

# Air Conditioner / HVAC W203 Stepper Motor Repair

## PART 3 OF 3

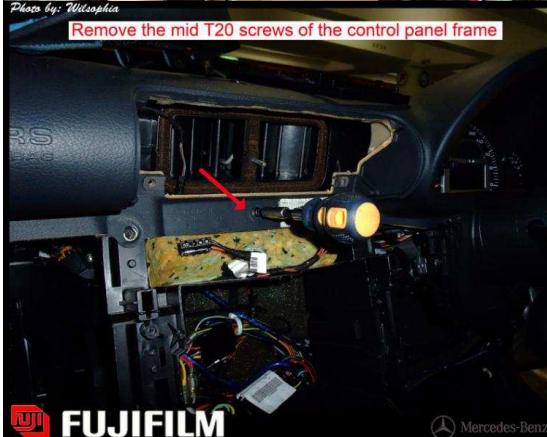
<http://mbworld.org/forums/c-class-w203/177068-noisy-air-conditioner-stepper-motor-replacement-clicking-hissing.html>

<http://mbworld.org/forums/c32-amg-c55-amg-w203/449471-famous-ac-clicking-noise-ac-footwell-damper-linkage-replacement-diy-details-steps.html>

Great BIG thanks to [Racin\\_fool](#), [liveniceguy](#) and [Wilsophia](#) for the write up and pictures!!!

### Upper Dash Removal page 25

15. By doing this, you can now remove the vents on each side of the center console and set them aside. They are long black plastic air tubes. Now taking the flat tipped screwdriver (you may need a slightly larger/longer one), you can pop the two tabs that hold the black cage to the dash support. Remove it and set it aside.





16. Now if you are in a well lit area, you can see the A/c stepper motor now exposed behind the inner dash support/brace on the left side. Picture where the radio was and now look up and left of it and behind the brace. It is held in place with (3) small silver screws and has the broken linkage between it and the main A/c / heater case. Remove the screws and you should be able to maneuver it around and unplug it. Remove it and you will find that the linkage is either cracked where it connects to this stepper motor or will have fallen off already and shown you what was wrong.

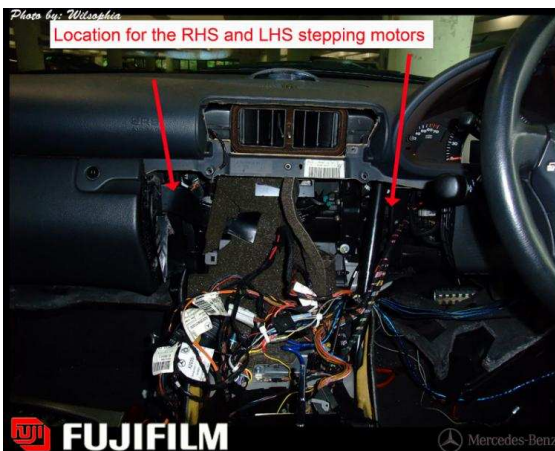
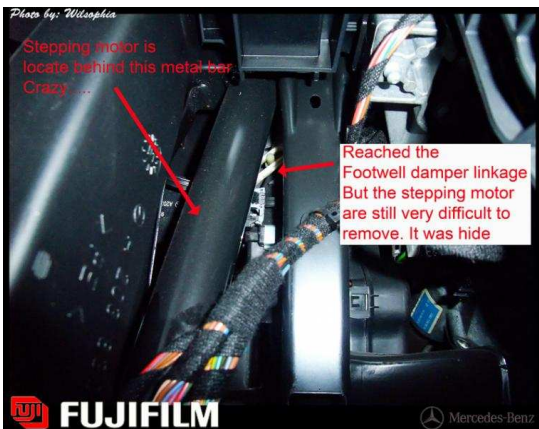




Photo by: Wilsophia



Stepping motor is locate behind this metal bar Crazy.....

Reached the Footwell damper linkage But the stepping motor are still very difficult to remove. It was hide

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This is one of the stepping motor. Don't be happy.....

The stepping motor for the footwell damper is hide inside here..... Good luck

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3 x T20 mounting screws for each stepping motor. It is 1 of 3, they are hide inside some structure or air duct which cannot be removed easily. Try the best to remove. You cannot return.....

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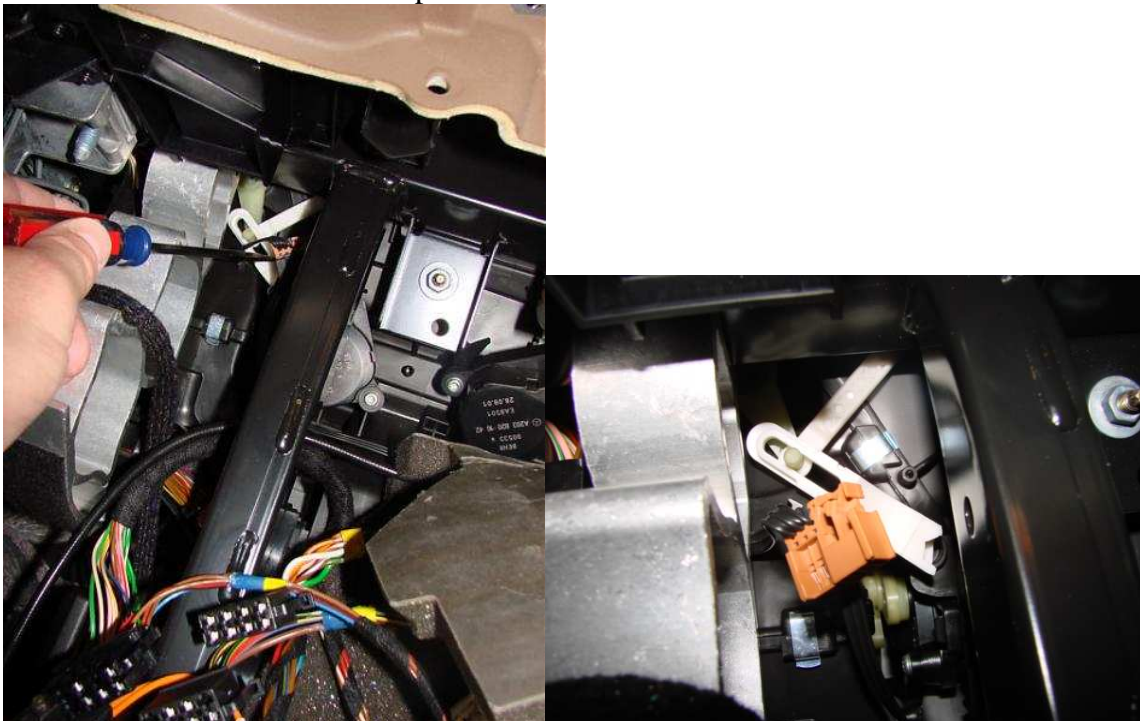
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17. After reinstalling everything, and getting everything back together, make sure you have no extra screws and that everything is functioning as normal. To normalize the A/c stepper motors, hold down the Recirc and Front windshield buttons for about 10 seconds or until they both start flashing back and forth. When they are done flashing and you have confirmed everything is working, you are done.

Additional comments for step....

After you replace the new linkage connect the wires back to the radio trim. Turn the ignition on and resync the stepper motors. I made the mistake in putting the dash back together to find out I had a linkage broken and a stepper motor broken as well. I had to go back into the dash to find and replace it.





*Photo by: Wilsophia*

After replace the linkages, Connect the AC panel (2 plugs). Turn the ignition key to "On" position, Re-sync all the dampers by pressing and holding both "Fresh air" and "Windscreen" buttons for 10 secs. They will flashing for 30 secs and stop Turn off the ignition key and wait for 2 mins. Restart the Car and AC to function test on all the dampers. See if anything wrong. There is no harm to turn on the ignition if you manage all the wiring well..... Good luck



Stepper Motor M2/19 With the Purple Connector and the one with the Green Connector Located Right Behind Your Headunit doesnt have a Regular Linkage like all the rest of motors-- has the Plastic Gear Thing-e! (Actually called Linkage -- Footwell flaps PN A203-830-00-32)



Broken linkage



## **UPPER DASH REMOVAL**

continuing from the initial instructions, you start removing the bolts holding the steering wheel to the frame. Take out the instrument cluster with a belt coat hanger, remove shell inside there. Continue removing bolts holding frame to the body.

Once steering wheel is dropped, you can remove the glove box. Remove side vents. Unbolt the pass. side airbag but dont unplug it. The top dash cover is held on by screws all the way around the bottom and then just two on top. Don't worry about the center

vent. The last two on top and under plastic pieces near the edges of the vent.

Lift that out, then by now the frame should be loose. The last bolt holds it to the firewall.

Get out, pop the hood and raise the hood to the higher position. Use that air ratchet to remove the wipers. Then 4 torx screws holding the plastic liner in. Take that out and then continue unbolting the wiper system. You might want to take a picture of it at this point so you install it in the same position.

With that out, there is a 10mm screw with a very larger washer below it. Remove that and the frame should be loose now. You now have access to the steppers. Also I was looking in the wrong spot. The larger center box that the easily accessible steppers are on in the AC. The other two steppers are attached here also but up and to the left.

### Old vs New linkage arms as of 12/2010





Photo by: Wilsophia

