



# HearthStone I Top Stones

## Replacement or Resealing Instructions

**Date:** 6/14/2002

### **TOOLS REQUIRED:**

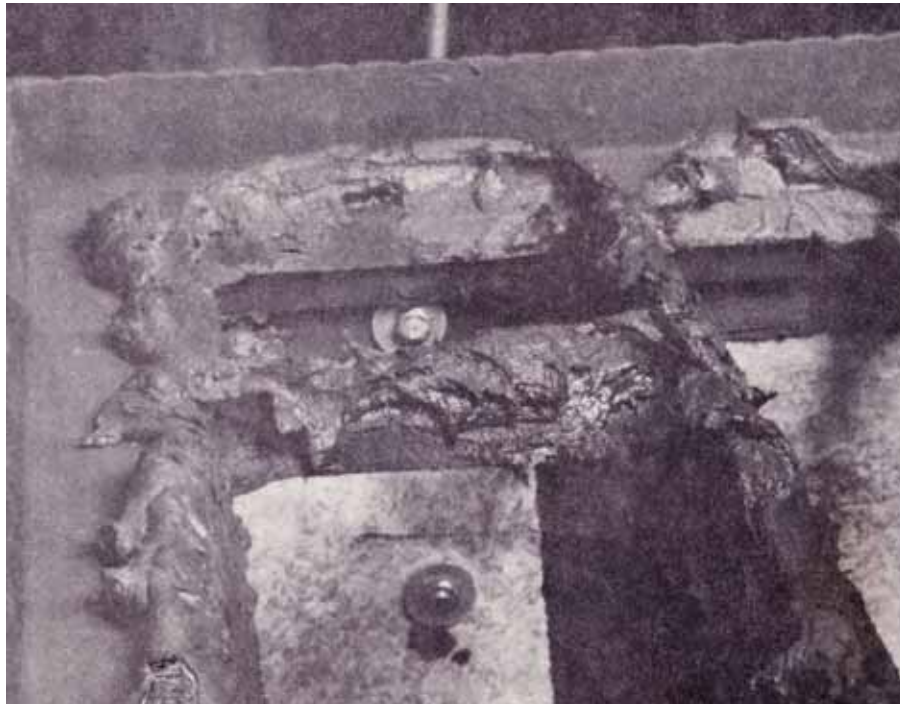
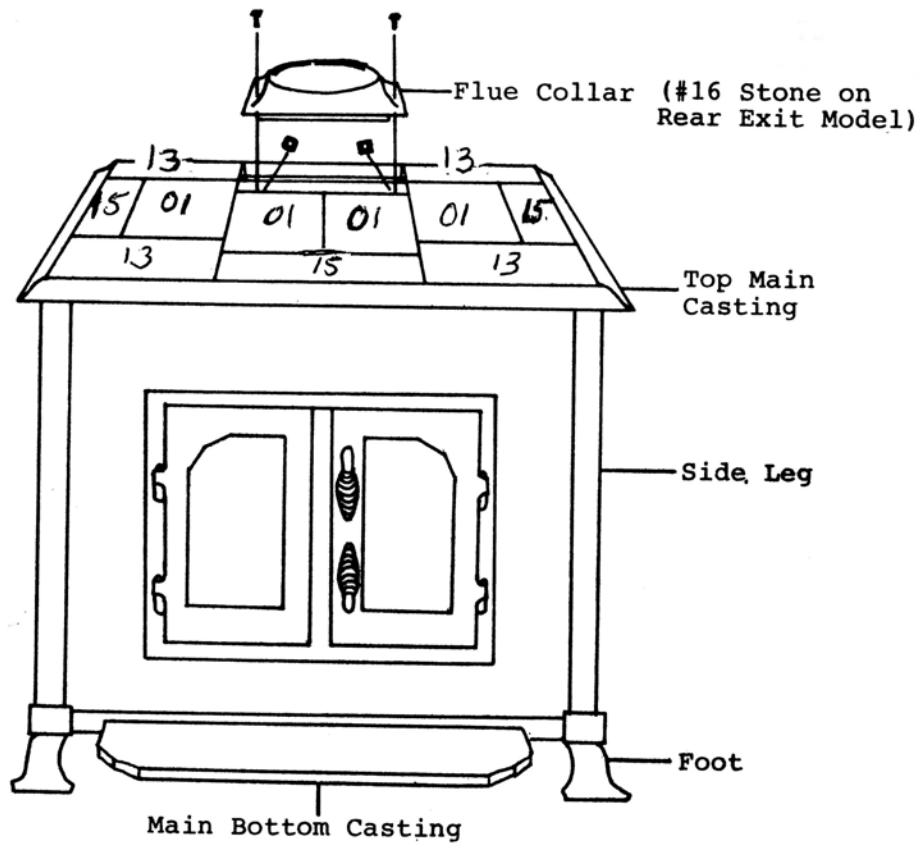
2 Large Screwdrivers or a Strong, Thin Metal Bar (to pry with)  
7/16" Wrench (if top exit)  
Rubber Mallet  
Putty Knife  
Stove or Furnace Cement

**BEFORE YOU BEGIN:** Allow the stove to cool to room temperature. Have a smooth, non-abrasive surface nearby, where stones may rest after removal.

### **PROCEDURE:**

1. If the flue collar is on the top of the stove, it will have to be removed. While holding the top of the flue collar bolts with a large flat screwdriver, reach in through the collar with a 7/16" wrench and remove the nuts that hold the flue collar in place. Tap or pry the collar loose and remove it. If the flue collar is on the rear of the stove, it can remain in place. If the stove has a rear flue, first remove the # 16 stone (back center stone - see diagram of stone). Remove the # 16 stone by prying upward with two large screwdrivers or thin steel bars. Be sure that the end of the prying device is deep down in the slot touching the casting underneath. Be careful to avoid chipping or gouging the stone. It may be necessary to tap stones before removal with a rubber mallet to break the cement seal. Pry from the rear of this stone only. Once this stone is removed, others stones can be accessed. All other top stones will have metal splines inserted between them. These splines, used to help seal the top stones) should be carefully removed and retained for reuse as the stones are put back onto the top casting.
2. To remove all stones, you will need to work from the back to the front. Begin by prying out the corner stones (# 13 stones - see diagram). Pry these stones from the side and rear, in order to get the best results.
3. Now pry the outside # 15 stones and the outermost #0 1 stones. Pry these slowly, as they break easiest. When they are pried up at about a 10° front to rear angle, pull them toward the rear of the stove, and remove. The center #01 stones can now be pried up and removed. Access to the front # 13 and center #0 1 stones is now available.

4. Remove left front # 13 by prying up from left side. Remove right front # 13 by prying up from right side. Remove center #01 stones simultaneously from rear. Remove front center # 15 stone by prying from any direction available. (Pry from front only if center #01 stones have not been removed). Always keep in mind that stones have splines in between, and that prying too far could rip the stone apart. Also keep in mind that you are working with a puzzle-like configuration. You must always start at the rear and work forward.
5. Place stones on a smooth surface as you remove them. Remember where they were from (lay them in the same pattern as they were on the stove or label them), and which spline fits in between which stone.
6. Once you've reached the stone needing repair, you should clean all other stones removed, their splines, and the top casting where it is exposed. Use a putty knife, and be sure to clean the stone grooves.
7. You may dry fit the stones in reverse order to get an idea of what the finished job will look like. It will take longer, but the finished job will be much better. Use washers (or pennies) for shimming the stones if necessary.
8. After deciding on the arrangement of stones, apply a 1/4" bead of stove cement to the top casting on all the ribs, and within 1/2" of the vertical edge. (See photo)
9. Working with one stone (or two in certain cases) at a time replace the spline to stone channel with a small amount of stove cement on what will be the "downside" of the spline. This method is to insure that no cement will bulge out of the seams on top and become visible. Work in reverse order, until you come to the # 16 stone (rear exit) or the flue collar opening (top exit).
10. If the stove is a top exit, place the flue collar onto the top of the stoves and secure it with the nuts and bolts previously removed. The bolts should only be 'snugged' until the cement is dry (24 - 48 hours). Liberally seal the entire interior of the collar with cement. After the cement has dried, tighten the collar with the screwdriver and wrench. If the stove has a rear exit, replace the # 16 stone as above.
11. After resetting the stones, and the cement is still pliable, take the screwdrivers or thin steel bars and gently slide the tips between the top casting and outer-most stones. Pull very gently outward on the tool, so that maximum stress is directed toward the top edge of the cast iron, and bottom edge of stone. If you were to push toward the center with the tool, a stone is likely to chip. The idea is to push the stones together to remove any visible gaps.
12. Allow 24 to 48 hours for the new cement to cure, and then burn 2 or 3 low temp fires (stone is warm but not hot to the touch) to cure the new stone.



Cement Applied to Top Casting