1973 Dodge Charger Heater Box Restoration

Tools and equipment required:

- Zip lock bags and marker pen
- Digital camera
- 1/4" socket set
- Circlip pliers (to remove main body clips)
- Glue solvent, pressure washer, wire wheel, paint
- Phillips screwdriver
- Rebuild kit

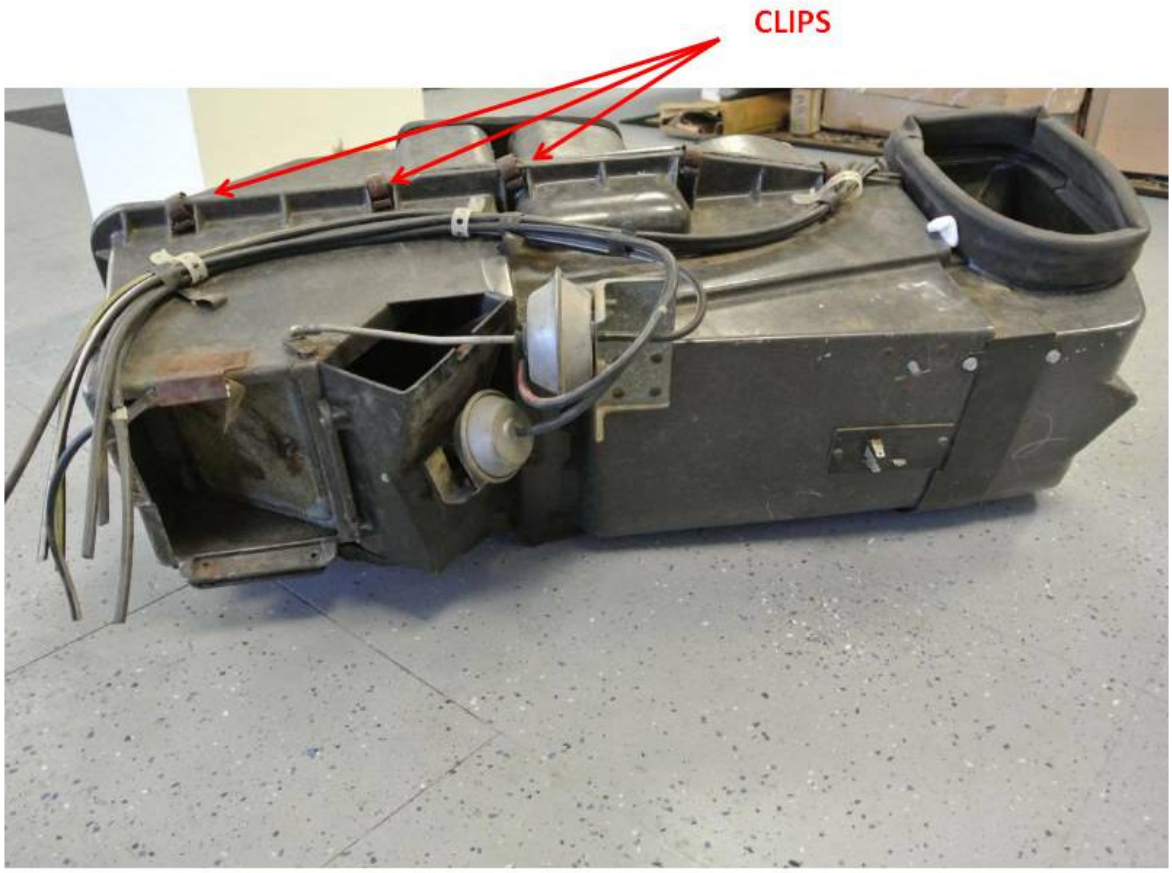
This job is not difficult, but you must be careful and methodical. Documentation is a must. Make sure you take plenty of digital photos. I bought my rebuild kit from DMT and it is a good one. It has all of the parts that you need and some instructions with it.

While the restoration pictured is that of a 1973 Dodge Charger, the principles outlined can well be applied to a variety of Mopars with this type of heater box.

Step 1: Disconnect tubing. Make sure you label it.

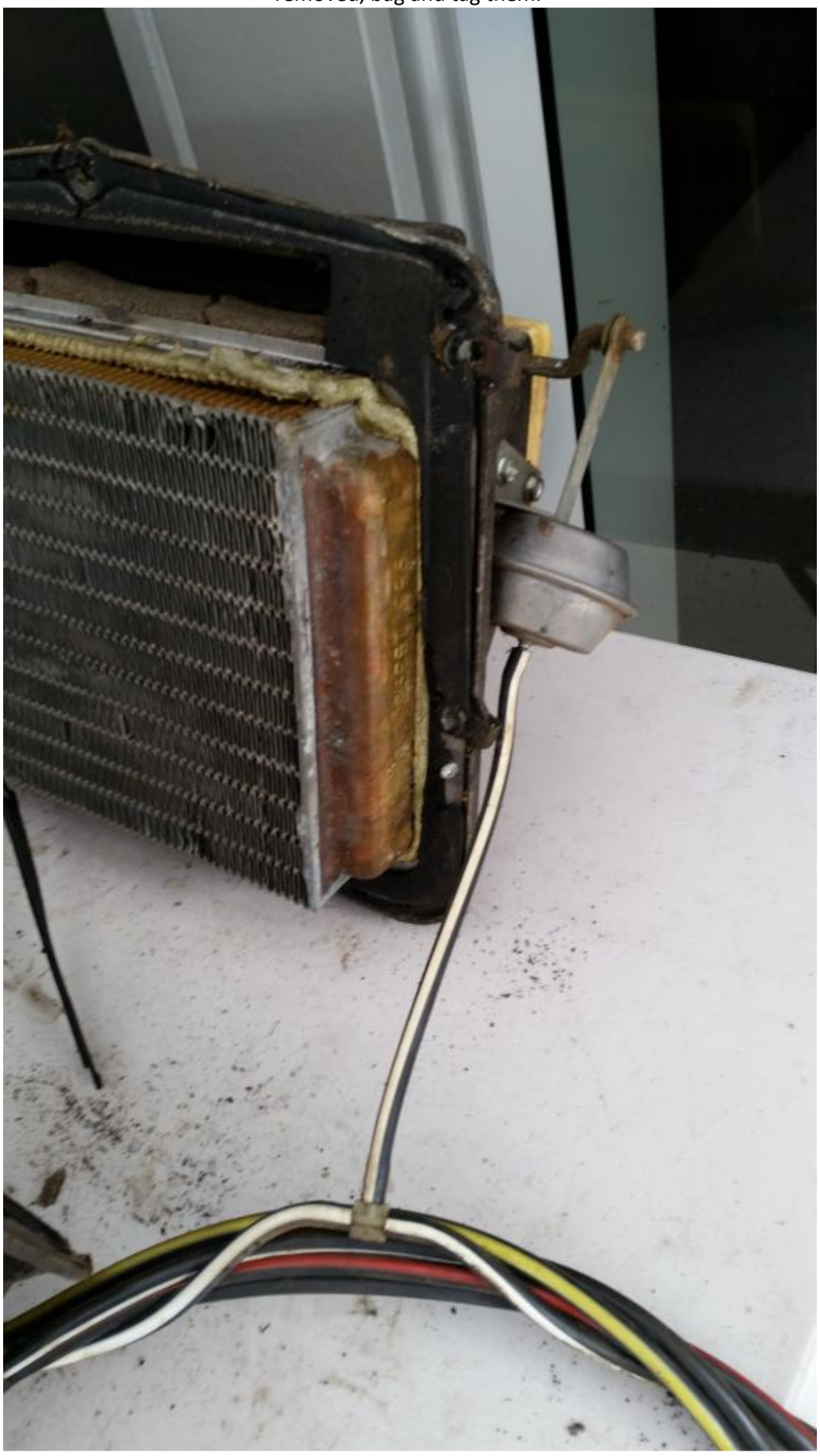
Step 2: Disassemble all of the plastic parts

Step 3: Remove the spring clips and gently pry open the two halves. They will be quite stuck as there is a gasket between the mating surfaces. They have been together for 40 plus years so it's no surprise.



It's important to note that the box is quite brittle and will break if forced, so be careful.

Step 4: Remove heater core and AC evaporator (if equipped). There are a series of screws holding this in place. When removed, bag and tag them.



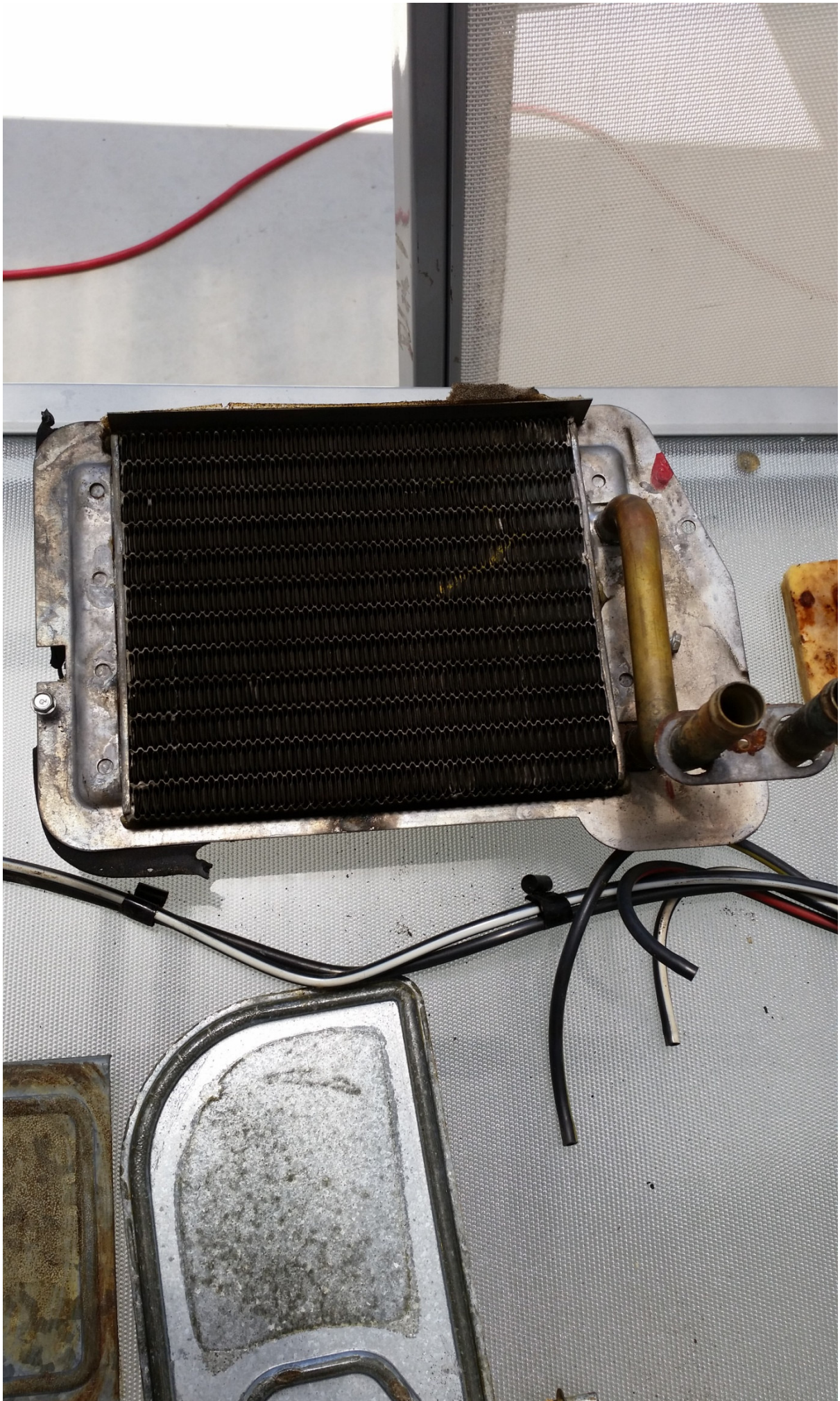
The inside of your box will undoubtedly look similar to this. Give it a good cleaning with a vacuum cleaner with brush attachment, compressed air dust gun and pressure wash gently to ensure that it is back to new condition. If these fins are blocked, it will reduce air flow and your AC will not function correctly.

Step 5: Strip all remaining items like actuators and brackets from the housing. Bag and tag them. Then thoroughly clean it. I used a couple of methods. First I pressure washed it (not heavy) and then to remove the stubborn gasket material, a blade and a light wire wheel. This box is brittle so go easy. This resto requires patience.

Step 6: Remove all the sticky residue from the internal doors which originally used to be for holding the old seals. I used Peel Off and it worked great. It is a citrus based product. Check out your local Home Depot for some glue solvent. After removal, use denatured alcohol to make sure you get it clean and free from oils and wax etc. It's essential for good adhesion for your foam. Apply all foam as per instructions supplied with your rebuild kit.

Step 7: Treat and paint all rusty brackets, actuators, screws etc.

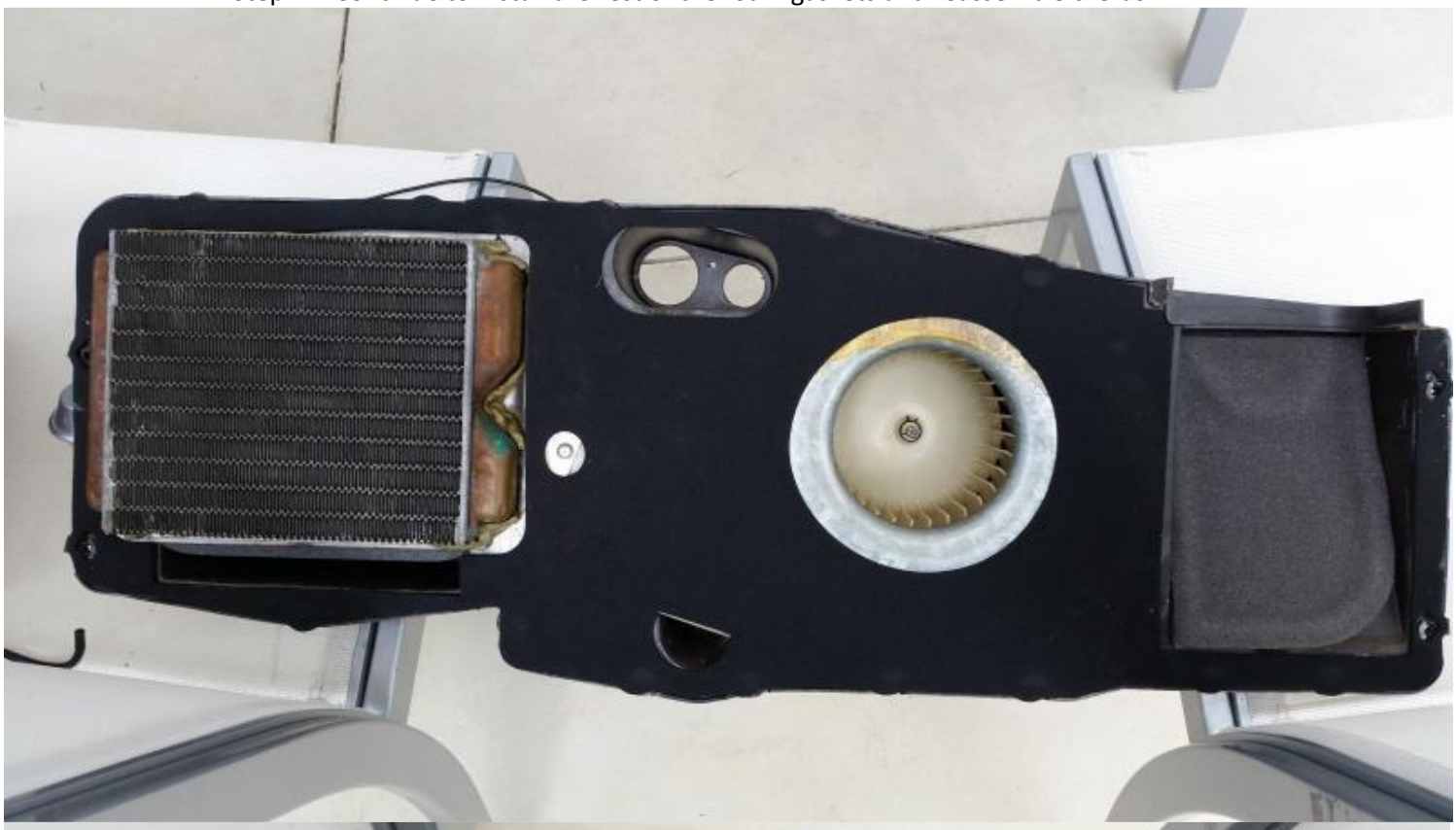
Step 8: Visually inspect and pressure test AC evaporator and heater core. This is done by charging the system with nitrogen and applying a pressure gauge to it and see if it holds pressure. Even better, take it to your local auto AC shop and get them to do it. Cost is about $40. Flush R12 freon out of evaporator so it can be replaced with R134a. You must never mix different refrigerants. This is also a good opportunity to straighten out any bent fins as well.

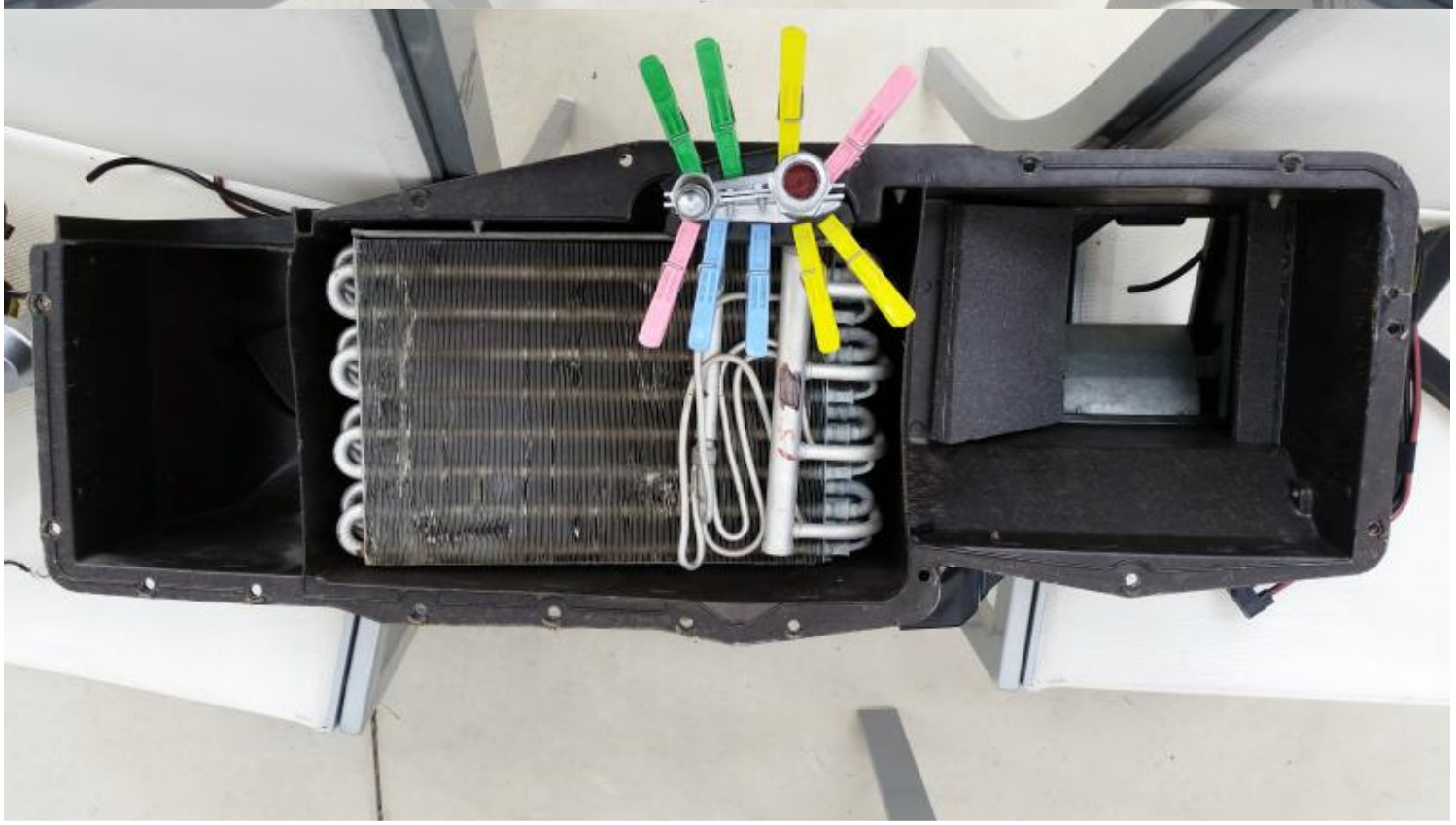


Step 9: Begin reassembly of the box. The best way to do this is to put the parts back in the reverse order that you removed them.

Step 10: Clean and paint fan motor. Clean the plastic fan as well as that will be very dirty. Test motor by hooking the positive and negative cables to a 12vdc power supply. It should spin freely. The motor has no bearings, only bushes, so should give no trouble. Then install the newly foamed internal doors. Before the main gasket is installed, make sure you install the caulk that comes supplied with the kit before the main gasket (pictured below)

Step 11: Continue to install the rest of the foam gaskets and reassemble the box.





Step 12: Re-install the heater core and evaporator. In my case, the box was quite weak and broken around the screw holes for the evaporator. The evaporator has a bit of weight in it and the jarring from driving would have caused this to happen.

I made a steel plate to install as a washer to mitigate the problem.

Step 13: Clean and reconnect the tubing. Inspect it for cuts and splits.

Step 14: Test with a vacuum pump for functionality. The way to do this is to get a small pump/vac from a camping store. They are very cheap and will allow you to perform this test. Hook up the heater control unit and plug in the tubing manifold that comes with the heater box. Push the pump tubing onto the venturi and turn it on. This will simulate the pressure supply from the intake manifold. Then just operate the heater controls and watch the doors move. Once you are happy that you have full functionality, reinstall into your car.

I hope this helps people who want to tackle this task. Good luck.