

# **Technical Data Sheet**

## Homestead 8570 Rear Panel Replacement Instructions

Part # 2510-750: Rear Panel

#### **INCLUDED IN KIT:**

(1) 2510-750 Rear Panel

#### YOU SHOULD ALSO HAVE:

6300-34080 Stove Cement (4) 4100-0115 ¼"-20 x 1" Ribbed Neck Carriage Bolts (8 ft.) 3110-057 Rope Gasket

#### TOOLS REQUIRED:

9/16" Socket or Wrench 7/16" Socket or Wrench Rubber Mallet Hammer Flat Screwdriver or chisel Phillips Screwdriver Wire Brush Bungee Cord Appliance blanket/cardboard

**<u>Before You Begin</u>**: Work on a cool stove. Read the instructions in their entirety before beginning.

### PROCEDURE:

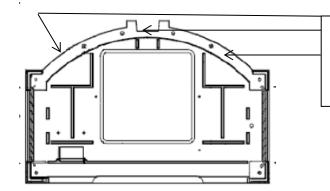
- 1) Wrap a bungee cord around the body of the stove. Although it is unlikely, this will prevent the stone walls from falling out of the body of the stove.
- 2) Removing the top casting. Due to the weight, two people may be needed to do this. The top casting is held in place with the two threaded rods that are turned into the underside of the top casting and run down through the firebox on the left and right sides of the stove. You can see them on the inside of the firebox located in the center of the side stones. Follow the rods down under the stove where they are secured with a 3/8" nut. Remove the nuts with a 9/16" wrench or socket. The top casting is sealed to the body of the stove with stove cement. Using a rubber mallet, tap up on the underside of the top casting until you break the cement seal. The more the stove has burned, the easier the cement will break free. Once the cement bond is broken, the top, including the three top stones, can be lifted straight up off the unit.
- 3) Remove the two rear corner posts by lifting them straight up and out of the stove. Use caution if the parts are enameled.



- 4) To clean the top casting, turn it upside down on saw horses or on a flat surface that has been protected with an appliance blanket or sheets of cardboard. Using a hammer and small chisel, or flat bladed screwdriver, chip out the old cement from the stone channel in the top. Use the wire brush to remove the smaller portions of cement. Wipe the dusty debris out with a wet cloth and allow it to dry.
- 5) Clean the old cement off from the top edge of the stone walls with the hammer and chisel, or flat bladed screwdriver. Although you do not have to remove 100% of the old cement, you should get as much off as possible. You want the fresh cement to bond to the stone and cast iron, not to the old cement.
- 6) You can now remove the secondary air manifold by lifting it straight up and out of the firebox. This will consist of the secondary air manifold, three secondary air pipes, and the ceramic baffle, so it will be heavy. Care should be taken when handling this assembly, as the ceramic baffle can be damaged in handling. Do not lift the manifold by grasping the baffle. Set the secondary air manifold aside. It will need to be reinstalled once the replacement rear panel is in place.
- 7) Remove the flue collar from the back of the rear panel by removing the four ¼"-20x3/4" Hex screws that hold it to the rear panel with a 7/16" wrench or socket. Keep the flue collar and screws to install on the new rear panel.
- 8) Before you can take off the original rear panel, it will be necessary to remove the components within the firebox. Remove the circular ash grate by lifting it up and out of the stove. Remove the cast iron grate base in the same way. You can now remove the three pieces of firebrick from the floor. They may be loose, but if not, you can gently pry them with a flat blade screwdriver. Using a phillips screwdriver, remove the two 10-24x3/8" screws from the bracket that retains the secondary air riser tube in the back of firebox. Keep the bracket and screws for reassembly. Pull the rear firebrick out from the firebox by pulling them out from the bottom until they clear the secondary manifold (some gentle prying may also be needed here). Some models may also have a channel steel spacer under each of the rear firebrick that should be removed and saved. Thoroughly vacuum the empty firebox.
- 9) The four ¼"-20x1" Ribbed Neck Carriage Bolts that hold the rear panel to the bottom casting will now be exposed. Locate the nuts under the bottom casting and remove these with a 7/16" wrench or socket. Because these are ribbed bolts, you will need to tap them up from the bottom with a hammer to take them out. Keep the bolts, nuts, and washers to use on the replacement back panel.

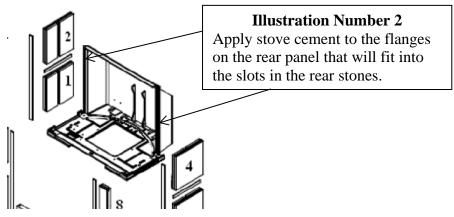


- 10) Before pulling the rear panel off the stove, note how the flanges on the left and right edges on the front of the panel fit into slots of rear stones. This will have to be duplicated when installing the new panel. Lift the panel off the stove. This can be discarded.
- 11) Before placing the new rear panel onto the stove, apply a thin bead of cement to the radius of the bottom casting (see illustration number 1).



**Illustration Number 1** Place a thin, continuous bead of stove cement here before setting the rear panel onto the stove.

12) Before placing the new rear panel onto the stove, apply a thin bead of stove cement onto the flanges that will insert into the slots in the back of the rear stones (see illustration number 2). Keep the cement on the edges that will be on the side of the firebox.



13) Maneuver the rear panel so that holes in the bottom of the panel line up with the holes in the bottom casting – making sure the flanges also remain cemented inside the stone slots. With the holes lined up, place the four previously removed ribbed carriage bolts into the holes and tap them into place with the hammer. Place a washer and nut back onto the bottom of the bolts and tighten them with the 7/16" wrench or socket. Cover the seam between the back panel and the bottom casting with a layer of stove cement.



- 14) Apply a thin, continuous bead of stove cement to all of the inner stone seams. Also where the stone and bottom casting come together and where the back panel and stones fit together. Smooth the cement out using a putty knife. This will help seal the stones – the smoothing is just for the aesthetics.
- 15) Place the firebox components back into the stove in the reverse order from which they were removed. Place the channel steel spacers (if the stove originally had them) back into the rear of the firebox. Place a small dab of cement onto the back of the rear firebrick and place them on top of the channel steel with the cement in contact with new rear panel. Place the riser tube between the two rear fire brick, making sure the notched end of the riser is facing up and toward the back of the stove (see Illustration Number 3). This will become important when reinstalling the secondary air manifold. Replace the retaining bracket for the riser by turning in the 10-24 screws with the phillips screwdriver.



**Illustration Number 3** Here is the proper orientation of the secondary air riser tube. Note the notch is on the top and to the back.

- 16) Place a dab of cement on the bottom of each of the firebricks that fit on the floor of the firebox and press them into place. Set the grate base and grate back into position in the firebox. Square them up while the cement is still pliable.
- 17) You can lift the secondary air manifold up and place it back into the stove. Make sure the front edge is resting on the primary manifold and the hole in the back sits down onto the riser tube. Maneuver the manifold until it drops down and locks onto the riser. You can seal around the top and bottom of the riser with stove cement to prevent air from leaking around the riser.

**NOTE**: before installing the top casting, inspect the ceramic baffle on top of the secondary air manifold. If it is cracked or broken, it can be easily replaced with the top off the stove.

- 18) Carefully place the two corner posts back into the stove by inserting then into the sockets in the bottom casting.
- 19) Apply a thin bead of gasket adhesive to the channel in the top casting to adhere the new gasket to the top. The gasket should be centered along the rear of the top casting and along the outer edge of the three remaining sides.



- 20) Apply a bead of stove cement to the inside edge of the top stones and across the top of the rear panel. The combination of gasket and stove cement will create a seal between the top casting and the firebox, once the top is drawn down to the body of the stove.
- 21) With help from a second person, lift the top casting up high enough to allow you to drop the rods back down through the body of the stove. With some maneuvering, the rods will drop into the holes in the bottom and the top will seat down onto the firebox. It may be necessary to pound the top down into place with the rubber mallet.
- 22) Place a lock washer and nut (that was saved from the disassembly) onto one of the treaded rods that are now extending down through the bottom casting. Fingers tighten the nut. Do the same on the opposite side. You can now tighten the nuts with the 9/16" wrench or socket. Tap the top casting with the rubber mallet as you tighten the nut, this will get the top to seat correctly.
- 23) Remove the bungee cord. Visually inspect the sides and top. Clean any excess cement from the outer surfaces.
- 24) The new cement should be cured. Follow the break in procedure outlined in the manual to do this.



Top Casting rope gasket detail