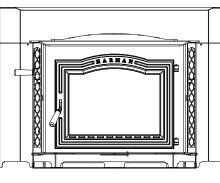


Owner's Manual Installation and Operation

Model:

## 300i Woodburning Fireplace Insert

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



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 website.

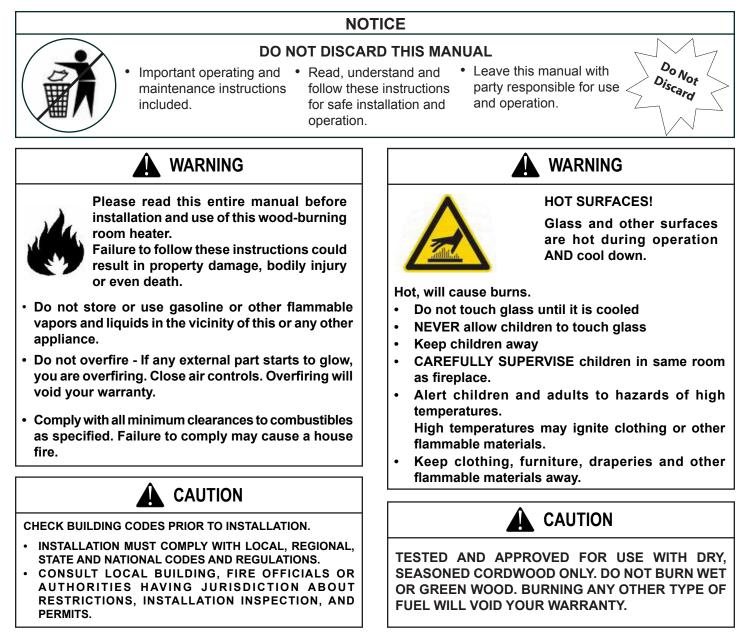


Wood Stove Use & Care Video





Please read this entire manual before you install and use your new wood burning insert. Failure to follow instructions may result in property damage, bodily injury, or even death.



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

### 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.

Congratulations, The Harman® 300i Woodburning Fireplace Insert you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new Wood Insert, 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® 300i Woodburning Fireplace Insert will give you years of durable use and trouble-free enjoyment. Welcome to the Harman® family!

## 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 Name	Serial Number
	The Sa lip. The safety i Serial # Purcha

The Safety/ Certification label is attached by a chain under the ash

lip. The label includes the appliance serial number and important safety information. Record the number here for future reference.

Serial #: 008

Purchase Date: \_\_\_\_\_

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#### → = Contains updated information

## **A** Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided <u>will</u> 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.

## **Product Specific and Safety Information**

MODEL:	300i Woodburning Fireplace Insert
LABORATORY:	OMNI Test Laboratories, Inc
REPORT NO.	135-S-18b-6.2
TYPE:	Solid Fuel Room Heater / Wood Burning Type
STANDARD(s):	UL 1482-2010, UL 737-2007, ULC-S628-93, EPA Method 28 & 5G
ELECTRICAL RATING:	115 VAC, 60 Hz

The 300i Wood Fireplace Insert is Certified to comply with 2015 particulate emission standards. Not approved for sale after May 15, 2020.



\*Heating capacity is a guideline and may differ based on climate, building construction and condition, as well as other variables.

Illustrations Not To Scale

NOT FOR USE IN MOBILE HOMES.

FOR USE IN THE U.S. AND CANADA

**SAFETY NOTICE:** IF THIS WOOD INSERT IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

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.



DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPTHA, OR ENGINE OIL.



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.

EPA Certification Number:	686
EPA Certified Emissions:	1.1 g/hr
*LHV Tested Efficiency:	83.3%
**HHV tested Efficiency:	77%
***EPA BTU Output:	11,200 - 34,900
****Peak BTU/Hour Output:	72,100
Other Important Information	
Vent Size:	6 Inch (152 mm)
Firebox Size:	3.0 cu. ft.
Max. Wood Length:	20" Maximum
Ideal Wood Lenght:	18"
Fuel	Seasoned Cordwood (20% moisture)

\*Weighted average LHV (Low Heating Value) efficiency using Douglas Fir dimensional lumber and data collected during EPA emission test.

\*\*Weighted average HHV (High Heating Value) efficiency using Douglas Fir dimensional lumber and data collected during EPA emission test.

\*\*\*A range of BTU outputs based on EPA Default Efficiency and the burn rates from the low and high EPA tests, using Douglas Fir dimensional lumber.

\*\*\*\*A peak BTU out of the appliance calculated using the maximum first hour burn rate from the High EPA Test and the BTU content of cord wood (8600) times the efficiency.

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.



BURNING COLORED PAPER, CARDBOARD, SOLVENTS, TRASH AND GARBAGE 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.



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.

### **Fire Safety**

Maintain the designated clearances to combustibles. Insulation must not touch the chimney. You must maintain the designated air space around the chimney. This space around a chimney is necessary to allow natural heat removal from the area. Insulation in this space will cause a heat buildup, which may ignite wood framing.

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

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

- Install at least one smoke detector on each floor of your home. Detectors should be located away from the heating appliance and close to sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
- 2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
- 3. A practiced evacuation plan, consisting of at least two escape routes.
- 4. A plan to deal with a chimney fire as follows:

In the event of a chimney fire:

- a. Evacuate the house immediately.
- b. Notify Fire Department.
- c. Never apply water to a suspected chimney fire. Serious damage could occur.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI Certified professionals. Carbon monoxide, referred to as CO, is a colorless, odorless gas that is produced during combustion of wood and other fuels. **CO fumes are toxic and can be fatal.** 

The 300i Fireplace Woodburning Insert is a natural draft system which relies on a properly designed chimney to remove CO and other combustion by-products from the stove.

Even though this stove is designed to be as safe as possible, it is important that you **install a CO detector.** This is true for oil, gas, or coal burning products as well.

CO is not specifically heavier or lighter than air. Therefore, it is best to install the detector at table top level rather than on the ceiling like a smoke detector.

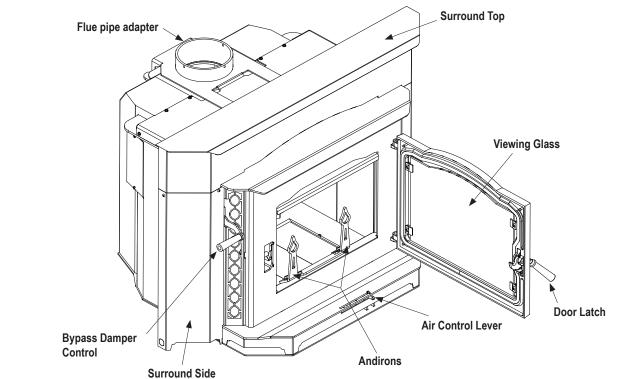
CO detectors are very sensitive and may sound an alarm for fumes other than CO or CO from sources other than the stove such as car or lawn mower exhaust.

### If the alarm sounds

- 1. Increase ventilation by opening windows or doors.
- 2. Make sure the stove doors and lid are closed and latched.
- 3. Check stove for smoking or puffing condition. Open bypass and increase air-flow to firebox, if needed.
- 4. Check chimney for possible blockage or down-draft.
- 5. Check for false alarm.

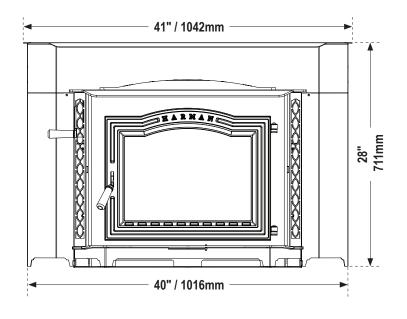
SAFETY NOTICE: IF THIS APPLIANCE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

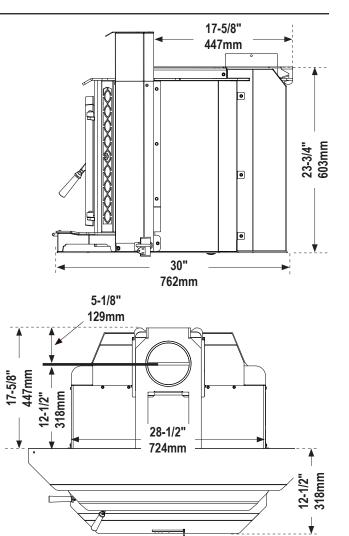
### **Component Locations**



### **Appliance Dimension Diagram**

Dimensions are actual appliance dimensions. Use for reference only.





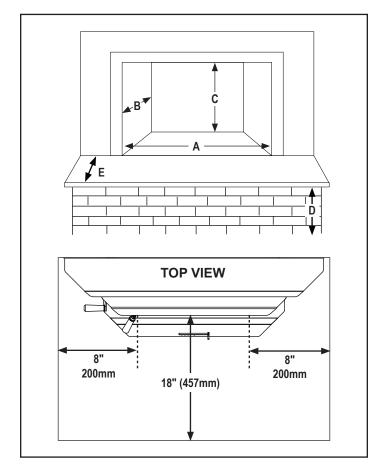
### Installation

Fireplace/Opening Requirements; Masonry fireplace ONLY.

Dir	nension	Inches	Millimeters				
Α	Minimum Width	28-1/2	724				
В	Minimum Depth	18	457				
С	Minimum Height*	24	610				
D	Minimum Hearth Height**	6	152				
Е	Minimum Hearth Depth	12-1/2	318				

\*HEIGHT MEASUREMENT DOES NOT ACCOUNT FOR FLOOR PROTECTION MATERIAL WHICH MAY BE NECESSARY.

\*\*FLOOR PROTECTION REQUIREMENTS CHANGE WITH HEARTH HEIGHT BELOW 6" (152MM).



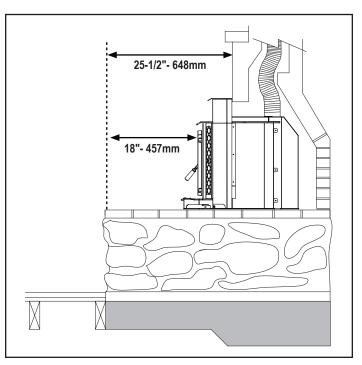
### Floor Protection requirements;

### Raised Hearth 6" (152mm) or higher-

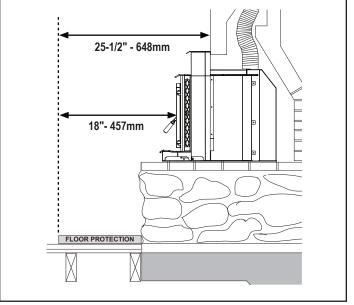
The depth of the masonry hearth must measure a minimum of 12-1/2" (318mm) *from the face of the fireplace opening*, to support the insert body. Depending on the overall depth of the hearth, additional floor protection may be necessary. If the depth of the hearth measures 25-1/2" (648mm) or more, from the fireplace facing, no additional floor protection is needed. If the hearth depth is less than 25-1/2" (648mm), floor protection must be installed.

Floor protection in front of the raised hearth must be a minimum 3/8" (9.5mm) of 0.84k material. An R value of 0.45 or higher is also acceptable. The standards call for floor protection to extend a minimum of 18" (457mm) in front of the appliance door opening, and 8" (200mm) to each side.

### NO ADDITIONAL FLOOR PROTECTION REQUIRED.

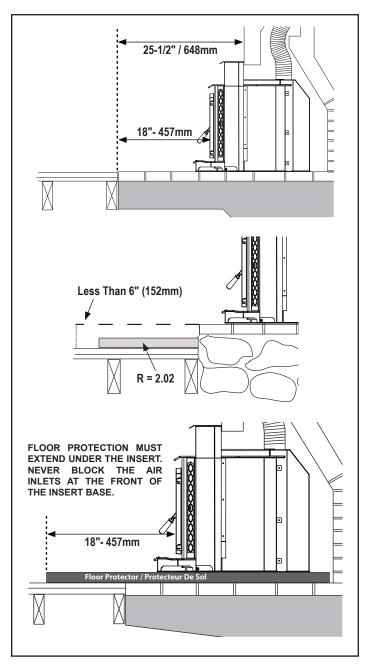


### ADDITIONAL FLOOR PROTECTION IS REQUIRED.



### Flush Hearth or Raised Hearths Less Than 6" (152mm) -

The masonry hearth must measure a minimum of 12-1/2" (318mm) from the face of the fireplace opening. The insert may not overhang the masonry hearth. For raised hearths less than 6" (152mm) in height, floor protection meeting a minimum 2.02 R-value, must be installed in front of the masonry hearth and may not exceed the height of the masonry. If the masonry hearth is flush with the combustible floor, floor protection must be placed under the insert, extending to the required distance. It is not permissible to place a floor protector in front of the insert base, as it will block the air inlets and create a safety hazard. Floor protection for these examples must be a minimum of R=2.02



### **Masonry Fireplace Requirements**

- 1. The chimney must be at least 15 feet high but not more than 33 feet high.
- 2. This room heater must be connected to; 1) a chimney complying with the requirements for Type HT in the Standard For Chimneys, Factory Built, Residential Type, and Building Heating Appliance, UL103 or 2) a code approved masonry chimney with a flue liner.
- 3. The entire fireplace and chimney must be clean and in good condition. Any damage must be repaired before installing the insert. A stainless steel liner must be installed if the tile liner of the masonry chimney is damaged.
- 4. The fireplace and chimney must meet local building codes.

# THE FIREPLACE FLUE DAMPER MUST BE REMOVED OR LOCKED IN THE OPEN POSITION.

### Masonry Direct Connect Installation

This method is less expensive than a full re-line. However, you'll need to check with your local codes to be sure that this is an acceptable installation method, as most municipalities require a full liner. Hearth & Home Technologies also recommends the installation of a full liner.

The connector pipe must be made of stainless steel and be rated for use with solid fuel burning appliances.

A steel block-off plate (not supplied) is used to seal off the damper opening and allow the chimney connector to pass through and extend beyond the first flue tile.

Kaowool, mineral wool or other non-combustible insulation is recommended above the plate to reduce the possibility of condensation.

A chimney cap is recommended to prevent the insulation from being exposed to rain or moisture.

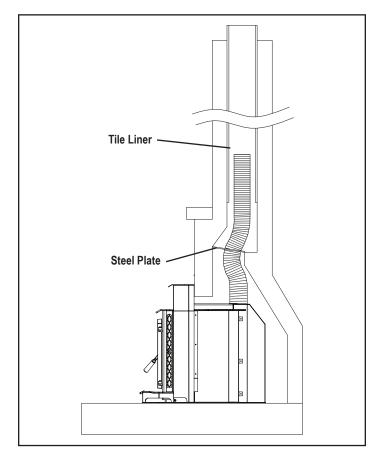
An external chimney can be no more than two times the cross sectional area of the appliance flue outlet, or 56 square inches. If larger, an approved chimney liner of 6" or 7" diameter must be installed. Likewise, an internal chimney can be no more than three times the cross sectional area of the appliance flue outlet, or 84 square inches. If it is larger, an approved chimney liner of 6", 7", or 8" diameter must be installed.

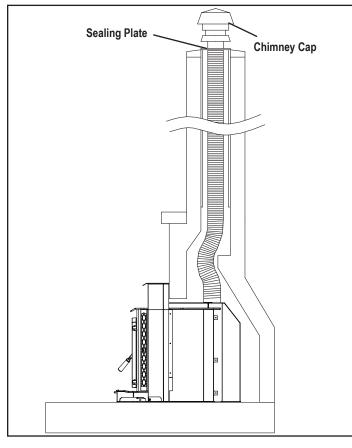
### Masonry Positive Connect Installation

This method is recommended, especially if the existing liner is damaged beyond repair, or for chimneys that have historically had low draft or smoke spillage problems. This stainless steel liner, listed to UL-1777, can be rigid or flexible with a chimney cap and top sealing plate or flashing installed. Do not mix and match chimney components. Use only materials or components from the same manufacturer, that are designed to be used in conjunction with each other. Follow manufacturer's guidelines for attaching and securing each venting component.

# DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM

For direct connect and positive connect installations, ensure that the liner is securely connected to the insert flue collar.





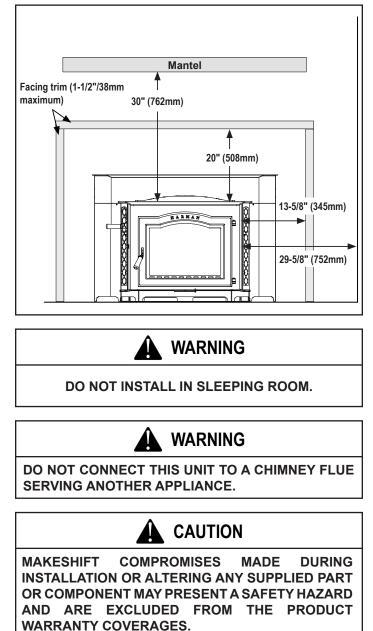
#### Clearances

Clearance is the empty space required between the insert and the nearest combustible surface or object, such as walls, ceilings, floors, or furniture. Clearance distances may only be reduced by methods listed in the standard CAN/ CSA B365 (Canada) or NFPA 211 (USA). Contact your local building authority prior to attempting any clearance reduction.

From the front of the insert, the clearance to combustible materials such as furniture, curtains or fuel is; 48" (1215mm) in the U.S. and 60" (1525mm) in Canada.

The clearance from the top of the insert to a 12" (305mm) mantel is 30" (762mm), and to facing trim, 1-1/2" (38mm) thick, is 20" (508mm).

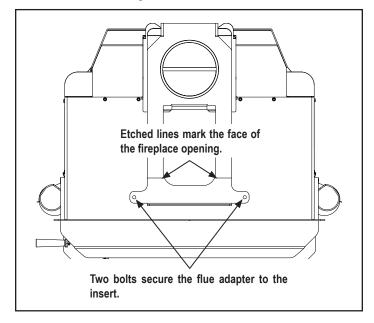
The clearance from the side of the insert to facing trim, 1-1/2" (38mm) thick, is 13-5/8" (345mm) and from the insert to a side wall is 29-5/8" (752mm).

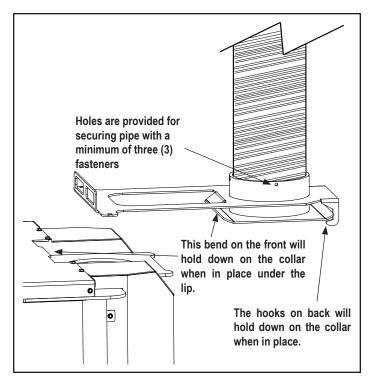


### Flue Liner

When installing the insert, you'll need to connect the flue liner to the insert collar with a minimum of three fasteners. The flue adapter is removable for ease of installation in tighter fireplaces.

Remove the flue collar from the insert by loosening the two bolts in the top. Attach the flue collar to the liner using three sheet metal screws. There are two lines etched into the top of the flue collar bracket. These lines should line up with the front of the fireplace opening. Keep the height of the bracket at approximately 24" from the floor. While sliding the insert into the fireplace, guide the flue collar bracket onto the top of the insert. The bracket will pull itself into position as the stove body comes back. The bend on the front of the flue bracket, and the hooks on the rear will secure the flue collar tightly to the insert. When the flue is in its proper position, install the two bolts down through the bracket to secure it.



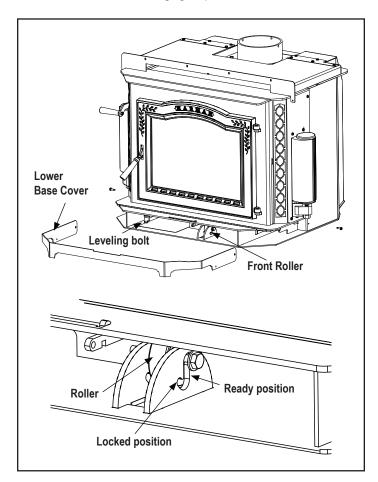


### **Slide-Assist Rollers**

The insert bottom is equipped with rollers to aid in moving. There are two stationary rollers toward the rear of the appliance, and one engaging roller in the front. To engage the front roller for movement, you'll first need to remove the lower base cover. As shown above, the cover is installed with a screw at each end of it. Remove these screws using a 5/16 socket or driver. Slide the cover toward the front and set aside.

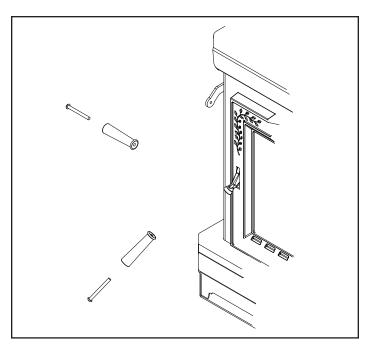
To engage the roller; begin by lifting the roller up and forward in its brackets. This will get the roller in its ready position. Lift the front of the insert body approximately 1/4 inch. If needed, the front leveling bolts can be tightened in to lift the insert. With the body raised, pull the roller down and hold it forward to lock it in the down position. You will need to hold the roller into place while the insert is lowered.

Once the insert is in place, lift the front of the body approximately 1/4" and the roller will disengage when you lower the body. It is up to you if you want to raise the roller and lock it in to the disengaged position.



### Handle Installation

The door latch handle and the damper handle are left off for shipping, and will need to be installed. Both handles and their bolts are packaged in the hardware bag. The shorter bolt (2-1/4") will be used for the damper handle, and the longer bolt (2-1/2") is for the door handle. Insert the bolt through the open end of the handle, then thread the bolt into the latch or the damper drive arm. Tighten only hand tight to prevent cracking of the wooden knob.



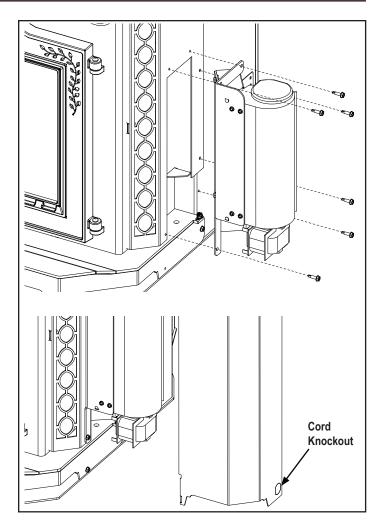
### **Distribution Blowers**

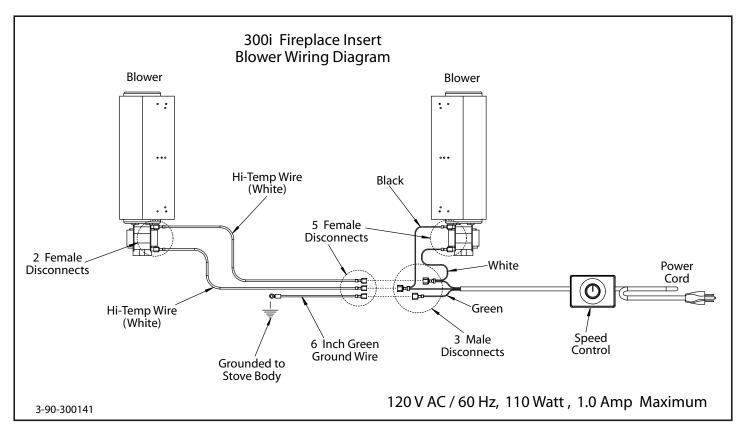
The blowers are already mounted to the insert for installer convenience. Each blower is secured to the insert body with (6) screws, as shown.

First, make a determination of which side you'll want the power cord coming from. On the determined side, install the short ground wire with ring terminal to the ash lip below and behind the blower, using the green screw and tooth washer from the hardware kit.

Notice the high temperature insulated wire pair that runs across the back of the air chamber beneath the insert, and attaches to each blower. This is what links the two blowers together. On the side that you want the power cord, remove the knockout from the surround panel and insert the power cord connectors through it. Pull the insulated wire connections from the blower motor and in their place, hook up the two female connectors from the cord. Next, attach the two male connectors from the cord to the insulated wire ends that were removed from the blower. Plug the green wire from the power cord into the short green wire that you installed. Secure the excess cord wires behind the surround using the wire ties and install the cord clamp into the knockout hole in the surround.

# NOTE: DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM



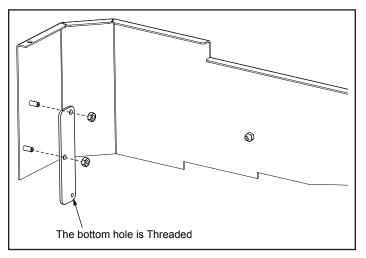


### **Surround Installation**

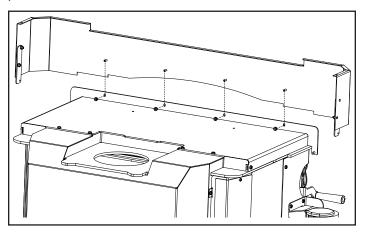
Standard Surround #1-00-300130 Oversize Surround #1-00-300134 Custom Surround #1-00-300130-SPL The surround is made up of six (6) pieces;

- Left Side
- Right Side
- Top
- Top cap
- (2) Support brackets

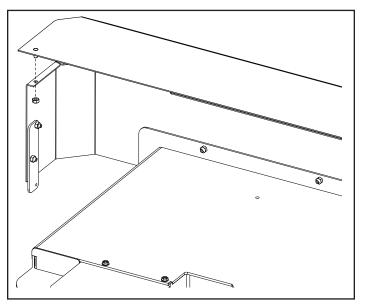
Begin by installing the support brackets on each end of the top panel as shown. Notice the bottom hole is the one that is threaded.



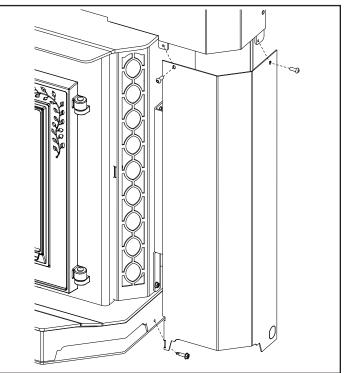
Next, install the top panel by inserting the four (4) studs through the holes in the fin on the insert. Secure with the provided nuts and a 11/32" nut driver.



Place the top cap down onto the top, aligning the two (2) studs with the holes in the top panel. Secure from underneath with two (2) nuts.



Install the side panels as shown below using (2) buttonhead screws at the top, and (1) self-tapping (Tek) screw at the bottom.



## Operation

### Draft

Before you install and operate your 300i woodburning insert, please read the entire contents of this manual. Pay particular attention to the explanation of draft and its effect on insert performance in the Installation section. By following the installation and operating guidelines, you will ensure proper draft and gain maximum efficiency and enjoyment from your insert.

### Fuel

Your insert burns wood very efficiently. Here are some guidelines concerning log size and moisture content that will help you obtain the best performance.

Select hardwoods if possible, as they are heavier and contain more heating capacity (BTU's) per load than do softwoods. Wood should be split and stored under cover for "seasoning", a year is recommended. Your insert is not an incinerator-do not burn garbage, painted or treated wood, plastic, or other debris.

Keep the area around the insert free from clutter. Keep all combustibles, including fuel, beyond the code-required clearance distance (48" or 1215mm in the U.S., 1525mm or 60" in Canada). Never store fuel in front of the insert where it could interfere with door operation, safe loading, and ash removal.

### Doors

Your insert has a large glass-paneled door for loading and fire viewing. To open the glass door, lift the handle upward and pull open; to close the door, push the door closed, and press down on the handle to latch.

The door must be closed while the insert is in normal operation, and the gaskets routinely examined for wear and replaced when necessary. Good door seals are important for maintaining control of the insert. Operating the insert with the door inadequately sealed, could create a serious over-firing condition (discussed later in this section).

The glass used in your insert is manufactured to exact standards to withstand the high heat of the fire. Like all glass, it must be treated with common sense and care. Never abuse the glass by slamming the door shut or striking the glass with a heavy object. Do not clean the glass while it is hot. If the glass is broken or damaged, do not operate the insert until it has been replaced (See instructions in the Maintenance section.)



Never build a fire directly against the glass. Always keep the fuel load behind the andirons.

## WARNING

FIREPLACE STOVES EQUIPPED WITH DOORS SHOULD BE OPERATED ONLY WITH THE DOOR(S) FULLY OPEN, WITH THE SCREEN IN PLACE, OR FULLY CLOSED. IF DOORS ARE LEFT PARTLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE STOVE OPENING, CREATING RISKS FROM BOTH FIRE AND SMOKE.

### Andirons

The andirons keep the fuel from coming in direct contact with the glass, and keep hot coals and embers from spilling out while reloading. Never build a fire directly against the glass. Always keep the fuel load behind the andirons.

Do not use a grate or otherwise elevate the fire. Build the fire directly on the insert's brick floor.

### **Paint Curing**

As you begin to operate your insert at higher temperatures, you will notice a "hot" or unpleasant smell; this is just the paint going through the curing process, and will disappear after a few fires.



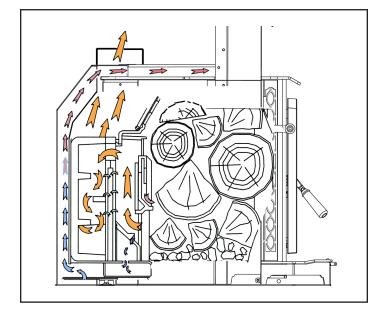
HOT WHILE IN OPERATION, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

### **The Combustion Process**

Combustion in the Harman 300i Wood Insert is precisely controlled and is best explained in two parts.

During a wood fire, combustion air enters at the bottom front of the stove where it travels upward through channels at either side of the front door. From the manifold located above the front door, it is directed into the firebox as a sheet of air flowing between the glass and the wood. This concept helps to keep the glass clean, while providing the oxygen needed to sustain burning. This is what is known as "Primary Combustion".

Additional air enters at the bottom rear of the stove body. Some of this air enters through holes in the rear bricks where it invigorates the fire at the rear of the firebox. The remaining air is delivered into the "Firedome" combustion package where it combines with the heated exhaust gases. This reburning of the smoke is known as "Secondary Combustion". During combustion, the burning of wood proceeds through several stages. The initial or evaporation stage is where the moisture in the wood is driven off in the form of steam. A second stage is where the volatile gases contained in the wood are released and burned. This represents most of the wood's heating capacity. The final stage is the charcoal stage where the charcoal burns the remaining heat content in the wood fuel. Ash remains after the burning is complete. Within the primary firebox, two or more of these stages of combustion are occurring at once.



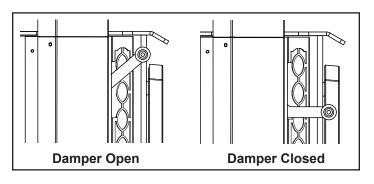
### **Damper Bypass Handle**

Two important controls - the damper bypass handle and the air control lever regulate the operation and output of the stove.

To open the front loading door, you must open the damper bypass, or smoke will spill into the room. In this mode of operation the combustion gases go directly from the main combustion chamber to the flue collar and exit into the chimney.

Lift upward on the damper handle to open the bypass damper and push down to close it.

## NOTE: The bypass damper must be open for smokeless loading.

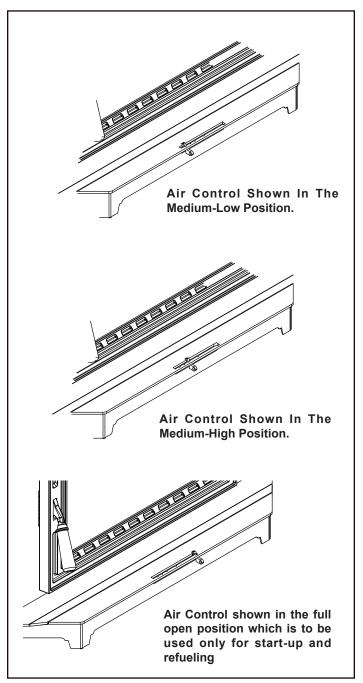


### **Air Control**

The air control slide is located on the ash lip below the firebox door. Using this lever you will be able to vary the amount of air delivered to the fire, creating a range of heat outputs. The low heat output setting is with the control located all the way to the left. The high setting is with the control located all the way to the right. There are notches cut into the ash lip to provide reference points for consistent adjustments. Do not, under any circumstances, alter the configuration or operation of the air control slide.

Minimum Burn Rate - air control fully to the left.

Medium-Low Burn Rate - air control at or below the first notch.



**Medium-High Burn Rate** - air control set between the second and third notch. This setting may be used to burn wood that is damp in order to keep it burning, but will consume seasoned, dry wood very fast.

**High Burn Rate** - air control fully to the right. This setting is for refueling and starting a fire. <u>Continuous burning at this</u> <u>setting will cause premature failure of consumable parts such</u> <u>as the "FireDome and/or the firebricks.</u> If continuous burning at maximum setting is needed, the appliance is too small for the space you are heating, or the wood fuel is too wet.

# Note: At minimum burn rates the glass may get dirty but will clean itself off again at higher burn rates.

### Contact may cause skin burns.

### Overfiring

Avoid overfiring your insert. Overfiring is a potentially hazardous situation which can lead to overheating of combustible materials, damage to the insert, and in extreme cases, cause a fire. Overfiring is caused by:

- 1. Too much air flowing through the insert too quickly.
- 2. You may have positioned the primary air control lever too far to the right.
- 3. You may have, inadvertently, left the damper open.
- 4. Not keeping up with routine maintenance, such as checking door gaskets for wear.

Overfiring results in excessive fuel consumption, and may cause parts of the insert to glow red. If you notice signs of overfiring, reduce the air supply to the fire, and review the Maintenance section in this manual.

## Never leave the insert unattended with the door open. Overfiring may result.

In the event of a chimney fire, call your local fire department; make sure everyone is safely out of the house. Reduce the air intake of the insert as much as possible using the air control lever; close the bypass damper to further restrict air flow. Do not throw water on the fire; this can cause insert damage and create an even more dangerous situation. Have your chimney professionally cleaned and inspected before resuming burning in your insert. Always remember to open the bypass damper when you are loading, this allows the exhaust gases to pass directly into the flue outlet and reduces the chance of smoke spillage into the room.

**Reloading:** Once you have prepared and maintained a thick charcoal bed, and the secondary combustion is established, you should be able to reload the stove at any time by simply opening the bypass damper, then the load door, add fuel and close the door then the damper. Depending on coal bed size, load size and moisture content of fuel, you may need to burn for a short period with the damper open and an increased air control setting.

**Removing Ashes:** Do not allow ashes to accumulate more than 2" - 3" in depth. Excessive ash buildup can restrict air flow through the firebox. This will prevent proper venting of exhaust gases.

Ashes should be placed in a steel container with a tight fitting lid. The container of ashes should be moved outside immediately, and placed on a noncombustible floor or 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 completely cooled. Other waste shall not be placed in this container.

Never use the ash disposal container for other trash. Wood ash can be added to your garden or compost

Before opening the door for ash removal, open the bypass damper. Using a fire rake, scrape the hot coals to one side of the firebox and the ashes to the other. Scoop the ashes out into the metal container as described above. Once the majority of ashes are removed, spread the hot coals back out across the bottom of the firebox and add the appropriate sized fuel to retain the fire. Close the door before taking the ashes outside for safe disposal.

### **Building and Maintaining the Fire**

Begin with the bypass damper open, and the air control lever at the maximum setting, all the way to the right.

Start with a bed of crumpled paper and kindling sized about finger width; place several 1" - 2" (25mm - 50mm) split pieces of dry wood on top of the kindling, followed by a few 2" - 3" (50mm - 80mm) split pieces. Lay the wood in a crossed pattern to allow maximum air flow. Ignite the paper and close the loading door. Allow this start-up fire to burn for a few minutes, keeping the bypass damper open. Add about five more pieces of wood in the 2" - 3" (50mm - 80mm) size range, making sure that the fuel bed is all the way across the firebox and staggered to allow airflow. Close the door and allow this fuel to burn a few minutes.

Add increasingly larger pieces of wood to the fire until you have a thick bed of hot embers, approximately 2" - 3" deep at the back, and at least an inch deep at the front. You must have this charcoal bed established before you close the bypass damper.

Providing you have the charcoal bed described above, close the bypass damper by pushing downward on the handle. This will begin the highly efficient mode of operation where the exhaust gases get re-burned in the secondary combustion package. If you cannot achieve a charcoal bed within the first 15 to 20 minutes, your wood is likely too wet, and you may need to burn the fire longer and/or hotter to compensate for the extra energy needed to drive out the moisture.

If, after five minutes of burning with the damper closed, smoke is visible coming from the chimney, you probably do not have the proper coal bed. Open the bypass damper and continue with the process until a significant coal bed is formed.



BURNING COLORED PAPER, CARDBOARD, SOLVENTS, TRASH AND GARBAGE 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.



DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

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 INSTALL A GRATE TO SUPPORT OR OTHERWISE RAISE THE FIRE FROM THE FLOOR OF THE FIREBOX.

#### **Blower Operation**

To regulate the speed of the convection blowers, adjust from low to high by turning the knob located on the blower cord. The blower speed should be matched to the air control lever setting.

When the air setting is low, the blower should always be at the minimum setting. At higher settings, above the first air slide indicator notch, the blower may be set to your desired comfort level. Be sure that the blower cord does not run under, over, above or in front of the insert.

The following guidelines for air settings can be used for wood burning; as you become familiar with your insert, you will know which settings best heat your home.

### Maintenance

Like all fine equipment, your insert requires some routine maintenance and inspection. Follow the guidelines in this section to guarantee safe and efficient operation.

### Surface

The insert's exterior surface should be dusted periodically with a soft cloth. For more thorough cleaning, wait until the insert is cool before using a damp cloth to clean any blemishes.

### The Door

If the door needs to be cleaned, wait until the insert is completely cool, then use a sponge, soap and water to gently remove dirt and stains. Before relighting the insert, remove all soap residue and wipe dry.

### Controls

To avoid a rust buildup on the inner surfaces of the controls, work the controls back and forth several times during the summer, or any prolonged period when you are not using your insert.

### The Fire Chamber

The inside of the fire chamber should be examined for damage to the refractory lining material, or bricks. If any of these parts have been damaged, replace them only with Harman supplied replacement parts.

The ramp brick must be removed to allow vacuum access for cleaning the front portion of the combustion package.

Always use caution when refueling or when vacuuming the firebox and combustion package. Some users have damaged their combustion package with vacuum cleaner tools, and fire pokers.



When cleaning in the rear of the firebox, near the entrance to the FireDome. Do not poke cleaning tools into the throat of the FireDome as this may cause damage to the refractory material.

### **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. Any creosote which accumulates on the glass should burn off during your hot fires.

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 nonabrasive cleaner specifically designed for use on stove glass. In any case, dry thoroughly before relighting your insert.

#### **Glass - Replacement**

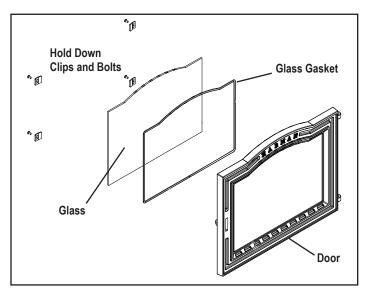
The viewing glass is a specially designed 5mm ceramic material. If the insert's glass is cracked or broken, you must replace it before operating your insert. Remove pieces carefully. Replace the glass only with Harman supplied replacement glass, part # 3-40-06932; do not use substitutes.

To replace the glass panel, you will need to remove the door. To do this, open the door, lift it straight up and place it face down on a flat surface.

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

Referring to the diagram, note how the various components of the door system fit together. Lay the load door face down on the flat surface. Install the self adhesive 1/4"" gasket material around the front face of the glass. <u>Note: This glass has a</u> <u>special IR coating on one side.</u> This coating must be to the **outside** of the insert. The coated side has a label on it. Do not remove the label before installing the glass. Remove label before burning the unit. If the label has been removed, you can determine which side has the coating by using an OHM meter. The side with the coating will show resistance.

Set the glass panel and gasket gently onto the door. Install the hold down clips and tighten with bolts as shown. Reinstall door on insert.



## 

Handle glass with care.

### When cleaning door glass;

- Avoid striking, scratching, or slamming glass.
- Do NOT Clean Glass When Hot.
- Do NOT use abrasive cleaners.
- Inspect gasket, replace if necessary.

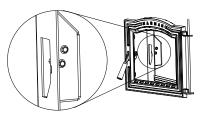
## Gaskets

Gaskets are used at strategic positions for controlling the path that incoming and outgoing air and gases take through the insert. You must check these gaskets from time to time, and replace them when necessary. You can test the seal by closing the component onto a piece of paper. When closed, the paper should not pull out of the seal without resistance. The gaskets are made of fiberglass of different sizes (obtainable from your Harman dealer) and are fixed in place with a high temperature gasket cement. To change a gasket, first remove the worn fiberglass and clean the area with a wire brush. Also clean any other surfaces that come into contact with the gasket. Place a small bead of cement in the area under the gasket, then press new gasket material into the channel; do not overlap the ends. Seat the gasket firmly by applying pressure when possible; for example, after changing the door gasket, close the door. Allow the cement to dry before using your insert.

Gaskets are located on the door and between the damper and the damper frame.

### **Door Latch**

After a period of time, you may find that the front door does not close as firmly as when your insert was new. This is mostly due to a natural compression of the gaskets. To adjust the latch, loosen the two bolts, and bump the retainer back. Adjust as necessary to achieve a good seal.



## **Chimney System**

### Creosote Formation And Need For Removal

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.

The FireDome Combustion system cuts creosote to almost nothing when properly burned with dry seasoned wood.

## **IMPORTANT NOTE**

The only suitable method for removing creosote from the venting system is a chimney brush. Creosote sweeping logs, powders and other products have the potential to damage the Firedome combustion system, and are not recommended for use in Harman wood stoves. Use of chemical creosote removal products will void the warranty of the Firedome combustion system. The chimney connector and chimney should be inspected at least once every 2 months during the heating season to determine if a creosote buildup has occurred. Checking your chimney and chimney connector more frequently, especially while you are getting used to your insert, is recommended. To inspect this system, let the insert cool. Using a flashlight and mirror, check the interior of the chimney connector, and the chimney itself. If creosote has accumulated (3mm or more) it should be removed to reduce the risk of a chimney fire.

To clean deposits from the surface of the connector, open the bypass damper to prevent debris from falling into the FireDome, and clean using the appropriate brush. When cleaning the stainless steel connector, it is recommended to use a non-metal brush.

To clean the chimney, use a specially designed brush sized to fit your particular flue opening, or call an established chimney cleaning service. It is recommended that you have your chimney professionally cleaned and inspected annually. Any cracks or damage should be repaired before further use of the insert.

Occasionally, it will be necessary to remove the insert to inspect the appliance and the fireplace. To remove the insert, you will first need to remove the two bolts that secure the flue adapter to the top of the insert. Slide the insert out of the fireplace for inspection. Have any cracks or damage repaired before further use of the insert.

Do not burn any fuel other than wood, such as charcoal, which can cause increased carbon monoxide production or overfiring. Never use highly volatile substances in your insert, such as gasoline, which could cause an explosion.

When solid fuels are burned completely, they produce water and carbon dioxide. However, in long slow burns, a substantial amount of carbon monoxide may be produced. If allowed to build up, carbon monoxide (which is odorless) can prove fatally poisonous. Proper ventilation and draft will prevent this from happening. If you smell smoke, increase the air control lever setting, and thoroughly ventilate your dwelling. During future burns, be careful not to overload the insert with fuel, so you will not be tempted to constantly operate at a low air control setting.

Other causes of poor draft are icing, exhaust fans, and room air starvation, which may occur in tightly constructed homes. If your insert is sluggish and you get an occasional odor, check these possibilities and increase the air flow in your home. Dryer vents and other appliances operating in close proximity to the insert may also create negative pressure.

### **Proper Ventilation**

Always provide a source of fresh air to the room when the insert is operating.

### Blowers

The blowers on your insert require very little maintenance. You should, however, keep the air inlets and the motors and fan blades free of dust and pet hair.

### Firebox

- Frequency: As necessary / Yearly
- By: User

Cleaning the firebox and internal heat exchange surfaces is recommended to maintain thermal efficiency. Depending on the quality and quantity of fuel being used, you may want to perform this cleaning monthly.

Be sure to clean these areas thoroughly at the end of the heating season.

Brush and vacuum all internal surfaces at the end of the heating season. Ashes will draw moisture and may promote rust formation.

### **Blower- If installed**

- Frequency: As necessary / Yearly
- By: User

The fan on the blower will collect pet hair and other debris over time. Any accumulation must be removed to maintain proper operation.

To clean blower;

- Disconnect Power Cord Before Servicing.
- Remove the (3) Tek Screws that hold the blowers in place.
- You will find it easiest to use an air hose and blow the debris from the blower housing. Alternately, with some minor disassembly, you can use a vacuum and/or brush to clean the blower wheel.
- Reinstall the blower and tighten the four bolts securely.

#### **Chimney / Chimney Connector**

- Frequency: As necessary / Yearly
- By: Qualified Service Technician / Chimey Sweep

Disassemble the chimney connector and take it outdoors for inspection and cleaning. Replace weak sections of connector.

Inspect chimney for signs of deterioration. Repairs to a masonry chimney should be made by a professional mason. Replace damaged sections of prefabricated chimney. Your local dealer or chimney sweep can help determine when replacement is necessary.

Thoroughly clean the chimney.

**Note:** When cleaning the chimney connector above the appliance, keep the bypass damper in the open position. This will keep any loosened material from falling into the Firedome Plus combustion chamber.

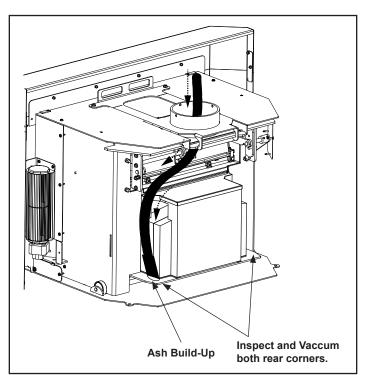
#### FireDome Technology

- Frequency: Yearly
- By: Qualified Service Technician / Chimney Sweep

Inspect and clean ash accumilation from around the Firedome Combustion System being careful not to damage the Firedome.

• Remove chimney connector from unit and pull unit away from fireplace opening.

• Carefully vacuum the ash and debris from around the sides and top of the Firedome combustion package.



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### 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.

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

See conditions, exclusions, and limitations on next page.

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Page 1 of 2

### 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.

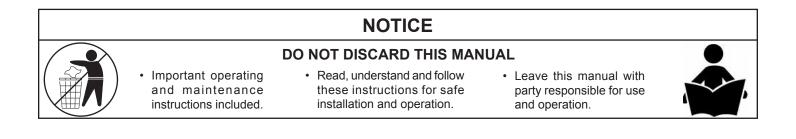
### **Contact Information**



Hearth & Home Technologies 352 Mountain House Road, Halifax, PA 17032 www.harmanstoves.com

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

### - NOTES -



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