for service
Fans do not shut off when stove cools	<ul> <li>Check with your America's Heat Pellet Stove Dealer for service</li> </ul>
Ash and/or pellet dust in the house	<ul> <li>Check and correct any leaks in the exhaust system</li> <li>Take more care in handling ashes, cleaning the window glass, opening the doors slower and pouring pellets into the hopper.</li> <li>Check with your America's Heat Pellet Stove Dealer for service.</li> </ul>

**CAUTION:** The electrical, and heat control components of your stove are not owner serviceable. Call your authorized America's Heat Pellet Stove Dealer for proper diagnosis of problems and service of those components. Note: There may be a charge for all travel, labor and parts on service calls by your authorized America's Heat Pellet Stove Dealer.

#### America's Heat Pellet Stoves Limited Warranty

America's Heat Pellet Stoves/LMF Manufacturing LTD honors a 5-year limited warranty on all steel fabricated parts and a 1-year warranty on all electrical components. This warranty is non-transferable and will be honored to the original purchaser effective from the date of purchase (dated sales receipt confirming purchase from an authorized America's Heat Pellet Stove dealer required).

The following items are not covered under this warranty – burn pot, igniter, heat exchanger tube scraper (and attached rod), glass, paint, all gaskets and seals, plating on door trim.

This warranty is null and void if your America's Heat Pellet Stove has not been installed, operated, cleaned and maintained in strict accordance with all guidelines identified within this owner's manual. This warranty does not cover damage, component failure or reduced performance due to misuse, mishandling, neglect, accident, alteration or willful abuse.

The limited warranty registration card must be completely filled out, signed and returned to LMF Manufacturing LTD within 30 days of purchase in order for this warranty to be valid.

All claims under this limited warranty must be made through the dealer from which the stove was purchased. Check with dealer in advance for any costs to you when arranging a warranty call. Mileage or service charges are not covered by this warranty. Service charges vary from dealer to dealer. If upon inspection the dealer indicates that a limited warranty claim is justified and all conditions of this limited warranty have been met, the manufacturer's responsibilities and liabilities shall be to repair or replace, at the manufacturer's option, the defective part(s). All costs associated with removal, shipment to and from the dealer or manufacturer, any losses incurred during shipment and reinstallation, and any other losses incurred due to the appliance being removed and reinstalled, shall be covered by the appliance owner.

## **Conditions and Exclusions**

- There is no warranty, written or implied, on the performance of this America's Heat Pellet Stove. The manufacturer
  has no control over the installation, day-to-day operation, cleaning, maintenance or quality of fuel burned in this
  stove. All above identified factors are key to the performance of the appliance and are not under the control of the
  manufacturer.
- This warranty does not cover operational-related problems and damage caused by various issues such as but not limited to
  - 1. Over firing (caused by excessive feed rate).
  - 2. Damage caused by burning any heating medium other than wood pellets.
  - 3. Environmental conditions that restrict free flow of exhaust gasses from exiting the exhaust system (issues such as, but not limited to, downdraft or back draft, negative air pressure within the home caused by other mechanical systems within the home such as furnaces, clothes dryers, etc., improper ventilation, nearby trees or structures that can inhibit the free exit of exhaust gasses).
- In order for this warranty to be valid, the appliance must be installed by a qualified installer (trained pellet stove technician).
- This warranty is null and void if:
  - 1. Appliance has been operated in an environment contaminated by Chlorine, fluorine or other damaging chemicals.
  - 2. Appliance has been subjected to submersion in water or prolonged exposure to dampness or high humidity conditions.
- This warranty does not cover damage, component failure or reduced performance due to misuse, mishandling, neglect, accident, improper installation, alteration or willful abuse.
- America's Heat Pellet Stoves and LMF Manufacturing LTD is free of liability for any damages caused by this heating appliance. Incidental of consequential damages are not covered by this warranty.
- This warranty is null and void if the appliance's serial number has been removed or if it is found that the serial number has been changed with that of another identical appliance.
- This warranty is not valid for appliances used for commercial use.

• This warranty is not valid if the appliance has not been purchased from an authorized America's Heat Pellet Stove dealer.

• There is no warranty on damage caused by corrosion.

#### America's Heat Pellet Stoves Limited Warranty (contd.)

Neither the manufacturer, nor the suppliers to the purchaser, accepts responsibility, legal or otherwise for the incidental or consequential damage to property or persons resulting from the use of this product. Any warranty implied by law, including but not limited to implied warranties of merchantability or fitness, shall be limited to one (1) year from the date of original purchase. Whether a claim is made against the manufacturer based on the breach of this warranty or any other type of warranty expressed or implied by law, manufacturer shall in no event be liable for any special, indirect, consequential or other damages of any nature whatsoever in excess of the original purchase price of this product. All warranties by manufacturer are set forth herein and no claim shall be made against manufacturer on any oral warranty or representation.

Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations of implied warranties, so the limitations or exclusions set forth in this limited warranty may not apply to you. This limited warranty gives you specific legal rights and you may have other rights, which vary from state to state.

## Made in the USA

Replacement Part Description	Part Number	Cost does not include shipping
Igniter	B65P008	\$75.00
Combustion Chamber Fan	B54P002	\$125.00
Room Air Fan	P54P003	\$125.00
Pellet Auger Motor	B54P001	\$150.00
STA Clean Grate Motor	B54P004	\$125.00
Burn Pot	B625009	\$80.00
Burn Box	B625010	\$80.00
Grate, Moving, Burn-Pot	B62D051	\$20.00
Control Board	B55P009	\$250.00
AC Interface / Fuse Block	B55P010	\$50.00
Snap Switch 100 - 90	B55P001	\$20.00
Snap Switch 140	B55P006	\$20.00
Snap Switch 250	B55P007	\$20.00
Temperature cable 10"	B55P013	\$15.00

#### **REPLACEMENT PARTS**

12/1/2016
-----------