Mercedes Benz 107 Cracked Heater Box Repair

Got Heat or AC System Problems?

Mercedes 107 Heat System / AC Problems and Remedies

- Heat, AC & Climate Control Manual
  - Heat - AC - Automatic Climate Control Service Manuals

Cracked heater box removal, repair and replacement in a Mercedes Benz R107

Here is what greeted owner, John Roncallo, when he removed the console and dash. Note the deteriorated defroster flap foam seal and the cracked heater box.
Here is the lower half of the heater box prior to any repairs. You can just see the cracked heater box at the top of the picture.
Another view of the top half of the heater box, prior to any repairs. The circled area is where the center pod mounts, and is visible when the radio is removed. Notice how a section of the heater box is completely nroken loose, and dislodged downward as to hide about 1/2 of the mounting rivets.

The two defroster vent flaps are visible in this picture as well. The actual vent ducts are attached to the underside of the dash, and lift away when the dash is removed.

Here the owner has removed the heater box (actually the front half of the top half) and turned it inside up. He then applied a thin sheet metal backing with blind rivets, to repair the cracked housing.
Here is the repaired housing from the front view. Note the size of the cracked portion of the housing, just visible around the two rivet holes. The larger hole to the left and a bit lower is where the vacuum line attaches to the pod after it is mounted inside.
Here is the repaired housing with the center pod mounted in place. This is a view of the Inside of the top 1/2 of the heater housing.

Here the repaired heater box is re-installed in the car, and the vacuum lines are attached. Now to put the rest of the car back together.

5 of the seven pods can be seen in this view. A careful observer can also pick out where the other two are by where the vacuum lines attach. Notice the def pod. See how the vacuum line tees at the center, and runs to the center pod. This shared vacuum line is why diagnosis is somewhat difficult. A leak in either renders both inoperative.

Note also the new foam seal installed on the def vent flaps. This is how a repair should be done. The foam hose lying across the right def duct is the ambient air sensor tube. This foam hose serves as a conduit for ambient air to be drawn across the sensor to regulate temperature. When this hose deteriorates, the sensor cannot sense the inside air and fails to regulate the temp and fan accordingly. Its replacement can be facilitated thru the glove box.