Replacing the Foam on the A/C Diverter Flaps Without Removing the Entire Dash

If you are experiencing bits of grayish-black foam blowing out of your dash area when you have your dash A/C or heater going, this is usually a sign that the foam which covers the heater/AC diverter flags has begun to disintegrate. Once this foam is gone, you will not get full A/C or full heat blowing out of your dash vents, just a mix of both. Some owners have chosen to remove the entire dash to replace the missing foam.

This is a compilation of the instructions for replacing the deteriorating foam that covers the diverter flaps that DOES NOT require the removal of the entire dash. I have used previous posts by Russell Henderson as well as information sent to me by Joan Williams, who had her flap repairs made by Earl Hungness. I cannot verify if this same technique will work on earlier models.

Under the right side of your dash against the firewall is a plastic molding. That is your heater box. With your flashlight, while you have your head under there, have someone operate the heater control and the vent control. You can hear and maybe see where the flappers are located in the heater box. Take your flashlight and look into the blocked right side upper dash vent. You’ll probably see foam.

Now, on to the repair method that Earl Hungness did on Joan William’s Rialta.

1. Unbolt and remove the passenger seat to give yourself room to work. You will need to unplug the electrical connection under the seat that buzzes whenever the passenger seat is not facing forward in driving mode. Hint: Some of us never plug this connection back in.
2. Remove the plastic “junk” tray that rests on the floor in front of the gear selector and the panel under the radio (Picture 1).
3. You will need to cut through the plastic to access the diverter flaps. When you lie on your back and look up under the dash, you will see where to cut. A headlight strapped to your head works well for this task. A sharp utility knife will work, but a better tool might be the oscillating multi-tool (available at Harbor Freight for about $20) The hole will need to be large enough to get your hand inside to tape/glue the new cover over the flaps. (Picture 2)
4. Remove the buttons that change from heat to A/C to see the diverter flaps and what needs to be repaired. Once the piece is out you can look up and turn your dash dials and see the metal pieces move from air to heat. (Pictures 3 & 4)
5. If needed, remove the rest of the old foam with tweezers or whatever tool will fit in the space. You can also blow out the foam debris. The first flap has holes in it and the second flap is solid and farther up into the interior.
6. Remove the old adhesive with nail polish remover, turpentine or Goo Gone.
7. Multiple suggestions for replacement material are a thin sheet of craft foam or heat/cold resistant foil. Make sure it can be easily handled for the reinstall in those narrow confines. Adhesives used were PVC pipe cement and Dollar Store’s Fix-All adhesive followed up with HVAC Shurtape AF 100 181A-P/181B-FX aluminum tape for good measure.
8. Reinstall the lower panel, the junk tray and the passenger seat.
Summary file of repairing the dash flap – various sources and ideas

Repairing Dash Heater/AC Vent

Problem: First, the dash air conditioner and heater fan starts blowing pieces of foam out the ducts. Second, the dash air conditioning is no longer very cold. The foam has disintegrated to the point that the flaps which direct the airflow are no longer covered making the dash controls useless.

Solution: Repair the flaps. There appear to be two methods of restoring the flap function. The Robert Crouse method of taking the whole dash out to refoam the flaps (http://www.cccgis.com/Rialta/Dash.pdf) and the other is Gerry in KC method of cutting a hole in the heater box (RialtaTech@yahoo.com message 54219). Robert replaced his missing foam with a sticky-backed foam from a craft store; Gerry replaced his missing foam with tape, not with duct tape, but with professional HVAC ("alu tape that is used on home heating ducts")...Since Robert had his dash out, he was able to replace the foam with foam on the flap controlling the cold/hot (blue dot/red dot), the foam on the ventilation direction (windshield/footwell/footwell-face/face) and the power-operated recirculation (u-turn symbol). Gerry was able to replace the foam with tape on the cold/hot flap and the direction flap. Both placed their solution on both sides of the flap.

Procedure: I used the Gerry tape method. As advised, I removed the passenger seat for better access. I wore my head-mounted light so I could see under the dash. I removed the lower parts of the dash containing the footwell duct, the upholther and the storage recess. From Harbor Freight, I got a Chicago Electric Oscillating Multifunction Power tool with a one-inch wood/plastic saw blade. From a crafts store I got a Sharpie Paint pen in white. Using a three-inch spackling blade as a straightedge, I outlined the cutlines from Gerry's pictures. I used the photos from ev_update@yahoo.com 93 EV GL AC/Heater as guide. Orienting the photo so that the writing is on the bottom margin and the colored wire bundle is at the top makes it easier to see the layout. Once I made the cut I determined that the opening could have safely been made larger. (See my modification of the ev-update photo.) I made a second cut which made it relatively easy to get my hand in to place the tape on both sides of the flap. I creased the tape lengthwise to give it some rigidity, pulled away the backing to reveal the “sticky” on one end, placed the sticky end on the flap. With the tape then held in place, I removed the rest of the backing, pressing down on the tape. (Replacing two cut out pieces made closing the opening more difficult.) I suggest cutting the larger opening.

I used seven-inch pieces of HVAC Shurtape AF 100 181A-P/181B-FX on both sides of the cold/hot flap exposed by the cut and on both sides of the ventilation direction flap easily accessible with the lower dash removed. After testing the operation of the repaired flaps, I glued the removed pieces back into the heater box with PVC pipe cement and sealed with a bead of the Burt-recommended Dollar Store Fix-All Adhesive The Original Super Glue. (I also put a piece of the aluminum tape over the repair.)

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Showing tool in position
View with hole cut

Tape ready to install