iPhone 6 Earpiece Speaker Replacement

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Introduction

If you have to use speakerphone to get audio in a phone call, you may need to replace your earpiece speaker. Use this guide to replace a dead or dying earpiece speaker in your iPhone 6.

You can also use this guide to replace the following parts:
- Earpiece Speaker Bracket
- Front Panel Assembly Cable Bracket

## Tools

- P2 Pentalobe Screwdriver iPhone
- iSclack
- Phillips #000 Screwdriver
- iFixit Opening Tools
- Suction Handle
- Tweezers

## Parts

- iPhone 6 Earpiece Speaker Bracket
- iPhone 6 Front Panel Assembly Cable Bracket
- iPhone 6 and 6 Plus Earpiece Speaker Mesh

### Step 1  Pentalobe Screws

⚠️ Before disassembling your iPhone, discharge the battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally punctured.

- Power off your iPhone before beginning disassembly.
- Remove the two 3.6 mm Pentalobe screws next to the Lightning connector.

### Step 2  iSclack Opening Procedure

ℹ️ The next three steps demonstrate using the iSclack, a great tool for safely opening the iPhone 6 that we recommend for anyone doing more than one repair. If you aren't using the iSclack, skip down three steps for an alternate method.

- If the plastic depth gauge is attached at the center of the iSclack, remove it now—it's not needed for larger phones like the iPhone 6.
Step 3

- Close the handle on the iSclack, opening the suction-cup jaws.

- Place the bottom of your iPhone in between the suction cups.

- Position the iSclack’s upper suction cup against the display, just above (but not covering) the home button.

- Open the handles to close the jaws of the iSclack. Center the suction cups and press them firmly onto the top and bottom of the iPhone.

Step 4

- Hold onto your iPhone securely and close the handle of the iSclack to separate the suction cups, pulling the front panel up from the rear case.

- The iSclack is designed to safely open your iPhone just enough to separate the pieces, but not enough to damage the display cables.

- Peel the two suction cups off your iPhone.
Step 5  Manual Opening Procedure

- If you don't have an iSclack, use a single suction cup to lift the front panel:
  - Press a suction cup onto the screen, just above the home button.
  
  Be sure the cup is pressed securely onto the screen to get a tight seal.

Step 6

- While holding the iPhone down with one hand, pull up on the suction cup to slightly separate the front panel assembly from the rear case.

  Take your time and apply firm, constant force. The display assembly is a much tighter fit than most devices.

- Using a plastic opening tool, begin to gently pry the rear case down, away from the display assembly, while continuing to pull up with the suction cup.

  There are several clips holding the front panel assembly to the rear case, so you may need to use a combination of the suction cup and plastic opening tool to free the front panel assembly.
**Step 7**

- Pull the plastic nub to release the vacuum seal on the suction cup.
- Remove the suction cup from the display assembly.

**Step 8**  
**Opening up the phone**

- Open the iPhone by swinging the home button end of the front panel assembly away from the rear case, using the top of the phone as a hinge.

  - Several clips along the top edge of the front panel form a partial hinge.

  - During reassembly, align the clips just below the top edge of the rear case. Then, slide the front panel upward until its top edge is flush with that of the rear case.
**Step 9**

Open the display to about a 90° angle, and lean it against something to keep it propped up while you’re working on the phone.

In a pinch, an unopened canned beverage works well for this.

Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.

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**Step 10** Removing the battery connector bracket screws

Remove the following Phillips screws from the battery connector bracket:

- One 2.2 mm screw
- One 3.2 mm screw
Step 11

Remove the metal battery connector bracket from the iPhone.

Step 12  Disconnecting the battery connector

Use a plastic opening tool to gently pry the battery connector up from its socket on the logic board.

⚠️ Take care to only pry up on the battery connector, and not the socket on the logic board. If you pry up on the logic board socket, you may break the connector entirely.

Step 13  Removing the front panel assembly cable bracket screws

Remove the following five Phillips screws securing the front panel assembly cable bracket:

- Three 1.2 mm screws
- One 1.7 mm screw
Incorrect placement of these screws during reassembly will cause permanent damage to your iPhone's logic board.

Step 14

- Remove the front panel assembly cable bracket from the logic board.

Step 15

- In the next four steps, take care to pry up only on the cable connectors, and not on their sockets on the logic board.

- Use a spudger or a fingernail to disconnect the front-facing camera and sensor cable connector.
Step 16

- Use a spudger or a fingernail to disconnect the home button cable connector.

Step 17

- Make sure the battery is disconnected before you disconnect or reconnect the cable in this step.

- Use a spudger or a fingernail to disconnect the display data cable connector.

- When reassembling your phone, the display data cable may pop off its connector. This can result in white lines or a blank screen when powering your phone back on. If that happens, simply reconnect the cable and power cycle your phone. The best way to power cycle your phone is to disconnect and reconnect the battery connector.
Step 18

Use the flat end of a spudger to disconnect the digitizer cable connector.

When reconnecting the digitizer cable, **do not press the center of the connector**. Press one end of the connector, then press the opposite end. Pressing in the center of the connector can bend the component and cause digitizer damage.

Step 19  Separating front panel assembly and rear case

Remove the front panel assembly from the rear case.

Step 20  Earpiece Speaker

Remove the following Phillips screws from the earpiece speaker/front-facing camera bracket:

- One 2.3 mm screw
Step 21

Remove the earpiece speaker/front-facing camera bracket from the front panel.

Step 22

Lift the front-facing camera out of its recess in the front panel.
Step 23

- Holding the front-facing camera out of the way, remove the earpiece speaker from the front panel.

⚠️ Try not to touch any of the contacts on the speaker or the cable—skin oils can damage them and interrupt the connection. If you touch them by mistake, clean them with a little isopropyl alcohol and give them a few moments to air dry.
Holy crap, ordered the replacement speaker and the $24 tool kit, followed this website and in 15 minutes (plus a baby diaper change in the middle) my wife's iphone 6 was working through the ear piece again! Super informative instructions - I like the color code on the screw sizes so I could sort them in trays during removal. Thank you iFixit! You saved me hundreds of dollars! The hardest part was snapping the cable connectors back in, I was very cautious not to force them in but other than that it was a breeze.

Jesse Michalski - 12/22/2015

What kit would you recommend me?

ceaggar - 02/19/2017

My husband dropped his iPhone 6 in a glass of water. He immediately pulled out, dried it and put it in a glass with rice. He tried to arrest him but did not work. He opened it and had water. It dried, he reassembled but did not detect the SIM card. The phone works but is not heard nothing.

Ivonnne - 03/26/2016

I just changed the ear speaker on my iphone 6. The damage was caused by water. After the replacement and a full factory reset the ear speaker is still not working. I read that it could be the cable however the camera, proximity sensor and everything else seems to be working, only the ear speaker still doesn't work. Any ideas?
Thanks

AI - 10/04/2016

Hey, I'm a technician.
I bought an iPhone 6 that the receiver (ear piece) and headphone jack didn't work. Replace the two parts about 2 times. I'm sure the problem is in the logic board.
Is there any way to fix it?
Thanks
Carlos
Is there any way to clean if I accidentally touched the contacts? I missed the last warning on the step by step and now the earpiece doesn't work.

Jose FERRER FUENTES - 12/21/2016

Methylated spirits will do it.
Use a very small amount on the corner of a lint-free cloth.
At a pinch you can use paper kitchen towel or one of those cotton earbud things. Whatever happens make sure that you don't accidentally leave any lint behind.
Don't let excess solvent flow anywhere except on the contacts. In fact, don't let it "flow" anywhere. You need enough on your cloth to whet the contact that needs to be cleaned but not so much that it is at risk of running off and getting into places you don't want it to.
Other solvents suitable for use on electrical contacts will also do but avoid any that leave a residue behind. Confusingly, it is often products labelled as 'Contact Cleaner' that leave a residue.

Tony Colliver - 01/16/2017

my iPhone 6 microphone not working when i calling some one even i on the microphone but the when i am using headphone is ok no problem.

Nasiralam Ansari - 01/30/2017

If you know what you are doing and are confident with dealing with this kind of hardware you can jump straight from step 8 to step 20 and complete this repair in a lot fewer steps.
If you are not 100% confident or otherwise the slightest bit concerned I recommend you follow every step in these instructions - they are the best on the net.
I didn't have any available, but I recommend the use of non-magnetic tools - especially tweezers - wherever possible when undertaking this repair due to the very strong magnet in the earpiece. Obviously you will have to use a metal screwdriver for the screws, but when it comes to the delicate micro-positioning of the replacement earpiece itself your life will be a lot easier than mine was if you employ plastic tools. Still, it is clearly possible with all metal tools, just a tad more fiddly and a tad more time-consuming. (But why make your life any more difficult than it truly has to be. :-) )

Tony Colliver - 02/06/2017

Followed step by step. I'm have some experience in repairing electronics. Turned on phone, has vertical lines all down the screen. Looked into and says ribbon connections not clean or connected but after 4 attempts to rectify same deal. Don't get me started about those screws either. Apart from speaker issue, phone was good as new and on ebay but pulled it off to fix speaker. Not saying it's the instructions at all but bricked a perfect phone or have to take it to those awful repair places in the shopping centres.

geoff edkins - 03/02/2017

Thank you very much. Worked like a charm. Replaced earpiece and frontcamera.

tommybak - 03/18/2017
SUMMARY: Clean the earpiece grill with alcohol/q-tip AND A needle tip before replacing quiet earpiece
So. I bought a used iphone 6. Installed a plastic screen protector (expensive self healing kind) and then gave it to my mom. She complained that the earpiece was very quiet... and indeed it was. I immediately thought I had damaged the iphone earpiece when I used water to install the screen protector so I order a new one online. Install the new earpiece speaker. Still soft... Look up online... common problem, they suggest cleaning with alcohol/q.tip. I do this several times, disassemble and reposition speaker, reassemble... STILL SOFT. At this point I'm about to throw in the towel... However, Last ditch effort, I disassemble the earpiece and using the tip of a steel needle/pin, i gently scratch the speaker grill from the inside to scrape out any particles. IT WORKS. you need the needle because alcohol alone may not dissolve the crud that is blocking the earpiece grill. Just a suggestion.

garbage911garbage - 03/21/2017

Good guide!

Fredrik Osalan - 03/22/2017

so i did a battery swap, andi think i tore a cable near the top mic because i cant hear nothing when i receieve a phone call, speaker phone is working fine
will this kit have the right cable needed or do i need a different part

faiz rahman - 05/13/2017

If it’s just a torn cable, you can try replacing it with this part using this guide.

Jeff Suovanen - 05/15/2017

I think I might have messed up my gold connectors by touching them with my fingers. Any suggestions?

jorel rosario - 09/03/2017

Excellent guide. The ear piece works again and it took less than 30 minutes to complete the replacement

Sten Andersson - 09/12/2017

My ear speaker volume is slowly decreasing. Replacing it didn’t help, and neither did a cable swap help. Perhaps the volume toggle switch, but it works fine in other modes. Any suggestions? I have an iPhone 6.

james corby - 12/04/2017

my ear piece speaker volume has been slowly decreasing in my iPhone 6. Replacing the speaker and switching out a new connecting cable didn’t help. Any suggestions?

james corby - 12/04/2017

I dropped my wife's iphone 6, and the earpiece stopped working. Enter ifixit! Who knew it could be so easy?!
Thanks for the detailed instructions and thanks for saving my hundreds on a new iPhone!!

Hejal Patel - 12/08/2017