



Technical Data Sheet

H-I Special Instructions The H-I With A Catalytic Combustor

Owner's Manual Supplement

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As a wood burner who has special concern for both efficiency and clean air, you have made a wise choice in the HearthStone I Catalytic. In order to get the most of what you want from your new stove --- and to get it safely ---please read the following instructions carefully.

Should you ever have any unanswered questions concerning the installation, operation or performance of your new stove, please feel free to contact Hearthstone's Customer Service Department at 802-888-5235 or see your nearest Authorized Dealer. We are here to serve you.

SAFETY NOTICE: If this stove is not properly installed, a house fire may result. For your safety, follow the installation directions. Contact local building officials about restrictions and installation inspection in your area.

PART I. INSTALLATION

For information on locating your stove, selecting or evaluating your chimney and stovepipe, proper hearth construction, and clearances to combustibles, read pages 2-6 of your HearthStone owner's Manual.

Also, note the following requirements and specifications for the HearthStone I Catalytic:

HEARTH COMPOSITION: Choose one of the following options:

1. A minimum of 4" masonry mortared onto 28-gauge sheet metal, which covers a plywood sub hearth.
2. With the HearthStone Hearth Heat Shield, TWO layers of 3/8" asbestos millboard (or the equivalent) covered with a non-combustible material (tile, slate, etc.) of any thickness.

PART II. ASSEMBLY:

Once situated on your hearth, all that remains to be done is to install the Catalytic Monitor.

CATALYTIC MONITOR INSTALLATION

NOTE: If the stove is not equipped with a catalytic monitor, skip to Part III.

The Catalytic Monitor consists of a heat probe (already installed above the Combustor), a cord and a readout console. You will need two #6 sheet metal screws and one 9-volt battery (not included).

1. First choose a location for the console. It must be at least 36" from the stove. The best location is one that's easy to check. It may either be set on a shelf or mantel, or mounted on the wall with screws.
2. If you choose to mount the console on the wall, position two #6 screws in the wall, 3-1/4" apart on a horizontal plane. Locate the screws 1/2" below where you want the top of the console to be. Leave the screws extending 1/4" out from the wall. Mount the console by mating the two holes on the back of the box with the two holes on the back of the box with the two screws in the wall.
3. Now, connect the probe to the console. Simply plug the cord coming from the back of the stove into the right side of the console. Insert it lip-side-up into socket A. Set the dial on the top of the console to position A.
4. Finally, install the battery. Remove the plate covering the battery compartment from the back of the console. Install one 9-volt battery in the compartment and replace the plate. The cord should be plugged in when you are installing the battery.

PART III. HOW THE HEARTHSTONE I CATALYTIC WORKS:

There are three essential differences between the HearthStone I Catalytic and other HearthStone Stoves:

1. The catalytic combustor has been added to burn more of the particulates produced by the fire. This gives you higher efficiency while reducing the smoke and creosote accumulation. The ceramic honeycomb structure of the combustor is coated with a chemical catalyst that enables the unburned gases to ignite at lower temperatures (5000 F and higher) than otherwise possible. A metal plate beneath the combustor, called the Flame guard, protects the combustor from log or poker impact and direct flame contact.
2. The air supply systems of the HearthStone I Catalytic is specially designed with less incoming air. The path that all the air takes is designed to funnel through the combustor unit, carrying with it the smoke that will be burned in the combustor.
3. The Catalytic Combustor (if so equipped) tells you the temperature just above the combustor, so that you can tell when it's operating. When the meter reads 5000 F or higher, catalytic combustion is taking place.

PART IV. OPERATION OF THE HEARTHSTONE I CATALYTIC:

THE CONTROLS -Familiarize yourself with the controls of your stove before your first fire:

SPIN DRAFT CONTROLS -The round knobs in the center of the left side-loading door and on the right side of the stove are adjustable, completely manual controls, supplying the primary air for your fire. Turning them counter-clockwise lets in more air, turning them clockwise restricts the air.

DAMPER -The damper is located at the upper front of the firebox, and is opened and closed by the handle on the upper left side of the stove. Turn it clockwise to open the damper, and counter-clockwise to close it.

SECONDARY AIR INLET -A small round opening on the right side of the stove admits fresh air at the fingertips of the flames to burn off some of the gases from the fire, and to provide secondary air to the combustor. The opening has a cover that swivels open or closed. It should always be open when the stove is in use.

THE OPERATION:

-BREAKING IN YOUR STOVE -Read and follow the instructions on page 8 and 9 of your HearthStone Owner's Manual for break-in. Breaking in your HearthStone I Catalytic is the same as breaking in a standard HearthStone I.

-GENERAL GUIDELINES -Read and follow the guidelines Presented on page 10 of your HearthStone Owner's Manual. Also carefully observe the following guidelines, which are special for the HearthStone I Catalytic:

Never burn garbage or trash, artificial logs or paper logs, gift wrapping or any colored paper, slick "coated" paper, treated wood, painted wood, or driftwood. Any of these could plug the combustor. It's all right to use black and white newspaper to ignite kindling.

Never start fires with lighter fluid or chemical starters.

Never use chemical chimney cleaners

Have regular stove and chimney inspections to guarantee the safest and most efficient operation.

ATTAINING CATALYTIC COMBUSTION AND MAINTAINING IT -To activate the catalyst in the combustor, you must first achieve catalytic "light-off". After charging the stove with a fresh load of wood, burn it at a medium-to-high rate with damper open until the wood is actively burning. Check the Catalytic Monitor console; when it reaches 600° F – 700° F, you know you've achieved light off. Now you may damp the fire down (by closing the Damper and the Spin Draft) to provide a long, slow burn. Catalytic combustors continue even during slow or

flameless fires. (We've achieved active burns with the drafts set to within ½ turn of closed, but this may vary from installation to installation.)

In order to maintain catalytic combustion with a slow-burning fire, you must re-activate the reaction (or light-off) whenever you re-fuel. Do this simply by burning the new wood at a high rate for a few minutes, until it's actively burning and the console again reads between 600° F . 700° F.

If monitor reading should fall below 500° F while there is still fuel in the stove, re-activate catalytic combustion by opening the drafts and reinvigorating the fire.

CAUTION: Make sure that the temperature of the combustor, as shown on the Catalytic Monitor never exceeds 1800° F. Extreme temperatures of this kind will drastically shorten the operational life of the combustor.

PART V. MAINTENANCE

Read and follow the instructions outlined in pages 11-14 of your HearthStone Owner's Manual. Also observe the following rules for maintenance of the catalytic combustor:

A. **CLEANING** -If ash collects on the face of the combustor, use a soft fiber brush, like a paintbrush, to remove it. Never clean the internal chambers of the combustor with any kind of instrument. Burning the proper fuels will keep it clean inside.

B. **REPLACEMENT** -The catalytic combustor has an average Operational life of 6,000 hours. When any of the following symptoms occur, it is time to replace the combustor:

1. Stove operation becomes chronically sluggish. Temporarily this could be due to weather conditions. If it persists, replace the combustor.
2. Heavy creosote formation. Be sure to check stovepipe and chimney regularly.
3. More smoke than normal coming out of your chimney.
4. Monitor Temperature falls off.

C. **IMPORTANT WARRANTY INFORMATION** -The Catalytic Combustor in your stove is covered separately by a pro-rated warranty through the 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

PART VI. SAFETY:

Read and follow the instructions given on pages 15 and 16 of your HearthStone Owner's Manual. And remember -don't burn anything but natural wood.



PART VII. TROUBLESHOOTING:

Read and follow the guidelines on page 16 of your HearthStone Owner's Manual.

With proper use and care, your new Hearthstone I Catalytic will provide you with a safe, efficient, clean-burning and beautiful source of warmth for your home. If we can ever be of any assistance to you please call us with your questions or comments.

Thank you for choosing HearthStone.