

# HearthStone®

# Harvest

# Owner's Manual

**SAFETY NOTICE: IF THIS STOVE 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 IN YOUR AREA.**

## F O R E W O R D

Welcome to the HearthStone Family. You have made an investment in perhaps the finest solid fuel radiant/convection heater available today. To own a HearthStone stove is to make a statement - a statement of your appreciation and understanding of a quality handcrafted product.

Please read this manual in its entirety. Its purpose is to familiarized you with your stove's safe installation, proper break-in, operation and maintenance. It contains information that will be useful to you now and in years to come, so keep it handy and refer to it as needed.

The performance of your stove depends on many variables that make your installation unique. The sections on operating procedure and general information, therefore, can only serve as useful guidelines rather than hard and fast rules.

Should you have any questions, do not hesitate to contact your dealer or the manufacturer for additional information.

This stove is manufactured by:

NHC, Inc.  
Stafford Drive  
PO Box 1069  
Morrisville, VT. 05661  
Customer Service Department: (802) 888-5232

This manual describes the installation and operation of the HearthStone Harvest Catalytic Wood Stove. This stove meets E.P.A. Particulate Matter (smoke) Control Requirements for Catalytic Wood Heaters built on or after July 1, 1990. Under specific E.P.A. test conditions this heater has been shown to deliver heat at rates ranging from 8,800 to 28,000 BTU's per hour.

**SAFETY NOTICE:** IF THIS STOVE 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 IN YOUR AREA.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

TABLE OF CONTENTS

I.	COMPONENTS REQUIRED FOR A SAFE INSTALLATION . . . . .	2
II.	INSTALLATION . . . . .	2
	A. LOCATING YOUR STOVE . . . . .	2
	B. FLOOR PROTECTOR . . . . .	3
	C. VENTING SYSTEM . . . . .	4
	D. CHIMNEY CONNECTOR . . . . .	4
	E. CONNECTION TO A MASONRY CHIMNEY . . . . .	5
	F. CONNECTION TO A MASONRY FIREPLACE . . . . .	6
	G. CONNECTION TO A METAL PREFABRICATED CHIMNEY . . . . .	6
III.	OPERATING INSTRUCTIONS . . . . .	8
	A. CONTROLS AND FEATURES . . . . .	8
	B. CATALYTIC COMBUSTOR . . . . .	10
	C. BUILDING A FIRE . . . . .	10
	D. OVERFIRING CAUTION . . . . .	12
	E. ASH DISPOSAL . . . . .	12
IV.	MAINTENANCE . . . . .	12
	A. MONITORING YOUR TEMPERATURES . . . . .	12
	B. CREOSOTE FORMATION . . . . .	13
	C. CATALYTIC COMBUSTOR . . . . .	13
	D. GLASS . . . . .	16
	E. GASKETS . . . . .	16
	F. STONE . . . . .	17
	G. CASTINGS . . . . .	17
	H. TOP TO REAR VENT CONVERSION . . . . .	17
V.	OPERATION GUIDELINES . . . . .	18
	A. DO'S AND DON'TS . . . . .	18
	B. SAFETY GUIDELINES . . . . .	19
	C. PERIODIC CHECKLIST . . . . .	19
	D. EMERGENCY PROCEDURES . . . . .	20
	E. FIREWOOD INFORMATION . . . . .	20
VI.	TROUBLESHOOTING . . . . .	21
	A. YOUR HEATING NEEDS . . . . .	21
	B. TROUBLESHOOTING GUIDE . . . . .	22
	C. TROUBLESHOOTING YOUR CATALYTIC COMBUSTOR . . . . .	23
VII.	IMPORTANT WARRANTY INFORMATION . . . . .	25
VIII.	SPECIFICATIONS . . . . .	26
IX.	REPLACEMENT PARTS LIST . . . . .	27

## I. COMPONENTS REQUIRED FOR A SAFE INSTALLATION

### CHIMNEY CONNECTOR:

The chimney connector joins the stove to the chimney. It should be 6" (15.24 cm) diameter 24 gauge minimum metal stovepipe.

### THIMBLE:

A manufacturer or site-constructed device installed in combustible walls through which the chimney connector passes to the chimney. It is intended to keep walls from igniting.

### CHIMNEY:

APPROVED MASONRY with at least 5/8" (16 mm) fire clay lining joined with refractory cement or other listed lining system suitable for use with wood stoves.

OR

PREFABRICATED 6" (15.24 cm) listed high temperature (tested to 2100 F) residential type and building heating appliance chimney. Components required by manufacturers for installation such as the chimney support base, firestop (as appropriate), attic insulation shield, insulated tee, etc. are necessary to assure a safe chimney installation. Use only components manufactured for the chimney.

FLOOR PROTECTOR: 3/8" (10 mm) min. thickness non-combustible material.

AVOID FIRE: Maintain the designated clearance to combustibles. Insulation must not touch the chimney. There must be the designated air space clearance around the chimney. This air space around the chimney is necessary to allow natural heat removal from the area. Insulation in this space will cause a buildup which may ignite wood framing.

## II. INSTALLATION

Before your Harvest can be installed, the rear heat shield must be installed on the rear of the stove. Using the four bolts provided, fasten the four metal brackets to the cast iron chamber back with the tabs facing upward. The shield is attached to the brackets by sliding the brackets into the slots cut into the shield. The lip of the heat shield is positioned underneath the stove to protect the hearth.

### A. LOCATING YOUR STOVE

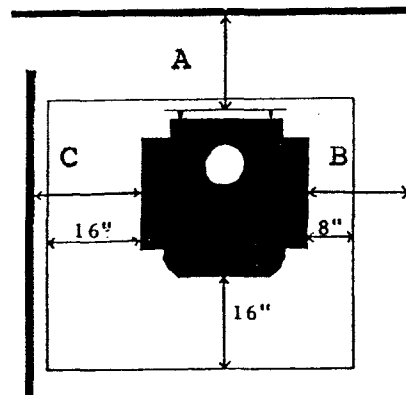
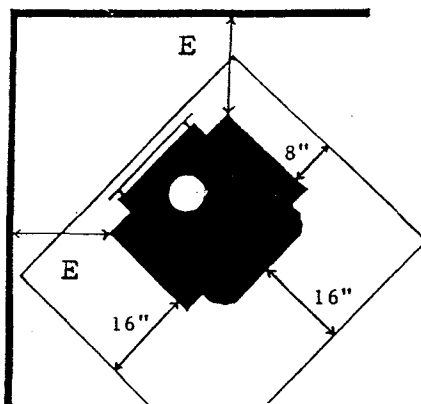
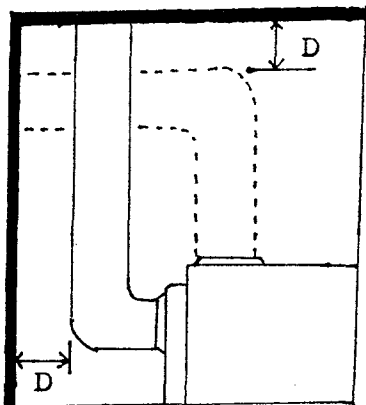
**DO NOT INSTALL THIS STOVE IN A MOBIL HOME.** Your Harvest's soapstone walls produce an even, radiant heat. Locate your stove centrally in your living area to allow the heat to travel naturally to distant rooms. Do not locate your stove in the basement. The amount of radiant energy required to heat your basement walls is so great that most of the useable heat is adsorbed by them and lost.

**FREESTANDING MODE:**

	<u>USA</u>	<u>CAN</u>
Back wall to heat shield (A)	14" (35.6 cm)	19" (48.3 cm)
Right side wall to stove (B)	20" (48.3 cm)	24" (70.0 cm)
Left side wall to stove (C)	36" (91.4 cm)	36" (91.4 cm)
Back wall to stovepipe and ceiling (D)	18" (45.7 cm)	18" (45.7 cm)

**CORNER INSTALLATION:**

Rear left & right corners to side walls (E)	14" (35.6 cm)	17" (43.2 cm)
---	---------------	---------------



When locating your stove, consider safety, convenience, traffic flow, and the fact the stove will need a chimney and chimney connector. Your stove should be located away from doors and hallways in an open area to allow for necessary clearances. Review the clearance diagrams for MINIMUM clearances. Keep furniture, drapes, curtains, wood, paper and other combustibles far away from the stove. Never install the stove in locations where gasoline, kerosene, charcoal lighter, or any other flammable liquids are used or stored.

**B. FLOOR PROTECTOR**

The stove must be placed on a floor protector if the floor is wood or other combustible flooring. If carpeting is present, it must be removed; the floor protector must not be placed on carpet. An acceptable floor protector is a 3/8" (10 mm) minimum thickness non-combustible material. The rear heat shield must be in place while the stove is in operation. The following clearances are the distance the hearth should extend beyond the body of the stove:

- FRONT: 16" (40.6 cm) beyond the ash lip
- LOADING DOOR (LEFT) SIDE: 16" (40.6 cm)
- RIGHT SIDE: 8" (20.3 cm)
- REAR: The hearth should extend a minimum of 8" (20.3 cm) to the rear of the rear legs so as to cover the entire area beneath the catalyst and rear heat shield.

### C. VENTING SYSTEM

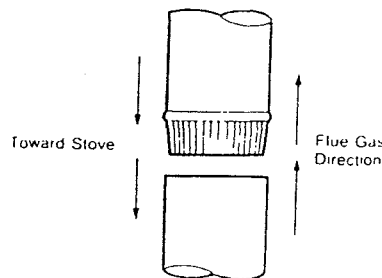
The venting system consists of a chimney connector (usually a stovepipe) and a chimney. These get extremely hot during use. Temperatures inside the chimney may exceed 2000 F in the event of a creosote fire. To protect against the possibility of a house fire, the chimney and stovepipe must be properly installed and maintained. A thimble must be used when a connection is made through a combustible wall to the chimney. A chimney support package must be used when a connection is made through a ceiling to a prefabricated chimney. These accessories are absolutely necessary to provide safe clearances to combustible wall and ceiling material.

This stove may be connected to a lined masonry chimney or a listed high temperature, prefabricated, residential type building, heating appliance chimney. Do not connect it to a chimney serving another appliances. This stove must not be connected to any air distribution duct.

### D. CHIMNEY CONNECTOR

The chimney connector must be 6" (15.2 cm) diameter 24 gauge stovepipe. Do not use aluminum or galvanized steel as they cannot properly withstand the extreme temperatures of a wood fire. Do not use stovepipe as a chimney. You must connect your stove to a chimney chimney comparable to those recommended in this manual.

Stovepipe sections must be attached to the stove and to each other with the crimped end toward the stove. This allows creosote to run into the stove and not onto the outside of the pipe. All joints should be secured with three sheet metal screws. Otherwise, in the event of a creosote fire, the stovepipe may vibrate apart. Holes pre-drilled in the Harvest's flue collar accept 1/8" X 1/2" (3 mm x 13 mm) sheet metal screws.

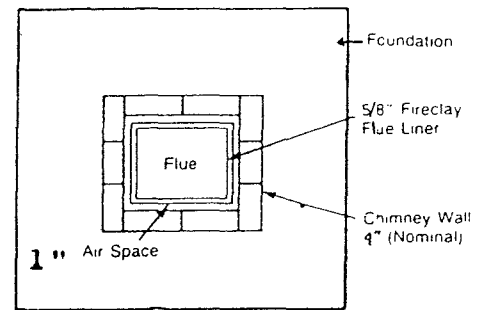


Additional stovepipe accessories (draw-bands, slip-joints, clean-out tees) greatly simplify the connection of stovepipe to chimney, make inspection easier, and let you dismantle the stovepipe without moving the stove. Because the Harvest comes equipped with a stove pipe damper in the flue collar, an additional damper in the stove pipe is not necessary.

For proper operation, the stovepipe should be as short as possible. Avoid too many elbows. Horizontal lengths of stovepipe should have an upward slope from the stove of at least 1/4" per foot. Maintain 22" (55.9 cm) clearance between the stovepipe and the wall and 18" (45.7 cm) to the ceiling.

## E. CONNECTION TO A MASONRY CHIMNEY

**CHIMNEY:** The chimney should be examined for cracks, loose mortar, other signs of deterioration, and blockage. The stove should not be installed until it is determined that the chimney is safe for use. Since an oversized flue contributes to the accumulation of creosote, the size of the flue should be checked to determine that it is not too large for the stove. For this stove, the flue should be no larger than 8" X 8" (20.3 cm x 20.3 cm) or 6" (15.2 cm) in diameter. The chimney should also be checked to assure it meets the minimum standards of the National Fire Protection Association (NFPA) Standard 211. The Harvest is not to be connected to any air distribution duct. Following is a list of the more critical minimum requirements for a properly constructed chimney:



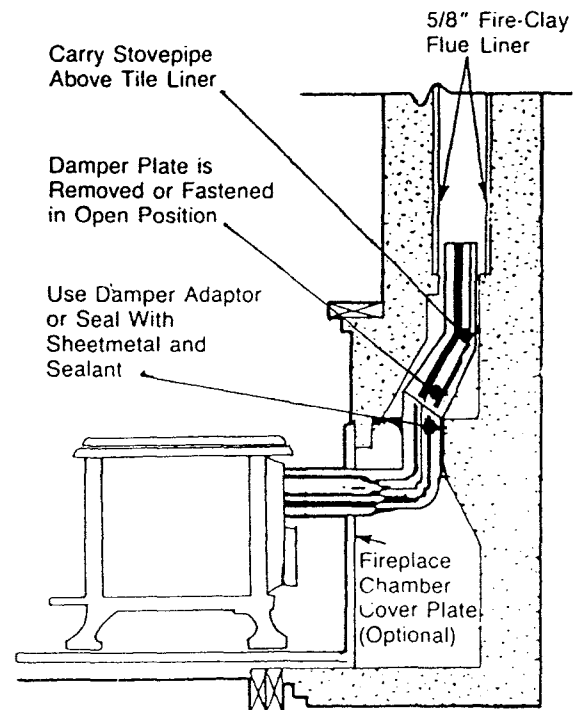
-The masonry wall of the chimney, constructed of brick or modular block, must be a minimum of 4" (10.1 cm) thick. A rubble or stone wall must be at least 12" (30.5 cm) thick.

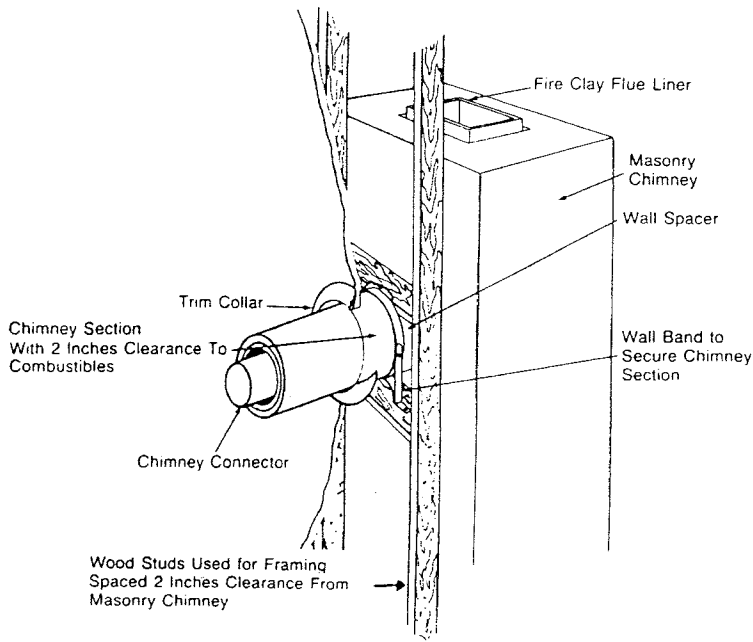
-The chimney must have a fire clay flue liner (or equivalent) with a minimum thickness of 5/8" (16 mm) and must be installed with refractory mortar. There must be at least 1/2" (13 mm) air space between the flue liner and the chimney liner systems or other approved material.

-A chimney inside the house must have at least 2" (5 cm) of clearance to the combustible structure. A chimney outside the house must have at least 1" (2.54 cm) clearance from the combustible structure. Fire stops must be installed at the spaces where the chimney passes through floors and/or ceiling.

-Remember that insulation must not contact the chimney. There must be air space around the chimney. Insulation must be 2" (5 cm) or more from the chimney.

-A chimney must be the required height above the roof or other obstruction for the proper draft. The requirement is for the chimney to be at least 3 feet higher than the highest point where it passes through the roof and at least 2 feet higher than the highest part of the roof or structure that is within 10 feet of the chimney, measured horizontally.



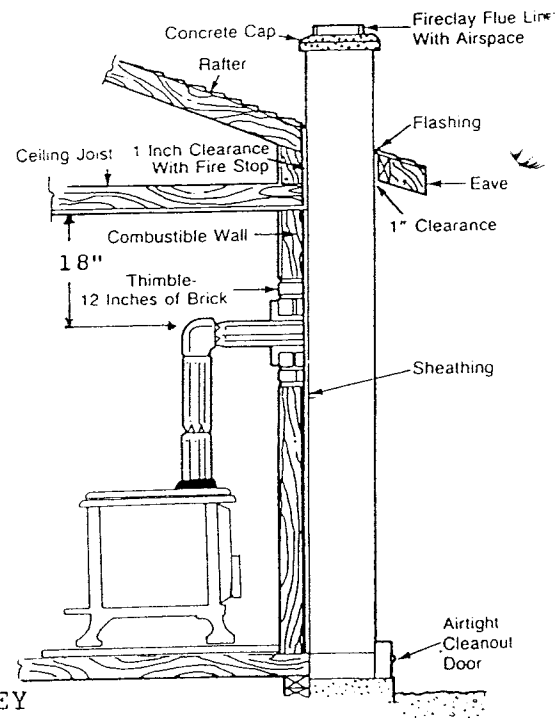


**THIMBLE:** A thimble must be used when the connection from the stove is made through a combustible wall to a masonry chimney. There are several methods to use the connection through a combustible wall. Local building authorities may be consulted or NFPA 211 may be used for referencing methods of chimney connection.

Listed prefabricated metal thimbles can be purchased for use with wood stoves. The manufacturer's installation instructions must be followed to assure the safety of the system. Be sure to maintain the designated clearance to combustible materials.

#### F. CONNECTION TO A MASONRY FIREPLACE

There are several kits available to connect the stove to a masonry fireplace. Look for a listed kit. The kit is an adapter which is installed at the location of the fireplace damper. The existing damper may have to be removed to allow installation of the kit. The key points of this type of stove connection are that the connector pipe must extend up into the chimney above where the fire clay liner starts, and the areas of the kit installation and connector penetration should fit tightly and be sealed with high temperature furnace cement unless the kit's instructions state otherwise. Maintaining a tight fitting 6" (15.2 cm) flue which is tightly fitting aids the proper draw of the chimney.



#### G. CONNECTION TO A METAL PREFABRICATED CHIMNEY

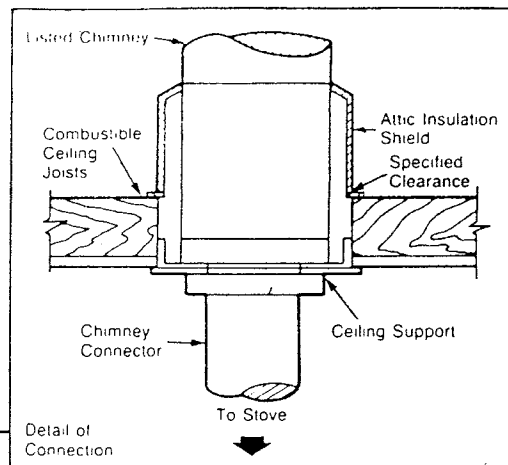
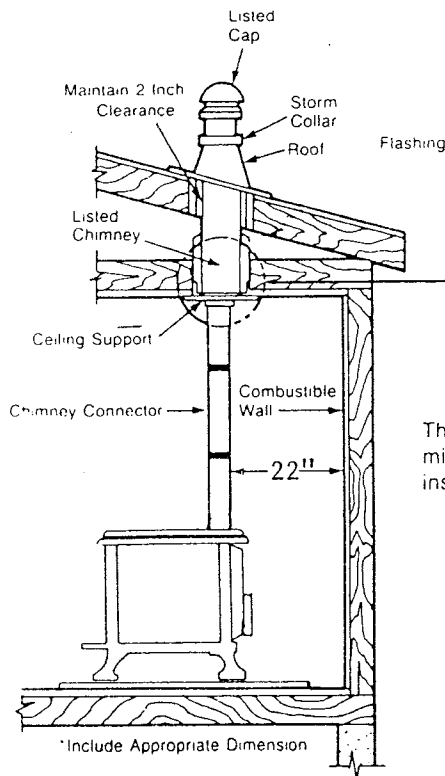
When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed precisely. Choose only Class A 103 H.T., solid insulation type chimneys. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass-through and "T" section package, firestops (when needed), insulation shield, roof flashing, chimney cap, etc. Maintain the proper clearance to the structure as recommended by the manufac-



turer. This clearance is usually a minimum of 2" (5 cm), although it may vary by manufacturer or for certain components.

There are two common metal chimney installations. One is to install the chimney inside the residence through the ceiling and roof as illustrated above. The other is to install an exterior chimney that runs up the outside of the residence. An interior chimney is recommended as exterior chimney walls may cool quicker which reduces the draft and increases the possibility of creosote accumulation. The height requirements for metal chimneys are the same as for masonry chimneys.

Install an attic insulation shield to maintain the specified clearance to insulation. Insulation in this air space will cause a heat buildup which may ignite the ceiling joists.



This method of installation requires at a minimum a ceiling support package, an insulation shield and roof flashing.

### III. OPERATING INSTRUCTIONS

#### A. CONTROLS AND FEATURES

**BYPASS DAMPER:** The bypass damper is located in the upper rear of the firebox and is operated on the upper left side of the stove using the detachable handle. Turn the damper counter-clockwise to open and clockwise to close. When the damper is open, it provides a direct smoke path up the flue bypassing the catalytic combustor. The damper should be opened only under the following circumstances:

- When starting a fire.
- For 5 to 10 minutes after reloading with fuel.
- For 30 seconds to 1 minute before opening either door to prevent smoke spillage or to "boost" the draft when necessary.

**PRIMARY AIR INTAKE/AIR WASH CONTROL:** Located above the front door, the primary air intake/air wash control supplies all primary combustion air to the firebox. The movement of the incoming air down along the inside of the front door glass provides an "air wash" which keeps the glass clean and free of soot. The fire's rate of burn is determined by the amount of air entering through the primary air intake.

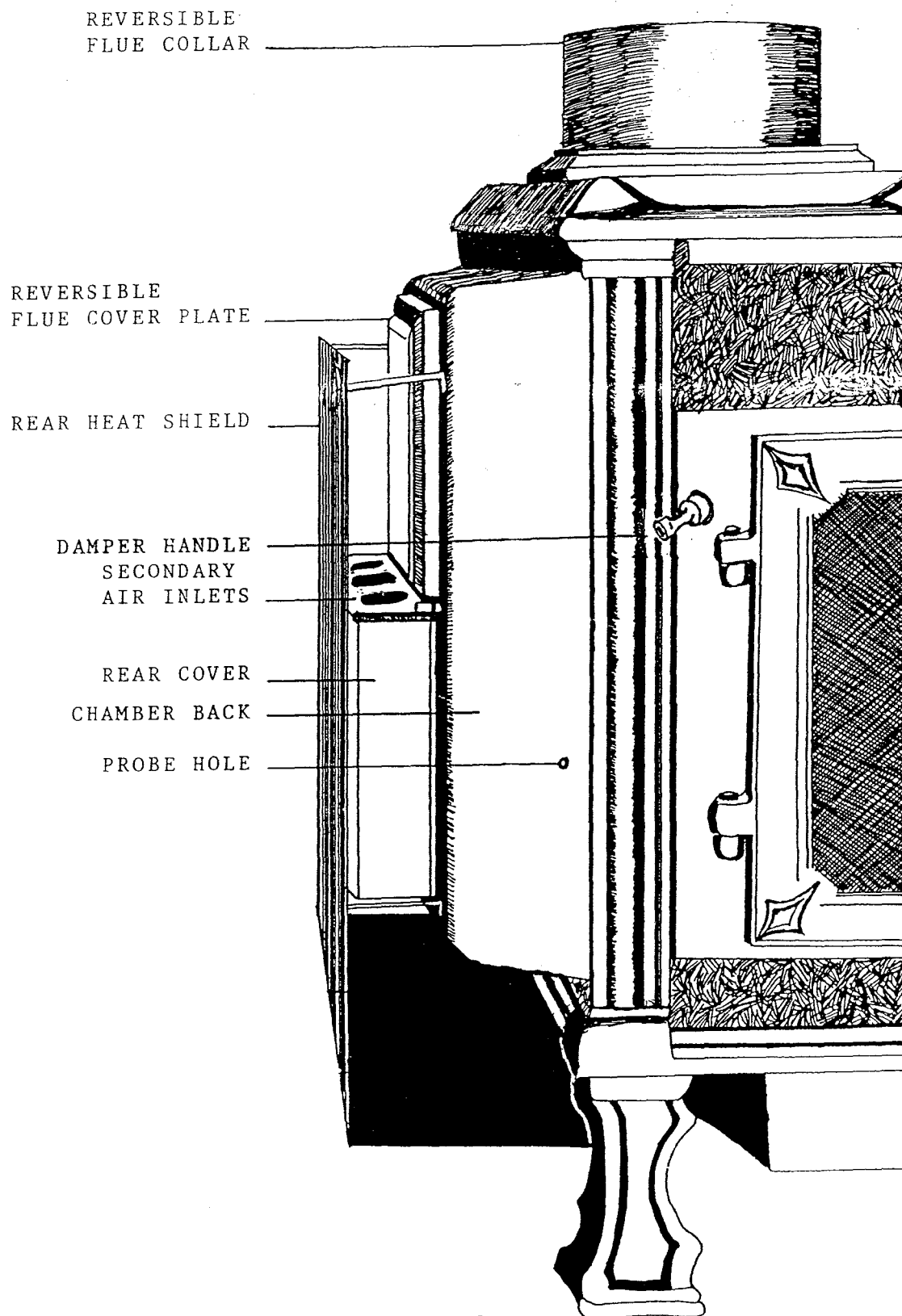
**SECONDARY AIR INLET:** Air for the catalytic combustor enters through a port in the rear of the stove. The amount of air is metered automatically by a bi-metallic element. No adjustment is necessary.

**DYNAMIC ASH GRATE:** Centrally positioned on the bottom of the stove floor is a sliding dynamic ash grate with a hinged handle. The oblong holes in this grate do not coincide with those in the stationary grate when the side door is fully closed. This design helps minimize underfire air which is deleterious to clean burning performance as well as the life of the stove. Ashes may be raked into the ash pan by opening the side door and sliding the grate toward you. By doing this, the holes in the upper and lower grates coincide, thereby permitting the ashes to be raked through these grates into the ash pan. Do not shake the grate back and forth to perform this task; use the proper fire-tending tool. Closing the grate is accomplished by reversing this process or by simply closing the side door.

Should an obstacle wedge itself within the grates while a fire is present in the stove, shake the grate back and forth a few times to clear the obstacle. If this is unsuccessful, then the hinged portion of the handle must be lifted through the side or front door with a fire-tending tool. The door can then be closed. When the stove is cool, remove the obstruction and replace the grate.

**REVERSIBLE FLUE COLLAR AND COVER PLATE:** The reversible flue collar and cover plate provide a system for venting the stove from the top or rear. This modification can be performed in the field. This stove must be adapted to the rear vent mode when connecting to a masonry fireplace. Refer to the MAINTENANCE section for instructions.

FAMILIARIZE YOURSELF WITH THESE CONTROLS AND FEATURES  
BEFORE YOUR FIRST FIRE



## B. CATALYTIC COMBUSTOR

The Harvest is equipped with a catalytic combustor located in the lower rear space between the inner and outer cast iron panels. The special interior design insures that the greatest possible volume of smoke passes through the combustor. By-products of combustion from the firebox are burned in the combustor thereby increase the overall efficiency of your stove and reducing harmful emissions. The combustor also greatly reduces the rate of creosote accumulation. It does not, however, eliminate creosote accumulation entirely.

Using proper fuel is vital to gain the full benefit of the catalytic combustor. Whenever possible, seasoned hardwood should be used. Green wood can dramatically reduce the efficiency as well as the heat output of the stove.

NEVER BURN THE FOLLOWING MATERIALS IN A STOVE EQUIPPED WITH A CATALYTIC COMBUSTOR: Artificial logs, coal, household trash, chemical fire starters, or gloss paper. Regular lack and white newspaper may be used to start a fire.

The best place to monitor the stove performance is at the combustor. A probe-type thermometer should be purchased to read temperatures at the combustor. We provide access to the combustor by a thermocouple (probe) hole on the left side of the chamber back. Remove the plug to access the hole. Monitoring combustor temperatures will help insure that you are getting the full benefit of your Harvest.

## C. BUILDING A FIRE

**BREAK IN PROCEDURE:** It is imperative that your stove be broken in slowly. Cast iron must be "seasoned"; overfiring a new stove may cause castings to crack or may damage other stove parts. Moisture in the soapstone must be driven out slowly to minimize the "shock" to the stove of its first exposure to high firebox temperatures. Also, the asbestos-free furnace cement used to assemble the stove must be cured slowly to insure adequate sealing and bond. The bottom layer of soapstones in your firebox are intended to prevent thermal stress and should remain in place in the firebox at all times.

### TO BUILD YOUR FIRST FIRE:

1. Open the bypass damper and primary air control.
2. Place five or six double sheets of tightly twisted newspaper in the center of the firebox.
3. Arrange kindling in a criss-cross pattern over the newspaper. Kindling should be approximately ten pieces, 1/2" (13 mm) in diameter and 10" to 18" (25 to 46 cm) long.
4. To get the draft started, light the paper under the kindling.
5. Leave the door slightly ajar until the kindling has started to burn and the draft begins to pull, then close the door.

6. KEEP A WATCHFUL EYE ON YOUR STOVE to maintain a steady, low-heat fire. Your first and subsequent break-in fires should make the stove warm but not hot to the touch. At the most, a few small chunks of wood should be added to the fire to reach these safe break-in temperatures.

7. Once warm-to-the touch temperatures have been achieved, close all air controls and allow the fire to die out completely.

8. Let the stove return to room temperature.

Your first three break-in fires should be built and maintained accordingly. You will be rewarded by a properly seasoned stove.

Do not be alarmed by a white foamy substance which may appear on the rear cover of your stove after your first few fires. This is the adhesive which holds the insulation onto the rear cover. The excess may be scraped off with a single edged razor blade.

Because of the cool flue gas temperatures present during the break-in, creosote may build up quickly. We recommend a visual inspection (and cleaning if necessary) of your stovepipe and chimney and combustor once the break-in procedure is completed.

**NORMAL OPERATION:** If your stove is not used continuously, follow the break-in procedure at least once to minimize the stress of a hot fire on a cold stove.

#### TO BUILD A FIRE FOR EVERYDAY USE:

1. Open the bypass damper and primary air control.
2. Place five or six double sheets of tightly twisted newspaper in the center of the firebox.
3. Arrange kindling in a criss-cross pattern over the newspaper.
4. To get the draft started, light the paper under the kindling.
5. Leave the door slightly ajar until kindling has started to burn and the draft begins to pull, then close the door.
6. Add logs, small at first to build the fire up, and let the fire burn briskly for 10 to 20 minutes.
7. Once the fire is burning well, close the bypass damper and regulate the primary air control to achieve the desired burn rate.
8. Before reloading, once again open the primary air control and the bypass damper. It is advised to wait at least three minutes before opening the loading door while the fire reinvigorates itself. Reloading on a bed of hot, red coals reduces smoking time and will bring fresh fuel up to a high temperature rapidly.
9. Reload and close the door.
10. Keep the bypass damper and primary air control open 5 to 15 minutes or until the fire is fully established again.
11. Close the bypass damper and use the air control to achieve the desired burn rate.

**NOTE:** A draft is not easily established under certain conditions. Seasonal factors or a cold chimney may be the problem. Try starting

the fire using small kindling and fuel to obtain a quick, hot fire. Tend the fire frequently with small fuel until the chimney is hot and the draft is well established.

**BURN RATE:** For a HIGH BURN, fully open the primary air control. If the stove is overfiring, the air control should be closed to reduce the rate of burn. Closing the primary air control almost all the way will result in a MEDIUM BURN. A LOW BURN is achieved when the primary control is completely closed. In the case of a chimney fire, close the primary air control completely and close the front and side doors should they be open.

#### D. OVERFIRING CAUTION

Overfiring means operating your stove at excessively high temperatures for extended periods of time. Because overfiring can cause damage to the stove, it should be carefully avoided. The surest indication of overfiring is when the stove creaks and glows and when enameled surfaces bubble. If an overfire situation occurs the primary air control should be closed immediately to reduce temperatures.

Evidence of overfiring is warping and/or failure of internal parts, a disintegrated combustor, discolored external cast iron, or damaged enamel. Blistering or bubbling of enameled parts is caused when the temperature of the enamel is in excess of 900 F. ANY OF THESE SYMPTOMS OF OVERFIRING WILL VOID YOUR WARRANTY!!!!

#### E. ASH DISPOSAL

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 or on the ground, well away from all combustible materials, pending disposal. Ashes should be retained in the closed container until all cinders have thoroughly cooled.

Ashes should NEVER be placed in wooden or plastic containers, or in paper or plastic bags, no matter how long the fire has been out. Coals can remain hot for several days when embedded in ashes.

### IV. MAINTENANCE

#### A. MONITORING YOUR TEMPERATURES

By reading the temperature of your stove at various locations, operation and troubleshooting are simplified. We recommend an electronic temperature monitor with a hi-temp 9" (22.9 cm) thermocouple for installation at the combustor and a standard 4" (10 cm) thermocouple for installation in the stovepipe (approximately 12" (30.5 cm) from the flue collar).

By monitoring combustor temperatures, you can determine if the stove is overfiring or supplying adequate heat, and whether the

combustor is active or has failed. Combustor temperatures in the range of 350 F to 1600 F indicate that the stove is operating properly and is supplying adequate heat. This is also the temperature range of a normally operating combustor. Temperatures in excess of 1600 F indicate an overfire situation so keep the combustor under 1600 F. If combustor temperatures cannot be kept consistently under 1600 F, consult the Troubleshooting Guide. Consistently low temperatures also indicate a problem. It is possible that the combustor has failed; the Troubleshooting Guide will help you evaluate the situation properly.

Temperature guidelines of the stack are as follows:

0 F to 420 F, LOW BURN: Typical temperatures of a stack at the start of a fire.

420 F to 750 F, NORMAL OPERATION: By maintaining these temperatures, you can be sure to avoid an overfire situation.

750+ F, OVERFIRING: Close the primary air control to reduce temperatures.

#### B. CREOSOTE FORMATION

When wood is burned, it produces tar, water vapor and other organic vapors which combine to form creosote. The creosote vapors condense in the relatively cool chimney flue of a newly started fire. The condensed creosote vapors can accumulate on the walls of the chimney and if ignited, this creosote makes an extremely hot fire which may damage the chimney or even destroy the house.

The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated (greater than 1/4" (6 mm)), it should be removed to reduce the risk of a chimney fire. Creosote should be removed with a brush specifically designed for the type of chimney in use. A chimney sweep can perform this service. It is also recommended that before each heating season the entire system be professionally inspected, and cleaned and repaired if necessary.

#### C. CATALYTIC COMBUSTOR

THIS WOOD HEATER CONTAINS A CATALYTIC COMBUSTOR WHICH REQUIRES PERIODIC INSPECTION AND REPLACEMENT FOR PROPER OPERATION. IT IS AGAINST THE LAW TO OPERATE THIS WOOD HEATER IN A MANNER INCONSISTENT WITH THESE OPERATING INSTRUCTIONS, OR WITH THE COMBUSTOR DEACTIVATED OR REMOVED.

INSPECTION: Visually inspect your combustor when your stove is cold at least three times during the heating season to determine if physical degradation has occurred. The Harvest's unique design allows for viewing of the combustor without its removal from the stove. The combustor can be damaged by excessive handling and the warranty will

not be honored for damage due to mis-handling. Removal is only necessary when decreased performance of the stove is evident.

The catalytic cell which houses the ceramic catalytic combustor has been designed to provide uniform temperatures throughout the combustor, thereby minimizing the likelihood of cracking. Please note that if cracks are observed in the ceramic, it does not mean that there is a problem. Since the ceramic acts only as a mechanical support for the catalyst (a chemical coating on the ceramic surface which stimulates combustion without being consumed itself), it may have cracks while remaining perfectly operational.

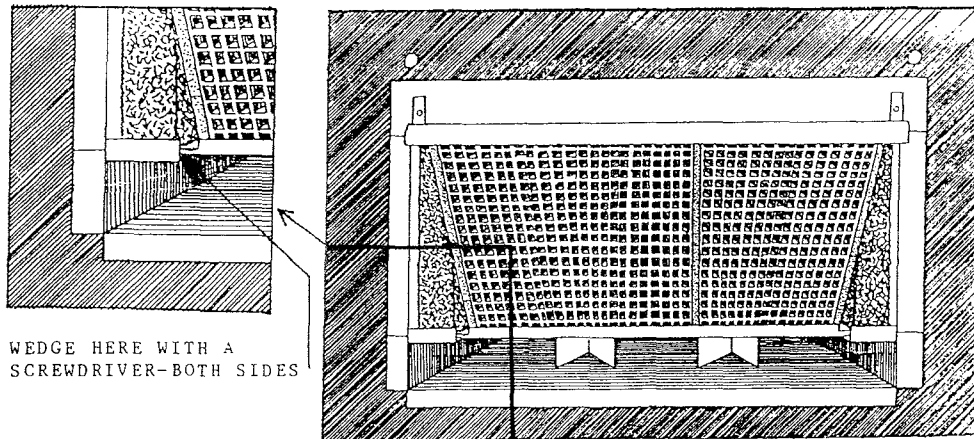
To remove the catalytic combustor:

1. Remove the rear heat shield.
2. Before removing the rear cover of the catalytic cell, place a nonflammable container on the hearth to catch any ashes that may fall when the cover is removed.
3. Remove the rear cover by removing the nuts which secure the cover to the chamber back.
4. Empty any ashes in the cover into the nonflammable container.
5. Inspect the combustor to confirm that it is physically present and intact.
6. If the combustor is physically present and intact, then this portion of the inspection is over.
7. If only a portion of the combustor remains, or if it is completely gone, replacement is indicated.

NOTE: It is also necessary to determine whether or not fly ash is present on the combustor's surface. Ash can be removed with a soft fiber brush, such as a paint brush. Never clean the internal chambers of the combustor with any kind of instrument. Burning the proper fuels will keep the combustor clean.

8. Replace the cover by reversing the removal procedure. Tighten the nuts only until they are snug. Over-tightening the nuts will damage the cover.

9. Replace the rear heat shield.



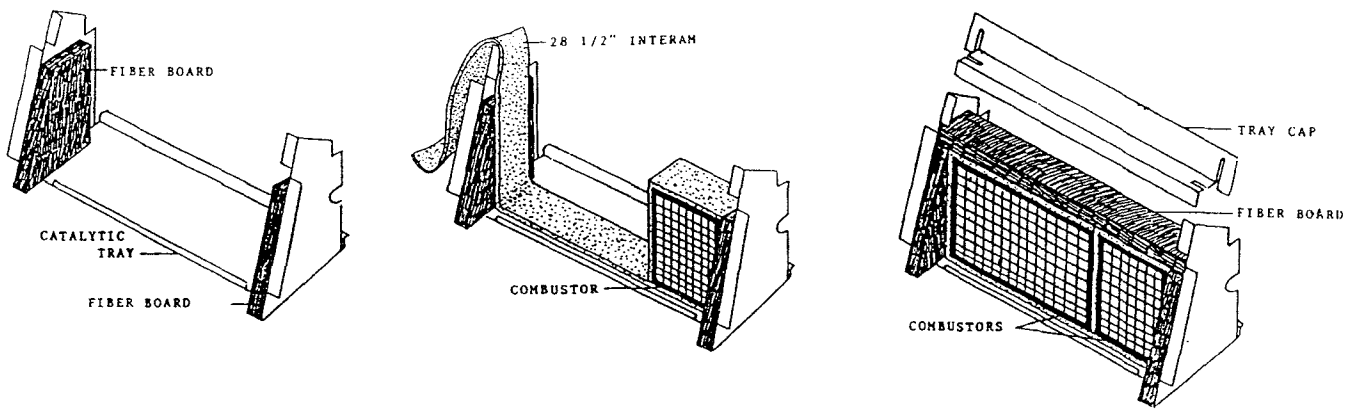


REPLACEMENT: Replace the catalytic combustor with NHC, Inc. part number 5100-2292. The combustor has been designed for many thousands of hours of use. The combustor should be replaced when any of the following symptoms occur:

- Stove operation becomes chronically sluggish. Temporarily, this could be due to weather conditions.
- Heavy creosote formation is evident. Be sure to inspect the chimney regularly.
- More smoke than normal is emitted from the chimney.
- Catalytic combustor temperatures are lower than usual (when monitoring is being practiced).

COMBUSTOR REPLACEMENT:

1. Remove the rear heat shield and rear cover as outlined in the preceding section.
2. The combustor may be removed from the stove as a unit by simply lifting and pulling out the tray that holds them in position. You may need to pry the tray loose if it does not release easily.
3. Remove the tray cover to access the combustor.
4. Remove the combustor and return them to the combustor manufacturer for warranty consideration. Reference your combustor warranty card received with your stove for the manufacturer's name, address and telephone number.
5. Before replacing the cover, remove ashes from the smoke passages of the catalytic cell beneath the tray that holds the combustor.
6. DO NOT OPERATE THE STOVE WITHOUT THE COMBUSTOR IN PLACE.
7. Upon receipt of your new combustor, follow the illustrations to place the new combustor into the tray. Reverse the procedure to replace the tray, rear cover, and rear heat shield. Remember not to over-tighten the rear cover nuts.



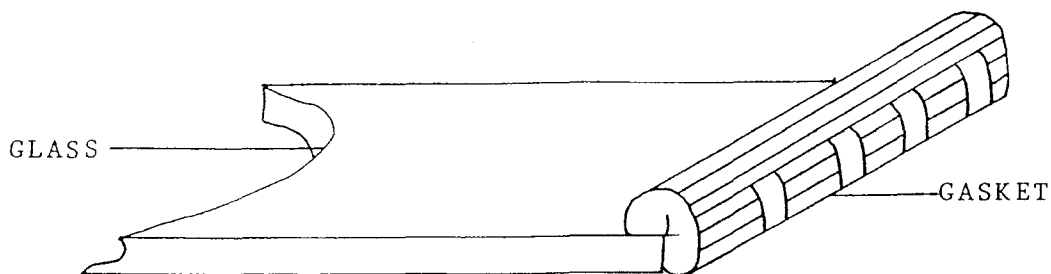
## D. GLASS

The glass in your Harvest is a thermal, shock-resistant glass, made specifically for wood stoves, and should not be substituted. In the event of breakage, it should be replaced immediately. Contact our Customer Service Department or your dealer for replacement glass which is accompanied with instructions and everything needed for the repair.

The procedure for glass and glass gasket replacement is as follows:

1. Remove the door by lifting it straight up off the hinges; the hinge pins will remain in the door.
2. Place the door face down on a flat, smooth surface.
3. Remove the eight window frame screws to separate the window frame from the door.
4. Carefully lift the frame and glass from the door.
5. To replace the glass, place the new pre-gasketed glass onto the door with the cushion of gasket facing down towards the door.
6. To replace only the gasket, remove the old gasket from the glass. Apply the new gasket as illustrated to form a cushion on one side of the glass. Place the glass onto the door with the cushion of the gasket facing down towards the door.
7. Replace and screw the window frame back to the door.
8. Replace the door.

In normal use, the glass may become dirty from the smoke and creosote. Cleaning the glass should only be done when the stove is cool. NEVER CLEAN THE GLASS WHEN IT IS HOT. The glass can be cleaned with common household ammonia-based cleaners and fine steel wool or a razor blade. Another technique for cleaning the glass is by using oven cleaner on a cool window, to remove the bulk of the creosote, followed by an application of ammonia-based glass cleaner to remove any residual haze. Do not burn the dirty papers used to clean the glass in the stove. Also, abrasive cleaners should not be used as they can harm the glass.



## E. GASKETS

Normally, gasket material should be replaced every two to three seasons, depending on stove use. If the door seals are loose, a new gasket will assure a tight seal. Contact our Customer Service Department or your dealer for a gasket kit which includes instructions and gaskets for the doors and the glass.

The procedure for replacing the door glass gasket is reviewed in Section D. Glass. To replace the door gaskets, first remove the old gaskets with a utility or putty knife. Clean the gasket channels with a wire brush. Apply gasket cement to the channels and push new gaskets into the channels without stretching the gasket. The door should be shut immediately to assure a positive seal.

The following gaskets are used in the Harvest woodstove:

GLASS: 3/4" (19 mm) Adhesive Backed Black tape; Qty: 42" (107 cm)  
FRONT DOOR: 1/4" (6 mm) Dia. Low Density Black tube; Qty: 54" (137 cm)  
SIDE DOOR: 1/2" (13 mm) Dia. Low Density Black tube; Qty: 42" (107 cm)  
ASH DOOR: 3/8" (10 mm) Dia. Low Density Black tube; Qty: 22-1/2" (57 cm)

#### F. STONE

Occasional cleaning is all that is necessary to maintain your Harvest's beauty. Care must be taken not to scratch or chip the stone. Do not set items on the stove which can scratch the surface of the top stones. Clean the polished stones with water and any non-abrasive cleaner and a soft cloth.

Often, with use, subtle earth tones of brown, red, and yellow may appear within the soapstone. This is a natural reaction in the soapstone.

#### G. CASTINGS

Exterior cast iron parts are painted with black, high-temperatures stove paint. Use this type of paint to regain the cast iron's original appearance. When using a damp sponge to wipe the stove, dry the iron thoroughly to prevent rusting.

Enamel castings can be cleaned with a standard glass cleaner. With time and use, a very fine subtle network of crazed lines may appear seemingly beneath the surface of the enamel. Crazing is a natural predictable process and does not represent a flaw in the enamel.

#### H. TOP TO REAR VENT CONVERSION

The Harvest can be operated with the exit flue collar in the top or rear position. The stove must be vented from the rear for installation into a masonry fireplace. The procedure for converting the stove from top to rear vent is listed below. Perform this conversion process only on a cold stove.

1. Disconnect the stovepipe and remove the rear heat shield.
2. Reach through the front door and remove the two nuts that hold the flue collar to the top casting. Use a 7/16" (11 mm) wrench.
3. The flue collar is cemented into place to prevent smoke leakage. The cement seal can be broken with a hammer and wedge or loosened by soaking the area (where the collar is cemented to the top) with a wet towel.

4. Remove the flue collar by lifting it straight up and off the stove. Remove and retain the 1/4" (6mm) threaded rods from the collar.
5. Reach through the top or through the opened bypass damper and remove the two 1/4" (6mm) bolts from the reversible cover plate.
6. Remove the cover plate and save the bolts.
7. Check the gaskets on the flue collar and cover plate. Replacement is required if they are worn. The collar and cover plate each use 35" (89 cm) of 1/4" (6mm) diameter, low density, black tube type gasket. Be sure the gasket completely fills the gasket channel.
8. Position the flue collar on the back of the stove.
9. Re-attach the bolts from the cover plate to the flue collar. The HearthStone logo faces downward.
10. Securely attach the threaded rods to the cover plate and position it on the top of the stove with logo facing forward.
11. Fasten the cover plate in position by tightening the nuts. Do not over-torque these nuts. Do not apply excessive force to the top stones.
12. Replace the rear heat shield.

## V. OPERATION GUIDELINES

### A. DO'S AND DON'TS

#### DO:

- Read and understand this Owner's Manual thoroughly before installing and operating this stove.
- Install the stove according to NHC, Inc's recommendations and in accordance with NFPA 211.
- Burn natural wood only. Higher efficiencies and lower emissions generally result when burning air dried, seasoned hardwoods, as compared to green or freshly cut hardwoods.
- Connect this appliance to a properly sized chimney.
- Maintain all gaskets in good condition.
- Inspect the chimney, chimney connector, and combustor as recommended.
- Follow the recommended break-in procedure as outlined in this manual.

#### DON'T:

- Modify this product in any way. Doing so will compromise your safety and particulate emissions and will VOID your warranty.
- Expect the stove to heat more than 50% of the recommended volume if installed in a basement or in any area with a large portion of uninsulated masonry walls.
- Burn kiln dried, painted or treated wood, solvents, trash, plywood, colored or glossy paper, artificial logs, cardboard, coal, garbage or driftwood. Burning these materials will shorten the life of the combustor.
- Use chemical fire starters or chimney cleaners as these materials will also shorten the life of the combustor.
- Clean the stove when it is hot.
- Clean the enamel surfaces or glass with abrasive cleaners.
- Burn the stove with the ash grates open or with improperly sealed doors. Overfiring may cause flame impingement on the combustor, which

could cause early failure. Burning coal, cardboard, or loose paper can produce soot or large flakes of char or fly ash that can coat the combustor causing smoke spillage into the room and render the combustor inactive.

-Ignore a sudden change in the performance of the stove. The Troubleshooting Section of this manual will help you determine possible causes and solutions to most problems.

## B. SAFETY GUIDELINES

1. Always keep combustible items (furniture, drapes, clothing, etc.) a minimum of 36" (91 cm) from the stove.
2. Store all solid fuel outside the listed stove clearances for this stove as shown on the stove's label or in this manual.
3. Do not overfire your stove.
4. Install a smoke alarm.
5. Keep a fire extinguisher handy. We recommend an ABC rated fire extinguisher.
6. Dispose of ashes properly.
7. NEVER use gasoline, kerosene, charcoal lighter fluid or similar liquids or solid fire starters to start or invigorate a fire. Keep all such materials away from the stove.
8. Keep children and pets away from the stove.
9. NEVER put articles of clothing or candles on a hot stove.
10. Do not connect the stove to a flue that is serving another appliance.
11. Inspect your chimney, chimney connector, and combustor regularly.
12. Clean your system when it is needed.
13. Close the front door of the stove gently, so as not to break and shatter the glass.

## C. PERIODIC CHECKLIST

### EVERY DAY:

-Empty ashes from the firebox and ash pan.

### EVERY TWO WEEKS:

-Visually inspect chimney connector and chimney for creosote; clean accordingly.

### EVERY EIGHT WEEKS:

- Check door seals using the "dollar bill test". When the fire is out, shut the door on a dollar bill. If the bill pulls out easily, the door isn't sealing properly. If the door is not sealing properly, replace the door gasket.
- Inspect your combustor.

### AT SEASON'S END:

- Dismantle chimney connector and clean thoroughly; replace any pieces that show signs of rust or deterioration.
- Inspect and, if necessary, clean your chimney.
- Thoroughly clean out the inside of the stove; inspect for signs of

deterioration.

- Inspect gasket material in all doors and replace if worn, frayed, cracked or extremely hard.
- Repaint exterior black casting, if necessary.
- Inspect your combustor.

#### D. EMERGENCY PROCEDURES

In the event of a stovepipe or chimney fire:

1. Close the primary air intake/air wash control above the front door.
2. Keep all doors shut.
3. Call the Fire Department.
4. Keep an eye on the stove, stovepipe and chimney.

Once the chimney fire has expired, continue to keep all air inlets closed and let the fire in the stove die out completely. The stove should not be fired again until the stove, stovepipe, combustor, and chimney are all thoroughly inspected for any sign of damage. Damage must be corrected before resuming use of your stove.

FIRE DEPARTMENT TELEPHONE NUMBER: \_\_\_\_\_

#### E. FIREWOOD INFORMATION

The quality of your firewood is an important variable which determines both heat output and duration of burn. Softwoods generally burn hotter and faster, while hardwoods burn longer and produce more coals. The density of the wood is the critical factor to consider when purchasing firewood or assessing your stove's performance. The following is a list of common species and their relative BTU content:

HIGH BTU CONTENT: Ash, Black Birch, Hickory, Locust, White Oak, Black Beech.

MEDIUM HIGH: White Ash, Beech, Yellow Birch, Sugar Maple, Red Oak

MEDIUM LOW: Black Ash, White Birch, Grey Birch, Elm, Norway Pine, Pitch Pine, Black Cherry, Soft Maple, Tamarack.

LOW: White Pine, White Cedar, Balsam Fir, Spruce, Aspen, Basswood, Butternut, Hemlock.

Moisture content also plays an important role in the performance of your stove. Freshly cut from a living tree, green wood has a great deal of moisture in it. To properly season green wood, it should be split and stacked and allowed to air dry for a period of six months to one year. Ideally, firewood should be stacked on skids or blocks to keep it off the ground, and only the top should be covered. Plastic or tarps that cover the sides of a woodpile trap moisture and prevent the wood from drying.

As for stacking, an old Vermonter said that the spaces between the logs should be large enough for a mouse to get through, but not for the cat that's chasing it.

## VI. TROUBLESHOOTING

### A. YOUR HEATING NEEDS

Virtually all woodstove operators at one time or another experience basic common problems. All are correctable and generally require only a minor adjustment of the stove, installation, or operating technique. In cases where weather conditions dramatically affect stove performance, the problems will be temporary.

If you question whether or not your stove is producing adequate heat, the best way to troubleshoot the problem is to monitor the temperatures of the combustor. A 1000 F combustor confirms the stove is supplying sufficient heat. Keep in mind that your house itself will regulate room/house temperatures. How well the walls, floors and ceilings are insulated, the number and size of windows, the tightness of outside doors, and the construction or style of your house (vaulted ceilings or other open spaces which collect large percentages of heat) all are determining factors of room temperature.

Your stove's performance is also dependant on its installation. Oversized flues result in decreased pressure (draft) which will keep smoke from rising out the chimney. This reduction in draft will cause the stove to die down or even force the smoke to pour into the room. If your chimney is the proper size and draft is still not easily established, there is the possibility of the chimney being too cold. Hot chimneys provide a stronger draft.

Most draft problems are directly related to the installation and the chimney. However, if drafting problems persist it may be useful to check the stove for air leaks. Use a lit candle or cigarette to check for leaks. While the stove is burning briskly, hold the flame at focal points of the stove (around the castings edges, door edges, between stones, etc). If the flame draws into the stove, a leak exists which alters air flow through the stove. Furnace cement applied to the interior of the stove at the point of the leakage should eliminate the leakage.

Other draft guidelines are as follows:

**AN "AIRTIGHT" HOUSE:** If your home is super-insulated or especially well sealed, the supply of fresh air to the interior of the home may be insufficient to allow the chimney to draft properly. This "negative pressure" condition can be aggravated if exhaust fans are operating within the home. Such exhaust fans would include bathroom fans, a clothes dryer and kitchen range hood exhaust fans. A combination of these factors will result in a weak draft. Ducting air from the outside to the vicinity of the stove may correct this problem.

**TALL TREES OR BUILDINGS IN PROXIMITY OF THE CHIMNEY EXIT:** Chronic or occasional down-drafts are often a result of nearby trees and buildings which alter outside air currents around the top of the chimney.

WIND VELOCITY: Generally, the stronger a steady wind, the stronger the draft. However, "gusty" wind conditions may cause down-drafts.

BAROMETRIC PRESSURE: On balmy, wet or muggy days, a draft is generally sluggish.

BRISKNESS OF FIRE: The hotter the fire, the stronger the draft.

BREAKS IN THE CHIMNEY: An unsealed clean-out door, leaky stovepipe joints or a chimney in poor condition may cause inadequate draft.

SEASONAL FACTORS: Early Fall and late Spring are generally difficult seasons in which to establish a proper draft due to outside temperature and barometric pressure factors. Generally speaking, the colder the outside air, the stronger the draft.

## B. TROUBLESHOOTING GUIDE

<u>PROBLEM</u>	<u>POSSIBLE CAUSES</u>	<u>SOLUTIONS</u>
STOVE SMOKES	Operating Technique	Open the damper and primary air control one minute before opening doors.
	Cold Chimney	Preheat the chimney when first starting a fire.
	Blocked Chimney	Examine the chimney and stovepipe for blockage or creosote accumulations.
	Insufficient Air	Supply more air to air intake area.
	Air Insulated Chimney	Replace with a prefabricated insulated chimney system or a properly sized masonry chimney.
	Oversized chimney	Reline the chimney to the appropriate diameter.
	Undersized Chimney	Install a draft inducer or replace the chimney.
	Chimney Too Short	Lengthen the chimney.
	Air Infiltration	Seal chimney connections and openings in clean out door.
	More Than One Appliance	Disconnect all other appliances and seal openings.
BACK PUFFING	Operating Technique	Open the damper and primary air control one minute before opening the door and keep the air control open for a few minutes after reloading.
	Extra Low Burn Rate	Burn the stove in a higher operating range.



BACK PUFFING	Chimney Downdraft Excessive Ash Buildup	Install a chimney cap. Empty ash pan daily.
SHORT BURN	Unsealed or Open doors Excessive Draft  Air Leaks in Stove Extra Long Chimney Oversized Chimney  High Winds	Close the doors tightly or replace the door gaskets. Check the installation. Operate the stove at LOW BURN range. Reseal the stove with cement. Shorten the chimney. Reline the chimney to proper diameter. Install a chimney cap.
LOW HEAT	Poor or Green Wood  Low Burn Rate  Air Insulated Chimney  Exterior Chimney Leaky Stovepipe or Chimney Insufficient Air Dirty Combustor  Too Much Heat Loss	Use only air dried wood/dried at least one year. Operate stove at higher burn rate. Replace with a prefabricated insulated chimney system. Insulated chimney. Check installation.  Supply air to air intake area. Inspect combustor. Clean or replace. Insulated House.
LOOSE CEMENT	Stove Not Broken In Properly Stove Used For More than Two Years	Reseal stove. Observe break- in procedure. Check for missing or loose cement.
BLISTERED ENAMEL	Operating Technique  Excessive Draft	Do not overfire. Monitor the temperatures. Check installation. Operate the stove at a LOW BURN range.

#### C. TROUBLESHOOTING YOUR CATALYTIC COMBUSTOR

<u>PROBLEM</u>	<u>POSSIBLE CAUSES</u>	<u>SOLUTIONS</u>
PLUGGED COMBUSTOR	Operating Technique  Poor Quality Fuel  Combustor Deactivated	Avoid burning items that produce large quantities of fly ash such as colored paper, artificial logs, cardboard, coal, driftwood or painted wood. Burn only well seasoned wood. Make sure fire is well es- tablished and stable before closing the bypass damper. Clean combustor; replace.

PLUGGED Overfiring and/or  
COMBUSTOR Flame Impingement  
Burning Damaging  
Materials

Check draft; monitor  
temperature in combustor.  
Burn only seasoned, natural  
wood.

CRACKED Normal if Combustor  
COMBUSTOR Does Not Deteriorate  
SUBSTRATE Further

Do not remove combustor unless  
necessary. Handle combustor  
with care!

Combustor Fired at  
Extreme Temperatures

Avoid firing combustor above  
1700 F.

Excessive Draft  
Causing Overfire

Check installation. Operate  
the stove at LOW BURN range.

## VII. IMPORTANT WARRANTY INFORMATION

Your new HearthStone Harvest has been inspected at the factory prior to shipment and is determined to be free of defects in materials and workmanship. Should a problem arise with your stove, you are protected by NHC, Inc's Limited Warranty which covers defective stove parts for a period of three years from the date you purchased your stove. For more details please consult the warranty card which you will find in your stove.

Door glass, gaskets, enameled parts and furnace cement are NOT covered by the warranty. Please note that failure to follow the installation instructions and basic operating recommendations presented in this Owner's Manual will void your warranty, as will negligence, abuse, modification or overfiring, as determined by NHC, Inc. or an authorized HearthStone dealer.

The catalytic combustor in your stove is covered by a separate warranty issued by the combustor manufacturer. It is important to return the warranty card to the catalytic combustor manufacturer when you receive your stove. Keep the warranty information provided by the manufacturer to refer to, if needed.

Please fill out and return to NHC, Inc. the original copy of the Warranty Validation form enclosed in your stove. Keep a copy of this important document with your Harvest Warranty and this Owner's Manual in a safe place for future reference. The specified copy of the Warranty Validation form goes to your dealer for his records.

### IN CLOSING.....

With proper use and care, your Harvest will serve you faithfully for many years. We recommend that you refer to this Owner's Manual whenever questions arise. Should you have any unanswered questions, problems, or comments concerning your stove, please feel free to call or write to us here at HearthStone/NHC, Inc. or contact your dealer.

If you are planning a trip to Vermont, we cordially invite you to visit us at our factory to see the stoves being built. Morrisville is located in North-Central Vermont, on Route 100, ten miles north of Stowe Village. We look forward to meeting you.

Thank you for choosing a HearthStone stove. We trust you will enjoy your Harvest.

## VIII. SPECIFICATIONS

## HEARTHSTONE HARVEST MOD A

Maximum Heat Output	36,400 BTU/Hr per EPA testing, 43,000 BTU/Hr per independent laboratory testing
Heat Life <sup>1</sup>	12 hours
Maximum Overall Efficiency <sup>2</sup>	79%
Size of Heated Area	Mid-sized house or smaller
Firebox <sup>2</sup>	2.56 cubic feet
Fuel Size <sup>3</sup>	18" to 20" (45 to 50 cm) logs
Maximum Rate of Burn	7.2 lbs (3.27 kgs) per hour
Minimum Rate of Burn	1.5 lbs (680 g) per hour
Dimensions	28" H x 27" W x 26" D 71 cm H x 69 cm W x 66 cm D
Fireplace Door Size (front)	15-7/8" x 8-3/8" (40 cm x 21 cm)
Loading Door Size (side)	12-1/2" x 10-1/2" (32 cm x 27cm)
Stovepipe Size	6" (15.2 cm) diameter
Recommended Metal Chimney Size	6" (15.2 cm) inside diameter
Recommended Masonry Chimney Size	6" (15.2 cm) inside diameter or 8"x 8" (20 cm x 20 cm)
Flue Exit	Reversible
-Freestanding Mode	Top or rear vent
-Hearth (Fireplace) Mode	Rear vent only
Rear Flue Exit Center Line	20-5/8" (52.4 cm) from floor
Primary Air Control	Manually operated
Actual Weight	518 lbs (235 kgs)
Shipping Weight	544 lbs (247 kgs)
Crated Dimensions	37-3/4" H x 32" W x 32-1/2" L 96 cm H x 81 cm W x 83 cm L
Standard Equipment	Rear Heat Shield
Soapstone Finishes <sup>4</sup>	Polished or Brownstone
Casting Finishes	Painted matte black cast iron or brown, blue, black or almond enameled cast iron

(1) Heat-Life is a trademark of NHC, Inc. and is defined as thermal capacitance or quantity of heat stored. Used here, it refers not just to burn time, but also to hours of usable heat obtained from a single load of fuel.

(2) Based on NHC, Inc. laboratory test results.

(3) The Harvest's firebox will hold 43 lbs (19.5 kgs) of 16" to 18" (40 to 46 cm) wood. The firebox is capable of a maximum log length of 20" (51 cm).

(4) Colors of polished stone can vary from grey to grey green, according to natural composition. Colors of brownstone can vary from grey-brown to brown, according to natural composition.

IX. REPLACEMENT PARTS LIST

<u>PART DESCRIPTION</u>	<u>ITEM NO.</u>
Gasket Kit	94-58401
Glass Kit	94-58405
Black Cast Leg	94-58410
Enamel Leg	94-58411
Black Cast Corner Post	94-58412
Enamel Corner Post	94-58413
Black Cast Ash Lip	94-58414
Enamel Ash Lip	94-58415
Side Latch Assembly	94-58420
Front Latch Assembly	94-58421
Ash Door Latch Assembly	94-58422
Damper Assembly	94-58430
Dynamic Grate Assembly	94-58443
Top Casting Kit (cement & hardware)	94-58446
Top Stone Replacement Kit	94-58447
Black Cast Top	94-58450
Enamel Top	94-58451
Ash Drawer Assembly	94-58456
Black Cast Front Door & Frame	94-58470
Enamel Front Door & Frame	94-58471
Black Cast Side Door & Frame	94-58476
Enamel Side Door & Frame	94-58477
Firebox Exit Guard	94-58480
Back Panel Kit	94-58481
Chamber Back Kit	94-58482
Back Panel Reinforcement Kit	94-58485
Catalytic Tray Replacement Kit	94-58490
Catalytic Tray & Combustor Kit	94-58492
Combustor Replacement Kit	94-58493
Primary Air Control Housing	5400-2020
Igniter Air Plenum	5400-2014
Air Wash Deflector	5400-2015
Firebox Exit Guard Cover	5400-2018
Air Control Plate	5400-2020
Air Control	5400-2024

Please call NHC, Inc. Customer Service at (802) 888-5232 for further information, pricing and ordering information.