

iPhone 6 Speaker Replacement

Use this guide to replace a broken speaker in...

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INTRODUCTION

Use this guide to replace a broken speaker in your iPhone 6.

This guide instructs you to remove the front panel assembly; this is intended to prevent accidental damage to the display cables while you work. If you feel comfortable supporting the display carefully while removing the speaker from the iPhone, you can skip the display removal and go directly to the speaker removal steps.

TOOLS:

Anti-Clamp (1)
P2 Pentalobe Screwdriver iPhone (1)
Phillips #000 Screwdriver (1)
iFixit Opening Tool (1)
Suction Handle (1)
Tweezers (1)
Spudger (1)

PARTS:

iPhone 6 Loudspeaker (1) iPhone 6/6s Antenna Interconnect Cable Clip (1)

Step 1 — Pentalobe Screws



- A Before disassembling your iPhone, discharge the battery below 25%. A charged lithiumion battery can catch fire and/or explode if accidentally punctured.
- Power off your iPhone before beginning disassembly.
- Remove the two 3.6 mm-long
 P2 Pentalobe screws next to the
 Lightning connector.

Step 2 — Anti-Clamp instructions







- (i) The next two steps demonstrate the <u>Anti-Clamp</u>, a tool we designed to make the opening procedure easier. **If you aren't using the Anti-Clamp, skip down three steps for an alternate method.**
 - (i) For complete instructions on how to use the Anti-Clamp, check out this guide.
- Pull the blue handle backwards to unlock the Anti-Clamp's arms.
- Slide the arms over either the left or right edge of your iPhone.
- Position the suction cups near the bottom edge of the iPhone just above the home button—one on the front, and one on the back.
- Squeeze the cups together to apply suction to the desired area.
 - (i) If you find that the surface of your iPhone is too slippery for the Anti-Clamp to hold onto, you can <u>use tape</u> to create a grippier surface.







- Pull the blue handle forwards to lock the arms.
- Turn the handle clockwise 360 degrees or until the cups start to stretch.
 - (i) Make sure the suction cups <u>remain aligned with each other</u>. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
- Insert an opening pick under the screen when the Anti-Clamp creates a large enough gap.
 - if the Anti-Clamp doesn't create a sufficient gap, rotate the handle a quarter turn.
 - **Don't crank more than a quarter turn at a time**, and wait a few seconds between turns. Let the Anti-Clamp and time do the work for you.
- Skip the next three steps.

Step 4 — Manual Opening Procedure



- If you don't have an <u>Anti-</u> <u>Clamp</u>, use a single suction cup to lift the front panel:
 - Press a suction cup onto the screen, just above the home button.
- i Be sure the cup is pressed securely onto the screen to get a tight seal.
- i If your display is badly cracked, covering it with a layer of clear packing tape may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken screen.



- 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.
- i 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.





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

Step 7 — 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.
 - ② 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.







- 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.
 - i 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.

Step 9 — 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
- i During your repair, keep track of each screw and make sure it goes back exactly where it came from to avoid damaging your phone.



 Remove the metal battery connector bracket from the iPhone.

Step 11 — **Disconnecting the battery connector**



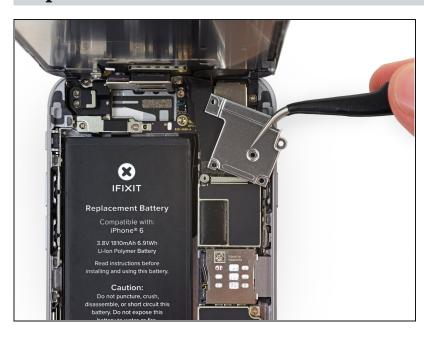
- Use a plastic opening tool to gently pry the battery connector up from its socket on the logic board.
- ⚠ Take care to only pry up on the battery connector, and not the socket on the logic board. If you pry up on the logic board socket, you may break the connector entirely.

Step 12 — Removing the front panel assembly cable bracket screws

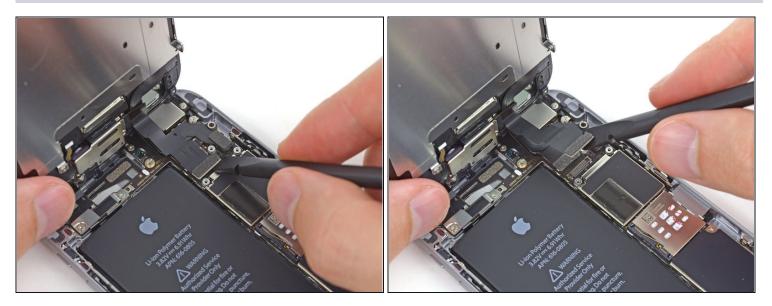


- Remove the following five Phillips screws securing the front panel assembly cable bracket:
 - Three 1.2 mm screws
 - One 1.7 mm screw
 - One 3.1 mm screw
- ⚠ Incorrect placement of these screws during reassembly will cause permanent damage to your iPhone's logic board.

Step 13



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

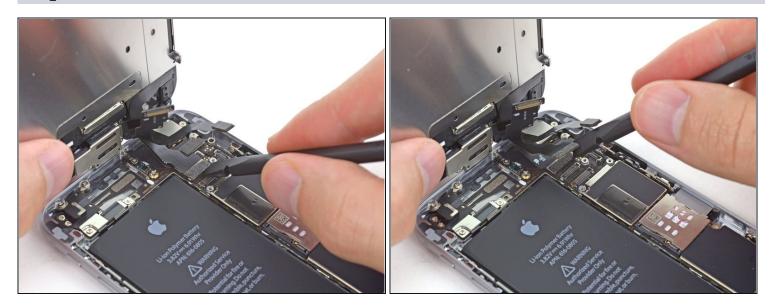


- ⚠ In the next four steps, take care to pry up **only** on the cable connectors, and not on their sockets on the logic board.
- Use a spudger or a fingernail to disconnect the front-facing camera and sensor cable connector.

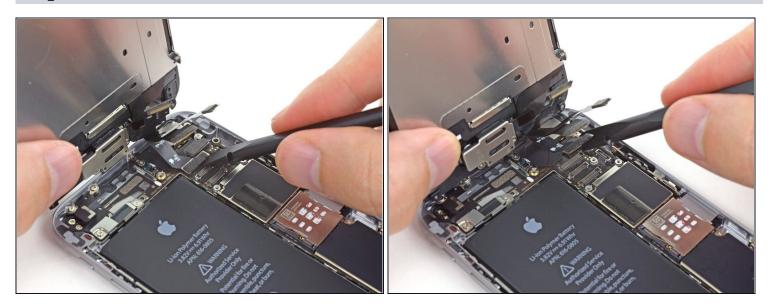
Step 15



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

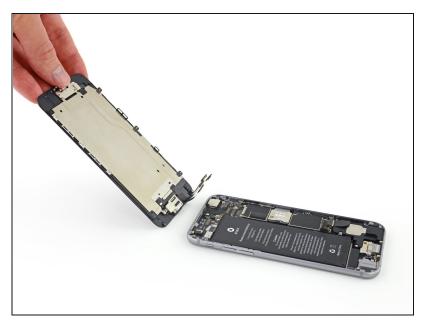


- ⚠ Make sure the battery is disconnected before you disconnect or reconnect the cable in this step.
- Use a spudger or a fingernail to disconnect the display data cable connector.
- When reassembling your phone, the display data cable may pop off its connector. This can result in white lines or a blank 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.



- 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 18 — Separating front panel assembly and rear case



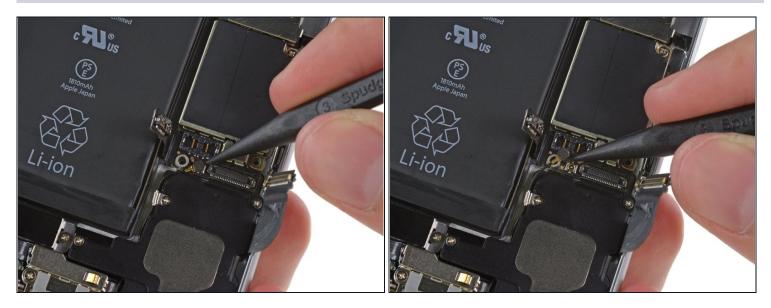
• Remove the front panel assembly from the rear case.

Step 19 — Speaker



• Use the flat end of a spudger to disconnect the Lightning connector assembly cable and fold it out of the way of the speaker.

Step 20



• Use the point of a spudger to lift the antenna cable connector up off of its socket on the logic board.



- Remove the following four Phillips screws securing the speaker:
 - Two 2.9 mm screws
 - Two 2.3 mm screws

Step 22



 Use the point of a spudger to push the antenna interconnect cable clip off of the speaker housing.



- Use the tip of a spudger to pry the speaker up and out of the rear case.
- Remove the speaker from the iPhone.

To reassemble your device, follow these instructions in reverse order.