

# Technical Data Sheet

## H-II Special Operating Instructions For The H-II Catalytic *Owner's Manual Supplement*

**Date:** 9/19/2012

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### **General Guidelines:**

\*\*Always open the bypass damper before opening the front or side door. Open the door slowly.

\*\*Do not burn painted or treated wood, artificial or paper logs, gift wrapping, coal, driftwood or chemical fire starters. Using any of these materials can shorten the life of the catalyst.

\*\*Small diameter pieces are good for kindling, but large pieces increase the length of the burn and increase the efficiency of the combustor.

\*\*The catalytic combustor needs a moderate draft for efficient operation. Too little draft will make the fire go out. Too much draft may cause over-firing. Installing a manual damper in the flue pipe can often control excessive draft.

\*\*A catalytic combustor properly installed and operated greatly decreases wood smoke emissions and creosote build-up, but you should continue to inspect your chimney on a regular basis for creosote accumulations.

### **Everyday use:**

#### 1. Lighting a Cold Stove:

Load kindling and wood, light fire, close door and burn the stove with the bypass damper open for 5-10 minutes to get the gases hot enough to ignite the catalytic combustor. Once the fire is well established, close the bypass damper and adjust the primary and secondary air inlets.

#### 2. Reloading:

Open the bypass damper and the primary and secondary air inlets. Open the door slowly, load wood, and close door.

- Reloading on a good bed of coals: Simply load and adjust primary and secondary air inlets for desired burn rate (see No. 3 below). Close bypass damper.

-Reloading on a dwindling bed of coals: Leave bypass damper open a few minutes or until the fire is well established. Then close the damper. The delay is necessary to get the flue gas temperatures high enough to ignite the catalytic combustor.

#### 3. Adjusting the Rate of Burn:

**High Burn:** Open the secondary air inlet all the way and open the primary air inlet to the flapper stop. As the stove warms up, check if the flapper is still open and adjust if necessary.

**Medium Burn:** Open the primary air inlet halfway, and open the secondary air inlet one half to two thirds.

**Low Burn:** Close primary air inlet. Close secondary air inlet to a thin crescent. Leave the secondary air inlet open 5-10 minutes when switching from high burn with a good bed of coals to a low burn to ensure an adequate air supply for the combustor as the stove adjusts to the lower burn rate.

4. Operating a catalytic stove with an electric temperature-sensing devise (If equipped with the monitor).

An electric temperature-sensing device such as a Dial\* Catalytic Monitor can be used to verify temperatures for catalytic ignition. The Monitor comes with a thermocouple probe that provides an instantaneous readout of the temperature of gases leaving the combustor. Ignition occurs at approximately 600 degrees, and normal operating temperature is 600 to 1400 degrees F.

#### Maintaining the Catalytic Combustor:

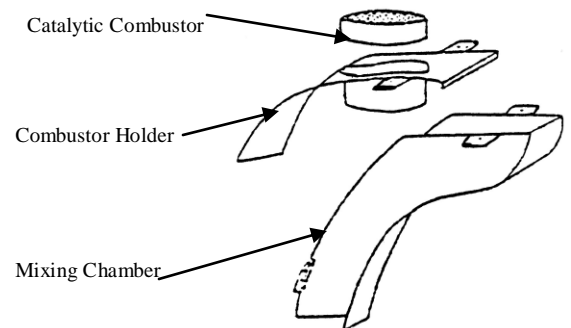
Your catalytic combustor is the finest available, designed for years of trouble-free operation with minimal maintenance.

To prolong the life of the combustor:

\*\*Avoid over-firing (above 1600 degrees F.).

\*\*Do not burn treated wood.

\*\*Once a year, examine the combustor for cracks or plugging with ash or creosote (no need to remove it from the holder). Ash can be gently brushed off the top of the combustor with a soft brush. Creosote accumulations indicate that the stove is not being brought up to combustor ignition temperature. The combustor should be replaced if severely cracked



#### 5. Replacing the Catalytic Combustor:

The catalytic combustor should be replaced if it is badly cracked or contaminated. To replace the unit:

1. Remove the mixing chamber by removing the four screws on the sides of the chamber.
2. Remove the two screws on either side of the front end of the combustor. Lift the back end of the holder out of the baffle opening.
3. Lift the catalytic combustor out of the combustor holder and replaces with a new unit. A strip of special insulation (440J) may be wrapped around the new combustor for a snug fit.

\*Dial Instruments are no longer available through HearthStone Quality Home Heating Products.