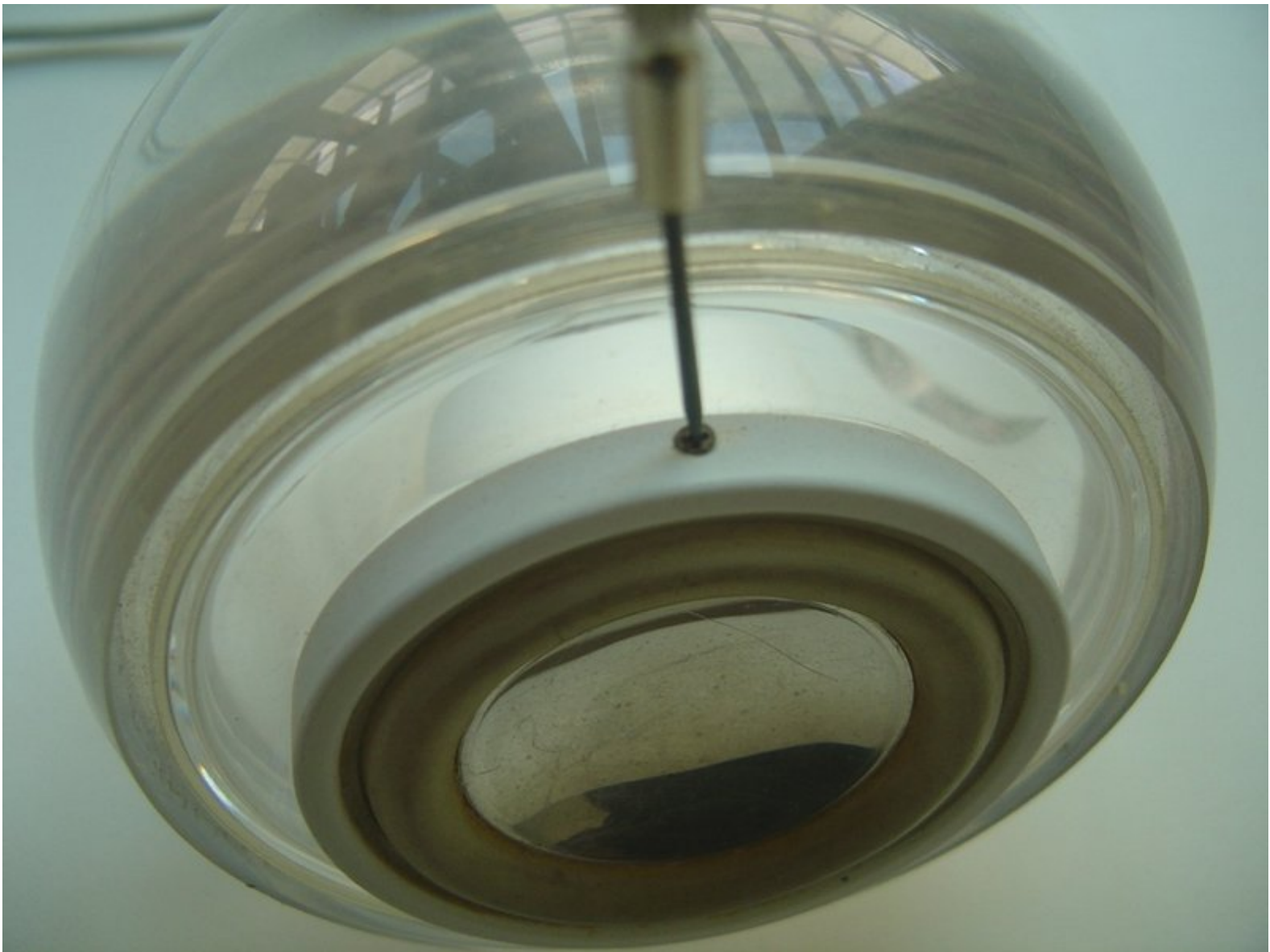




Repairing Apple Pro Speakers Loose Cone

If your speakers make a weird bass sound, maybe they have a loose cone. A bit of glue and handwork can solve this.

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INTRODUCTION

Everything started when I bought an iMac G4 Flat Panel, in 2013. Yes, it's an old machine, dated Early 2003, but I couldn't resist that beautiful design. Yes, it's a PowerPC-driven machine, so what?. That's what I said to the seller - people who buy this computer aren't concerned about performance. And now, it seats nicely, alongside an iMac 21,5" and a MacBookPro 13". What a cute family!

The guy who sold me this G4 was extremely carefull about it. Even beeing 10 years old, the machine was in pretty good shape. There was only one issue: the speakers (in fact, only one of them).

This computer came with Apple Pro Speakers. These are powered by Harmann-Kardon drivers and sound spectacular - so spectacular that, during a party, the former owner pushed the volume too far and one of the speakers started to sound like "plof, plof", when reproducing bass sounds. He told me that, in order to have a decent sound, I should use the iTunes equalizer and keep the lower frequencies attenuated. It worked, but that was only a workaround.

So, I decided to put my hands on the problem. As the speaker was working, these were good news - there was nothing wrong with the electrical parts (the coil, mainly). The problem should then be mechanical. I started to look for a loose cone. And that was the problem.

It seems that, when the speaker was put to sound too loud, the cone got unglued from its rubber surround, and this got unglued from the metal frame. Without this suspension properly glued, the cone was making very wide outward movements, when reproducing bass frequencies, generating that weird "plof plof" sound.

In order to fix this, I decided to remove the driver from its housing, but that turned out to be totally unnecessary - it's possible to fix this without removing a single screw. But I had already done it, so this guide shows pictures of the speaker off of its case. Nevertheless, if one decides to take the speaker apart (in fact, it's easier to work on it this way), just follows these steps.



TOOLS:

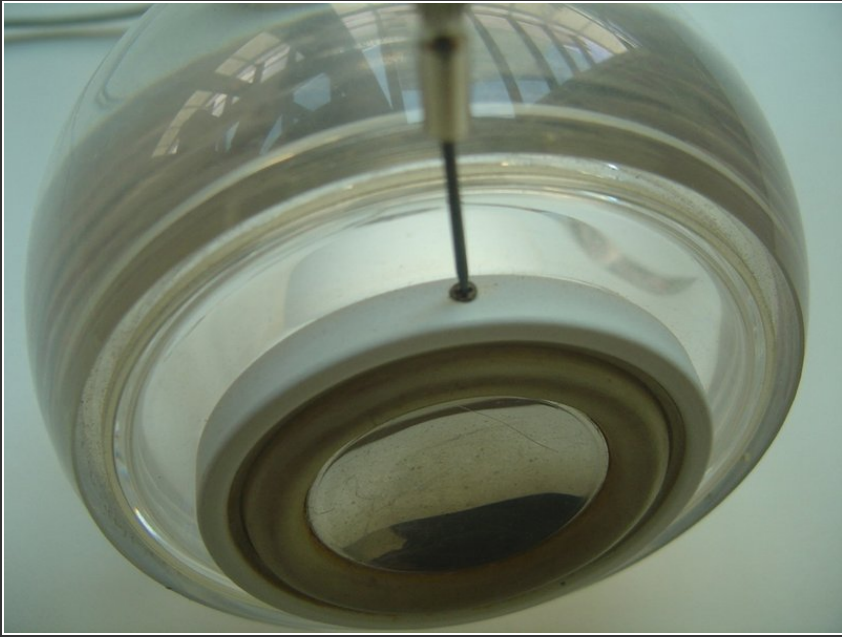
- [Phillips #0 Screwdriver](#) (1)



PARTS:

- [Contact glue](#) (1)

Step 1 — Repairing Apple Pro Speakers Loose Cone



- Using a small Philips screwdriver, gently unscrew the 3 screws sitting around the speaker (if yours have a grill, remove it, first).

Step 2



- Gently pull the driver off. There's a black rubber gasket lying between the driver and the housing. Pay attention not to rip it.

Step 3



- In order to make some room to work, it's necessary to pull some wire off. Pinch the wire inside the housing with two fingers and (again) gently pull it some 2-3 inches. It's not easy, but it will come out, little by little. A small amount of silicone spray in the metal ring, in the back of the housing (where the wire comes in) may help.

Step 4



- Look for unglued sectors of the rubber ring around the metal frame.

Step 5



- Use a small amount of contact glue. I used a thin wood stick as a tool. Follow the glue instructions. The picture shows a small piece of carton paper holding the rubber, while glue is applied.

Step 6



- Sometimes, the cone also gets unglued from the rubber ring. The procedure is the same - use contact glue.

Put everything back together, following the steps in the reverse order: gently pull the wire in the back of the housing (allow some loose wire inside the housing, don't let it too tight), put the driver in it's place and put the screws back.

Be patient and allow the glue to get dry, according to the instructions.

Hope it sounds better, now! Mine does.