## **Keystone/ Palladian Complete Top Assembly Gasket**

Please read all of the instructions before you begin the procedure. Confirm that you have all of the necessary tools and materials. If you have any questions technical support is available toll free at 1-800-866-4344, Monday through Saturday 9:00-5:00 E.T.

These instructions can be used for gasket replacement as well as top stone replacement. The appropriate materials will be provided depending on the circumstance.

## **Tools Needed:**

- 5/32" Allen wrench
- 7/16" wrench or socket
- ½" wrench
- Putty knife
- Wire brush

## **Materials Needed:**

- 15' .250 (1/4") gasket
- 15' .187 (3/16") gasket
- 15' .375 (3/8") gasket
- 2' .312 (5/16") gasket
- Gasket Glue
- Furnace Cement
- Materials included will depend on the procedure being performed. Replacement stone, gaskets, and gasket glue may be required.
  - 1. Make sure the stove is cool
  - 2. Disconnect connector pipe from the flue collar
  - 3. Remove the four allen head bolts that hold the cover plate or flue collar in place, and remove the cover plate or flue collar, to access the catalytic combustor.
  - 4. Use a 7/16" wrench to remove the bolt that attaches the heat shield to the combustor assembly. Remove the heat shield from the stove.

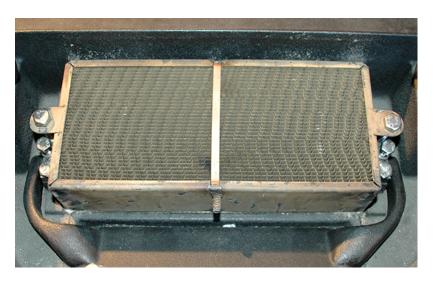




5. If you have not already done so, use a ½" wrench to remove the shipping bolts that hold the combustor assembly in place. These bolts are only necessary when the stove is being transported and do not need to be replaced. PLEASE NOTE: IF you have a Stainless combustor with a Stainless frame, you will use the bolts to secure the combustor down. The picture below shows the stainless combustor in a cast iron frame, which does not need securing with the long bolts.



Combustor with Cast Iron Frame does not need long holts securing it down



Above is the stainless combustor with a Steel Frame. It is recommended to secure down this style combustor with 5/16" x18 x 1.5" bolts.

6. It will be necessary to rotate the combustor assembly 90 degrees to remove it from the stove.



7. Locate the two bolts that fasten the top assembly to the two mounting brackets. They are found to the left and right of where the combustor assembly was located. Remove these (2) bolts with a 1/2" wrench.

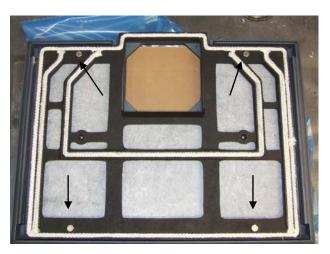


8. The top is now free from the stove. It is very heavy and care should be taken while removing it from the stove. Place it upside down on a suitable work surface



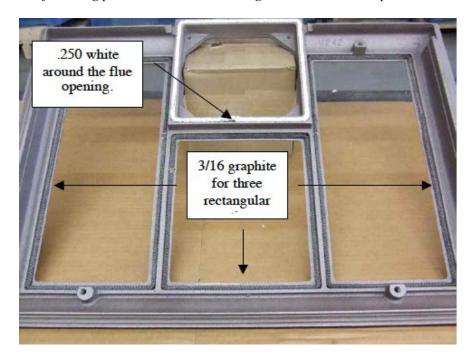


9. Looking at the underside of the stoves top, you will see 4 bolts going through a metal clamp frame and holding the stones in place. Remove these bolts with a ½" wrench noting the location of the gaskets under the clamp frame. And pull the clamp frame off from the assembly.

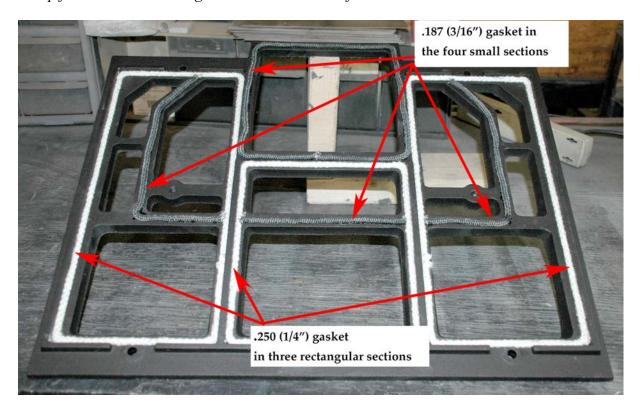


10. Remove the stones needed. Replace the gasket between the stones and the top frame as shown in the photo below as needed. Make sure the old gasket and glue is cleaned off as much as possible using a flat blade screwdriver or Dremel-style grinding tool. If you grind it, do not grind the cast itself and use a N95 rated particulate facemask to protect against fiberglass material as well as wearing protective eyewear. You do not want that fiberglass in your eye!

The following picture is to illustrate the gasket between the top stones & the top frame.



11. Install the stone into the freshly gasketed top frame making sure each stone is centered to ensure an effective seal. *The photo below shows the topside of the clamp frame that will rest against the bottom side of the stones.* 



- 12. Clean off the old gasket & glue and replace as needed using the picture above. Reinstall the clamp frame and ½" bolts. Tighten them down evenly.
- 13. Replace the gasket on the bottom side of the clamp frame where it will seal against the top rails of the combustor pan, the stone, and the cast walls of the stove as shown below.

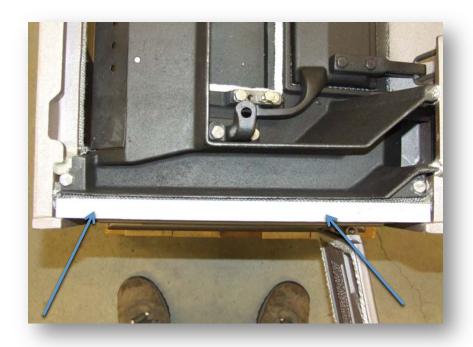
The following picture is the bottom side of the top assembly with the .375 (3/8") low density gasket applied with glue. It is (4) components: (1) outside perimeter with the break in the middle of one of the sides, versus in the front or rear. (2) front to back strips. (1) U-shaped section.



14. Apply a bead of gasket glue along the top edge of the left exterior stone and then run .312 (5/16") gasket across the entire length of that stone.



15. At the top of the stove, place .1875 (3/16") gasket between the two outside edges of the combustor pan and the stone shell. You may substitute .312 (5/16") gasket in place of the 3/16" if the space is large enough to do so.



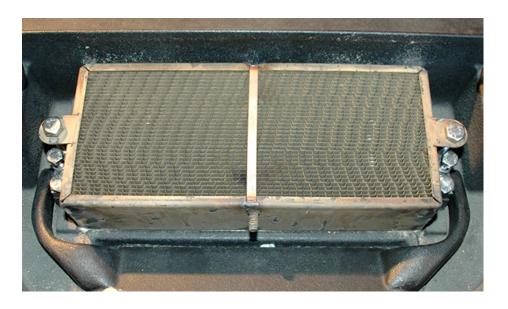
16. Position the top on the stove. Place the rear side into position first, then lower the front down. Make sure the top is sitting in position properly and not hung up on any of the cast.



- 17. Insert (2) 5/16-18 X 7/8" bolts through the hold-downs and up into the clamp frame. Start one bolt and then the second. Tap the top slightly to help align the hole as needed. Some assemblers prefer to insert set screws into the bottom of the clamp frame to help guide it as the top is put on and then replace the set screws with the bolts one at a time.
- 18. Replace the catalytic combustor. Consider cleaning the combustor with a vacuum if you have not already done so. The combustor should be seated on the gasket in the impression where it was seated previously.



Combustors with a <u>cast iron frame will not</u> need to be secured down with the 5/16" x 18 x 1.5" bolts. The weight of the cast iron will maintain the seal to the gasket below.



The newer combustors with the steel frame should be secured down with 5/16" x 18 x 1.5" bolts. The all stainless steel combustor is lighter in weight and will move more as it heats and cools, making it important to secure it down and keep it sealed to the gasket below.

- 19. Replace the stainless steel combustor shield, attaching it to the combustor frame using a 7/16" nut driver.
- 20. Replace the top cover plate or flue collar using the 5/32" hex key wrench.
- 21. Reattach vent pipe.
- 22. Enjoy your stove.

We need your help! Woodstock Soapstone Co. takes pride in providing the highest quality products as well as the best customer service in our industry. We welcome your suggestions and input to help us achieve these goals. If you have any comments to improve our products, service, and information provided in these instructions please contact us at (800) 866-4344 or info@woodstove.com. Thank you.

Revised 1/13/16