

Here are three causes for erratic fan speeds

1. Faulty resistor unit on the Fan.

For the first few years a faulty resistor was virtually the only cause of erratic fan speeds. They can still be at fault, but now that our Crossfires are getting older, faults with the control panel switching (HVAC panel) are increasing.

2. The rotary fan speed control knob.

A metal wiper on the back of the knob makes contact with a potentiometer on the HVAC circuit board. The electrical contacts can get dirty particularly if not used very often. If you're lucky – as I was, turning the switch quickly back and forth (Ignition switched off) cleaned up the switch contacts and it has worked well ever since. If this does not work the HVAC panel would need removing from the car and overhauling. The link here from the Benzworld forum shows how to do it.

<https://www.benzworld.org/threads/w210-climate-control-complete-disassembly-pot-repair-bulbs.2141945>

3. HVAC circuit boards poor connection.

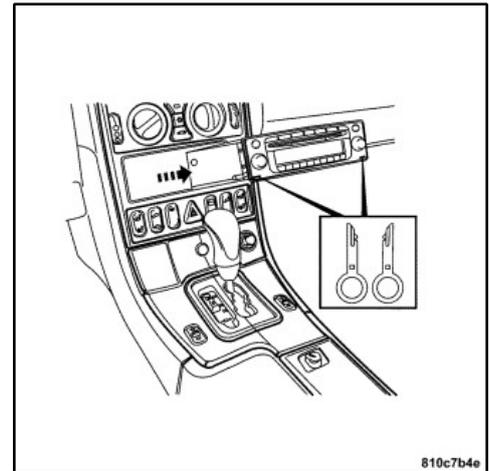
There are two circuit boards in the HVAC module which are connected by nine pin connectors. These pin connectors can occasionally work loose over time. The HVAC module needs to be removed and overhauled. A full description of this from the Crossfire forum shown here.

Chrysler Crossfire – HVAC Control Module Removal

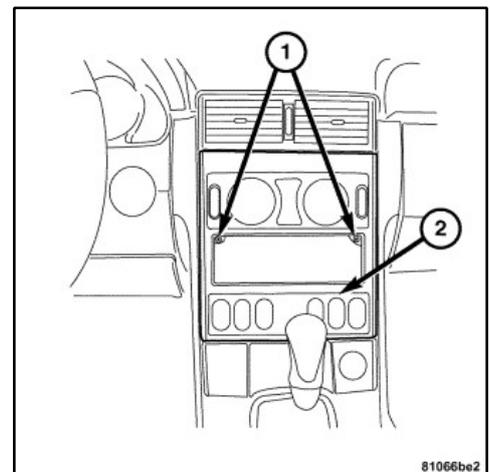
WARNING: On vehicles equipped with airbags, disable the airbag system before attempting any steering wheel, steering column, or instrument panel component diagnosis or service. Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the airbag system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the airbag system. Failure to take the proper precautions could result in an accidental airbag deployment and possible personal injury.

1. Record customer defined presets.

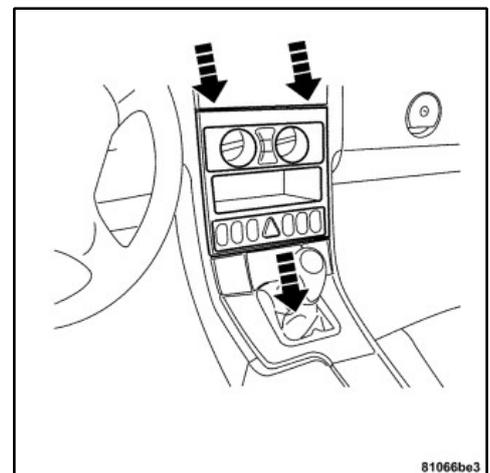
2. Disconnect the negative battery cable.
3. Remove the radio by performing the following:
 - Using Special Tool 3291 Radio Removal tool, insert the tools into the slots with the jagged edge toward the center of the radio until a slight click is heard.
 - Gently pull the rings on the radio tools to dis-lodge radio.
 - Pull the radio from the vehicle dash.
4. Disconnect the radio harness connectors.
5. Remove the radio from the vehicle.
6. To remove the radio tools, depress the flexible metal tabs on each side of the radio.



7. Remove the center console panel screws (1). Position aside the finish panel (2).

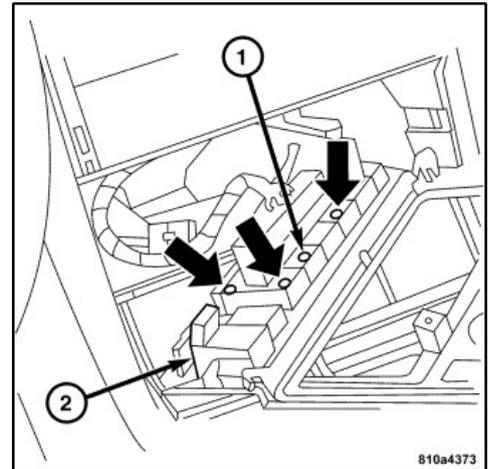


8. Pull the cover (1) toward the rear and pull it out at the top of the instrument panel (2 hooks).

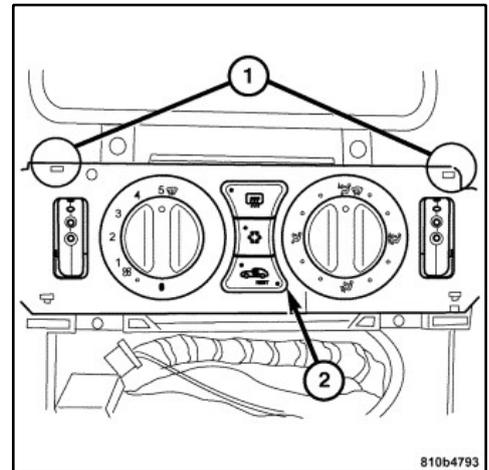


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9. Disconnect the console switch group at the catch lugs (2).
10. Remove the console switch group (1) from the cover.



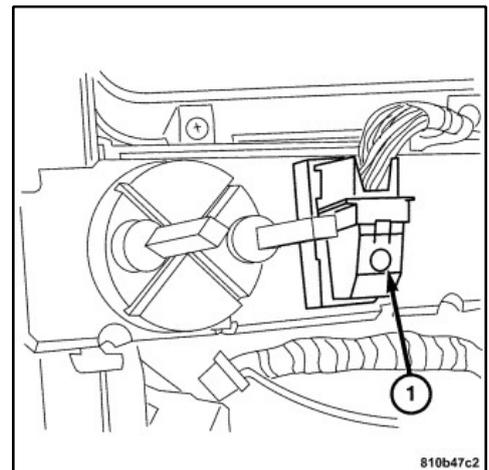
11. Pull out the A/C heater control module by pressing in the catch lugs (1) at the sides.



12. Disconnect the electrical connector (1) by swinging the retaining bow down.
13. Remove the A/C heater control module.

Heater/AC Speed Control Fix By CL770

One of the niggling issues I've had with my Crossfire is the erratic fan speed control for the climate control. First up I replaced the resistor unit on the fan, that didn't change anything (a waste of time). I've replaced the climate controller twice now without much success, as they both eventually failed. I purchased another unit from the wreckers last week, I went to install it today and it was faulty as well. So I finally made the effort to try and work out what was failing.



I've pulled a unit apart before and couldn't identify any obvious faults (dry joints, failed components etc), but today when I pulled another one apart I noticed something entirely

different. This time when I removed the front of the unit, the rear (horizontal) circuit board came out still attached to the front (vertical) circuit board with the controls on it.

The main issue I identified was the very poor contact provided by the 18 pin header and socket that attach the two boards electrically. When mounted in its case, the two circuit boards attach very loosely. When the unit is new, the contact is probably ok, but after you start to use the controls and drive the car around I bet the contact deteriorates over time and gets erratic. I've taken some pictures that show the issues, there are two main ones:



1. The front RHS of the rear circuit board hits part of the plastic surround of the front boardmounting, stopping it from fully pushing into the header socket. Fix - file some of the plastic away. Push the rear circuit board all the way into the header and apply some epoxy glue to hold it there.



2. There's a small locating pin at the rear of the external housing that locates the circuit board. Fix - cut it off with a Stanley knife, as it pulls the rear circuit board away from the front board when you mount it in the housing. You could also apply some more epoxy here once you put it all back together.



If you fix both the issues above you will get much better electrical contact between the front and rear circuit boards through the header and pins. I modified all three of my faulty units today, they now all work like new.