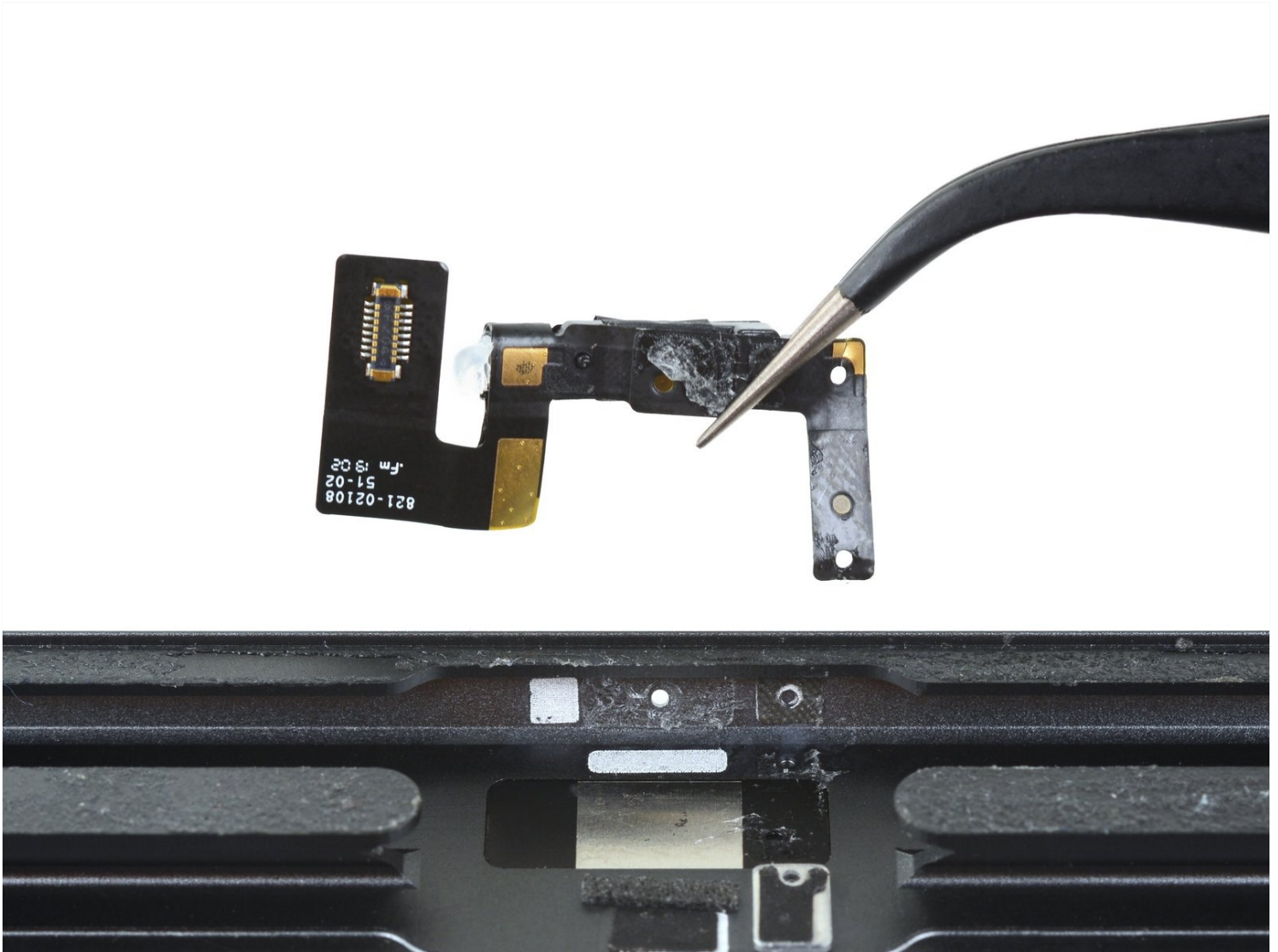




iPad Air 3 Top Microphone Assembly Replacement

Follow this guide to replace the top microphone...

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INTRODUCTION

Follow this guide to replace the top microphone assembly in an iPad Air 3 for both Wi-Fi and cellular models.

The assembly includes two microphones—one points towards the back and one points upwards. The cable is strongly glued in place.

Some photos in this guide were taken from a previous model. There are small differences between models, but the overall procedure is very similar.



TOOLS:

[Anti-Clamp](#) (1)
[Suction Handle](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[Battery Blocker](#) (1)
[iOpener](#) (1)
[Tweezers](#) (1)
[Phillips #00 Screwdriver](#) (1)
[Spudger](#) (1)
[Isopropyl Alcohol](#) (1)
[Packing Tape](#) (1)
[Safety Glasses](#) (1)
[Deck of Cards](#) (1)
[Coffee Filters or a lint-free cloth](#) (1)



PARTS:

[iPad Air 3 Adhesive Strips](#) (1)

Step 1 — Prepare an iOpener



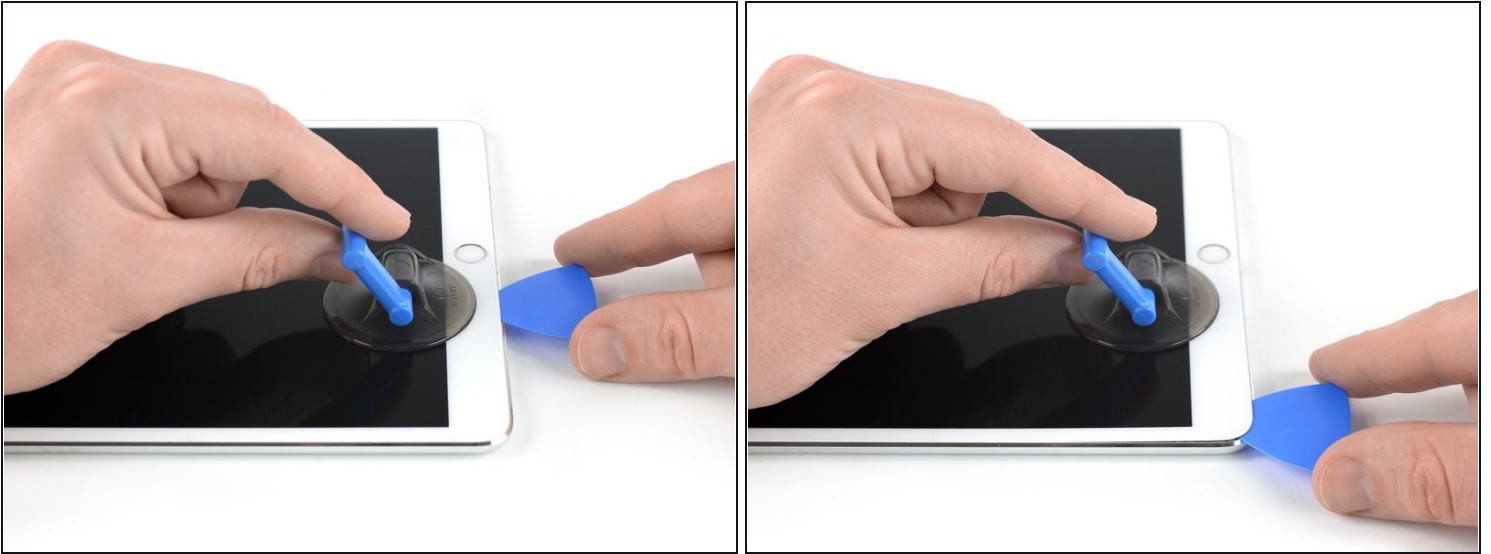
- ① Strong adhesive holds the screen in place. In order to separate it, you'll first need to heat and soften the adhesive using an iOpener, hair dryer, or heat gun.
- You may need to reapply heat repeatedly throughout this process to prevent the adhesive from cooling and hardening.
- [Prepare an iOpener](#) and place it on the bottom edge of the iPad's screen for about two minutes.

Step 2 — Create an opening gap



- ① If your iPad's screen is badly cracked, wear skin and eye protection. Cover the screen with a smooth layer of clear packing tape to contain glass shards and help the suction cup adhere. Alternatively, use a strong piece of tape (such as duct tape) and [fold it into a handle](#).
- Place a suction cup next to the iPad's home button and press down to create a seal.
- ① To get the most leverage, place the suction cup as close to the edge as possible without going past the edge of the display.
- ① If you want to use the [Anti-Clamp](#), a tool we designed to make the opening procedure easier, follow [this guide](#).
- Firmly pull up on the suction cup to create a small gap between the front panel and the rear case.
- ⚠ **Don't pull too hard, or you may shatter the glass. If necessary, apply more heat to further soften the adhesive.**
- Once you've opened a sufficient gap, insert an opening pick into the gap.

Step 3 — Slice through the bottom adhesive



- Slice through the adhesive under the screen by sliding the pick along the edge of the display, towards the bottom left corner.
- Leave the pick in place temporarily to prevent the adhesive from re-sealing.

Step 4 — Slice through the left adhesive



- Apply heat to the left edge of the iPad for about two minutes, or until it's slightly too hot to touch comfortably.
- If necessary, re-heat your iOpener for a few seconds or until it's a bit too hot to touch. Be careful not to overheat the iOpener, or it may burst.
- Insert a second opening pick at the bottom left corner of the iPad.
- Slide the second opening pick along the left side of the display to separate the adhesive underneath.
- Leave the opening pick inserted near the top left corner of the iPad to prevent the adhesive from re-sealing.

Step 5



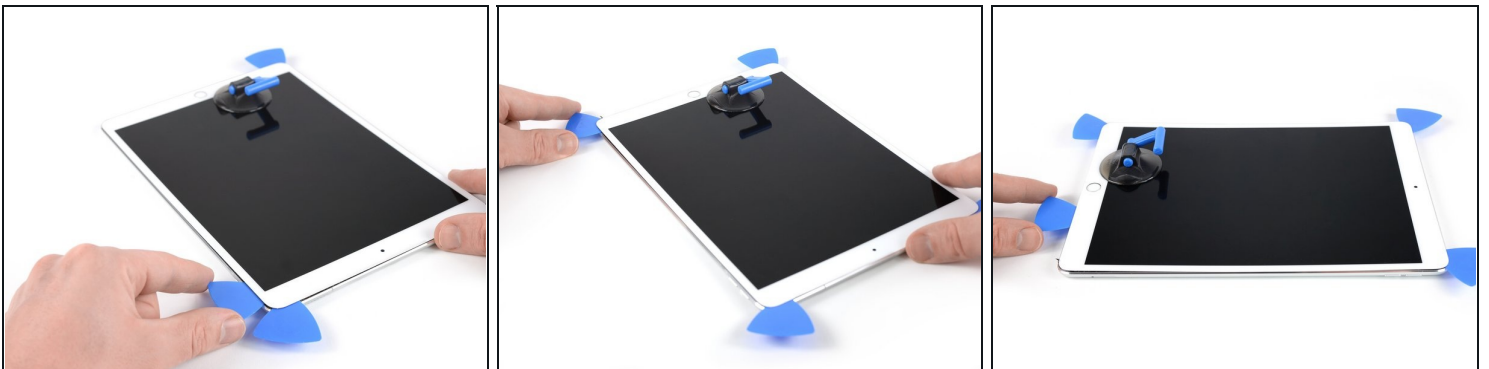
- Apply heat to the top edge of the iPad for about two minutes, or until it's slightly too hot to touch comfortably.

Step 6



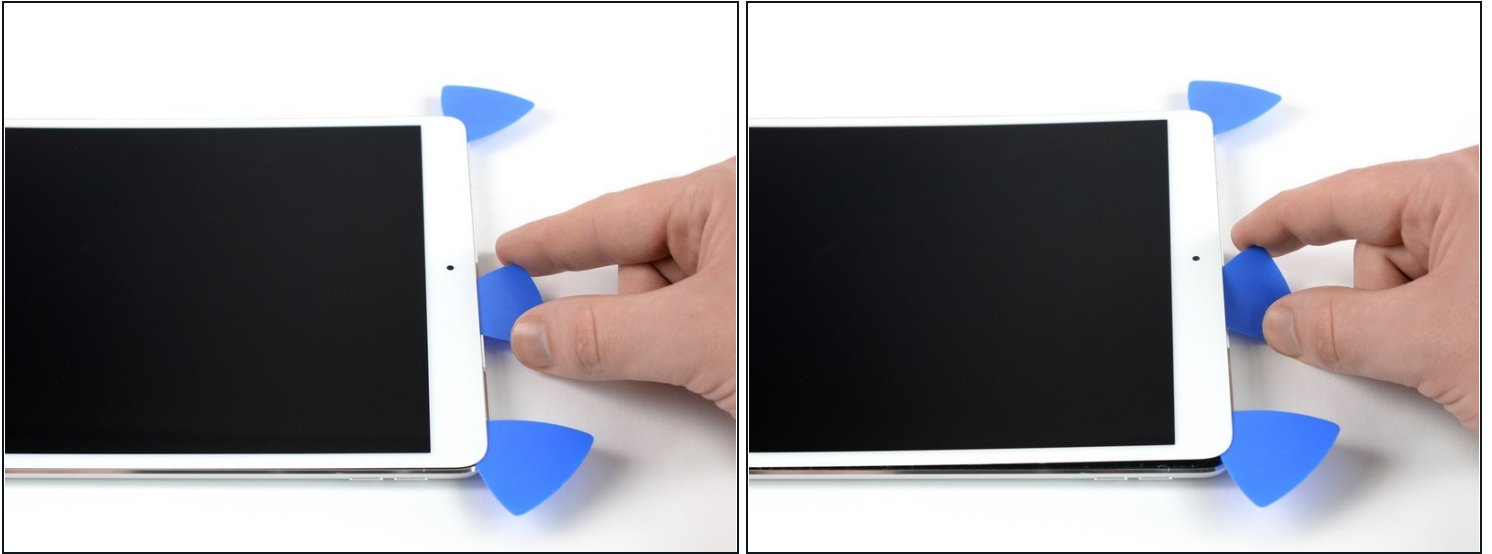
- Insert a third opening pick at the top left corner of the iPad.
- Use the opening pick to cut the adhesive under the top edge of the iPad by sliding it to the top right corner.
⚠ The front-facing camera is located right in the center of the iPad's top edge and can be damaged if the pick is inserted too far. Only insert the tip of the opening pick when cutting near the camera.

Step 7



- Apply heat to the final, right edge of the iPad for about two minutes, or until it's slightly too hot to touch comfortably.
- Insert a fourth opening pick at the top right corner of the iPad.
- Slide the opening pick down to the bottom right corner to cut the adhesive.
- Slide the opening pick around the bottom right corner—pausing to apply more heat if needed—and cut the remaining adhesive on the bottom edge, but stop before you reach the home button.

Step 8



- Insert a fifth opening pick at the top of the iPad near (but not directly on) the front-facing camera.
- Gently twist the pick to separate the display assembly from the iPad.

⚠ Don't try to remove the display all the way yet! It is still connected to the iPad's motherboard.

- If needed, apply more heat and/or cut any remaining adhesive that prevents the display from separating.

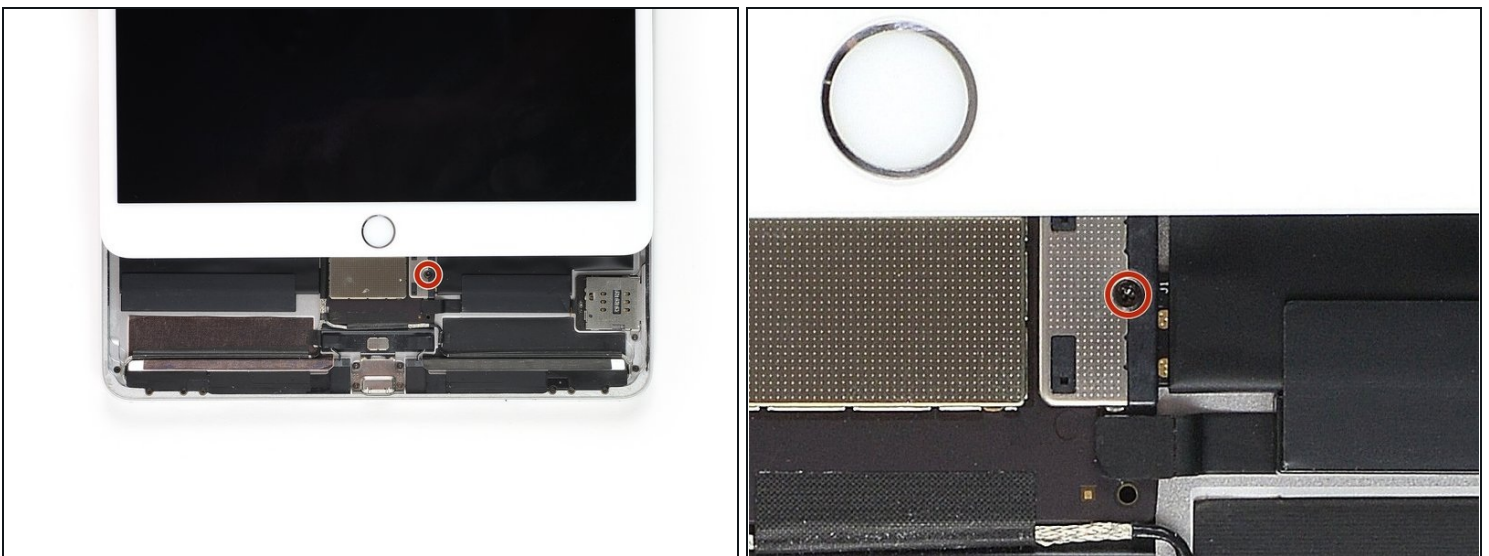
Step 9



- Lift the display assembly from its top edge and carefully slide it up (towards the front-facing camera and headphone jack), until the screw that secures the battery power connector is revealed at the bottom.

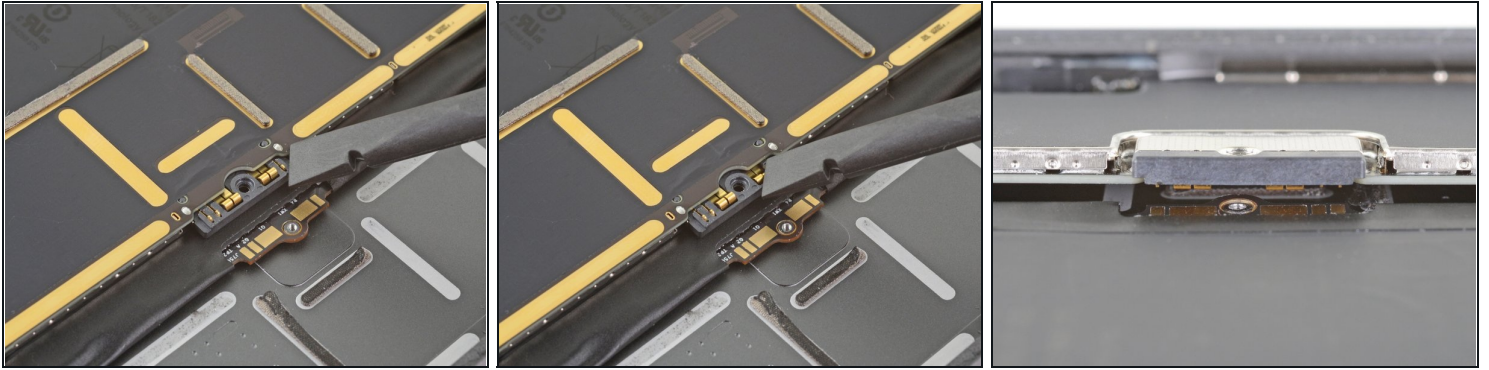
⚠ Don't lift the display more than 70° or you may damage the attached ribbon cables.

Step 10



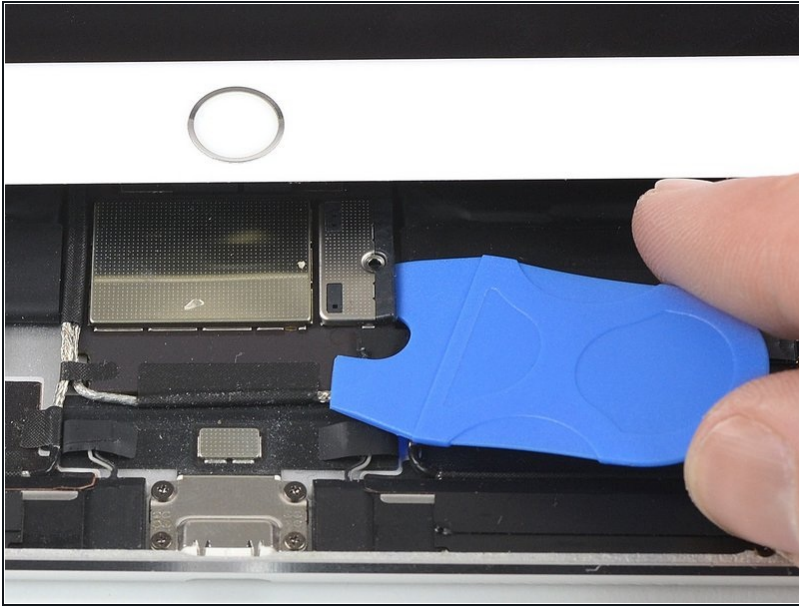
- Remove the 1.9 mm Phillips screw that secures the battery power connector.
- ⓘ Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your device.

Step 11 — Battery connector information



- ① These photos show what the battery connector looks like underneath the logic board. Use these photos as a reference while you safely disconnect the battery.
- ① Notice that the battery connector has cantilever springs on the logic board that press against the battery contact pads. Since both the logic board and battery are glued down, you'll need to slide something thin and flexible between the contact points to disconnect the battery.

Step 12 — Disconnect the battery



⚠ Be careful when you isolate the battery using a battery blocker. The battery contacts are easily bent or broken, resulting in irreversible damage.

- To disconnect the battery, slide one prong of a battery blocker or the tip of an opening pick under the battery power connector to ensure the power circuit is interrupted.
- ① Don't push the battery blocker underneath the connector with excessive force. If you're having trouble fitting the battery blocker underneath the logic board, you can try [using a playing card](#) to disconnect the battery instead.
- ① The battery blocker or playing card ideally should slide under the logic board without encountering any blockages.
- Leave the battery blocker in place as you work.

Step 13



- Slowly lift the display from its top edge, being careful not to strain the attached ribbon cables.
- Remove the two 1.3 mm Phillips screws securing the display connector cover bracket.
 - ⓘ You may need to angle the driver slightly in order to avoid straining the ribbon cables.
- Remove the display connector cover bracket.

Step 14



- Use a spudger to disconnect the two visible display flex connectors by gently prying them straight up from their sockets.
 - ⓘ To re-attach [press connectors](#) like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

Step 15



① Underneath, you'll find two additional display cable connectors.

- Use your spudger to gently pry them up and disconnect them.

Step 16



- Remove the display assembly.
 - ✦ During reassembly, before installing a display, remove any remaining adhesive from the iPad, and clean the glued areas with high concentration isopropyl alcohol (90% or greater) and a lint-free cloth. This helps prep the iPad for fresh adhesive and ensures that it will bond properly.
 - ✦ If you plan to reinstall your existing display, remove any remaining adhesive from the back and clean the adhered areas with isopropyl alcohol.
 - ✦ Test your iPad's functions and install [pre-cut adhesive strips](#) to the back of the display using our [display adhesive application guide](#) before sealing it up.

Step 17 — Remove the upper component bracket screws



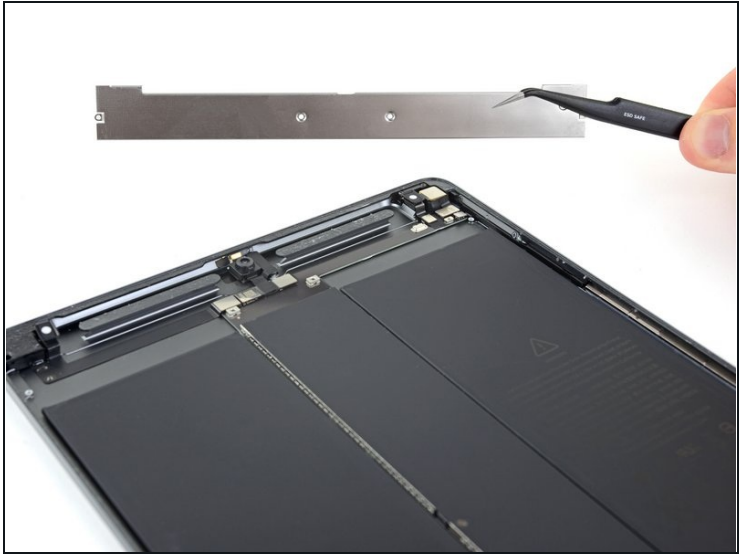
- Use a Phillips screwdriver to remove the five screws securing the upper component bracket:
 - Three 1.4 mm-long screws
 - Two 2.4 mm-long screws

Step 18 — Free the upper component bracket



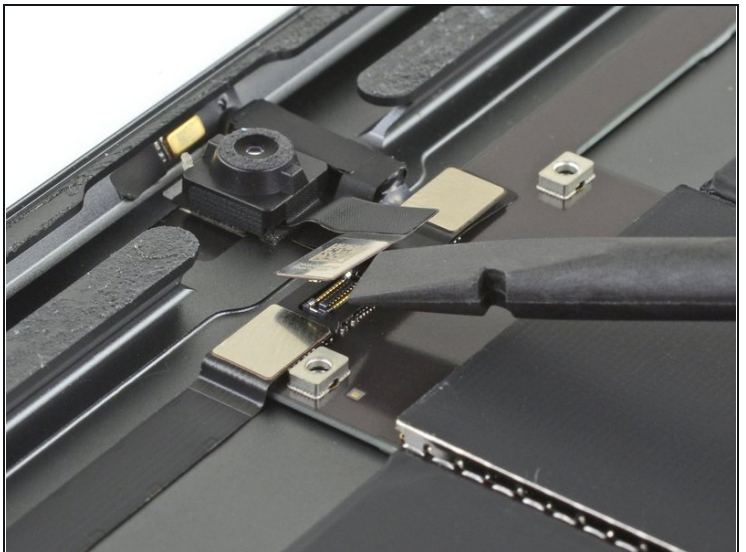
- Use a spudger to push the upper component bracket towards the upper edge and off of the clips located near the rear camera.

Step 19 — Remove the upper component bracket



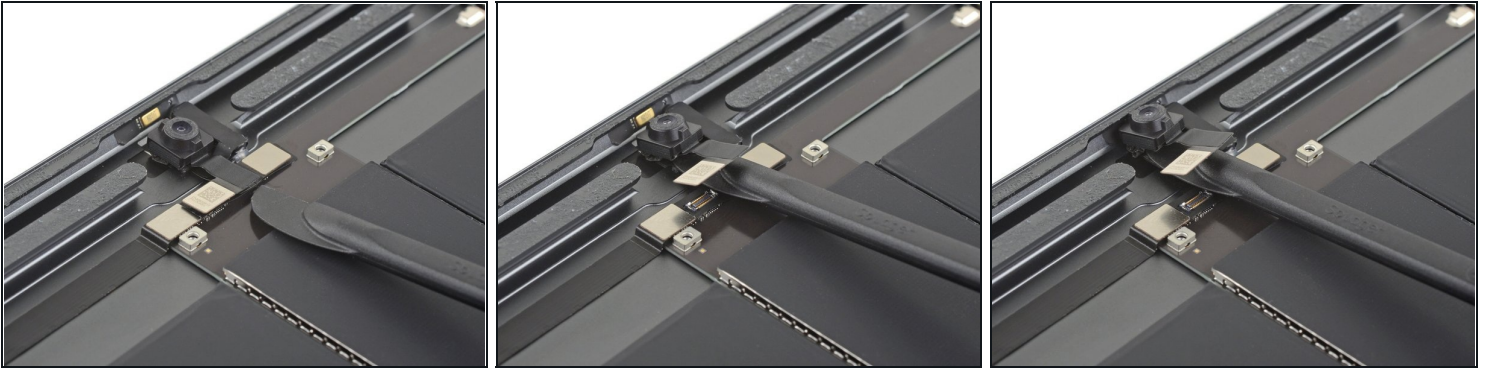
- Remove the upper component bracket.
- ☑ During reassembly, make sure that the upper component bracket slides under [the clips](#) near the rear camera.

Step 20 — Disconnect the front camera



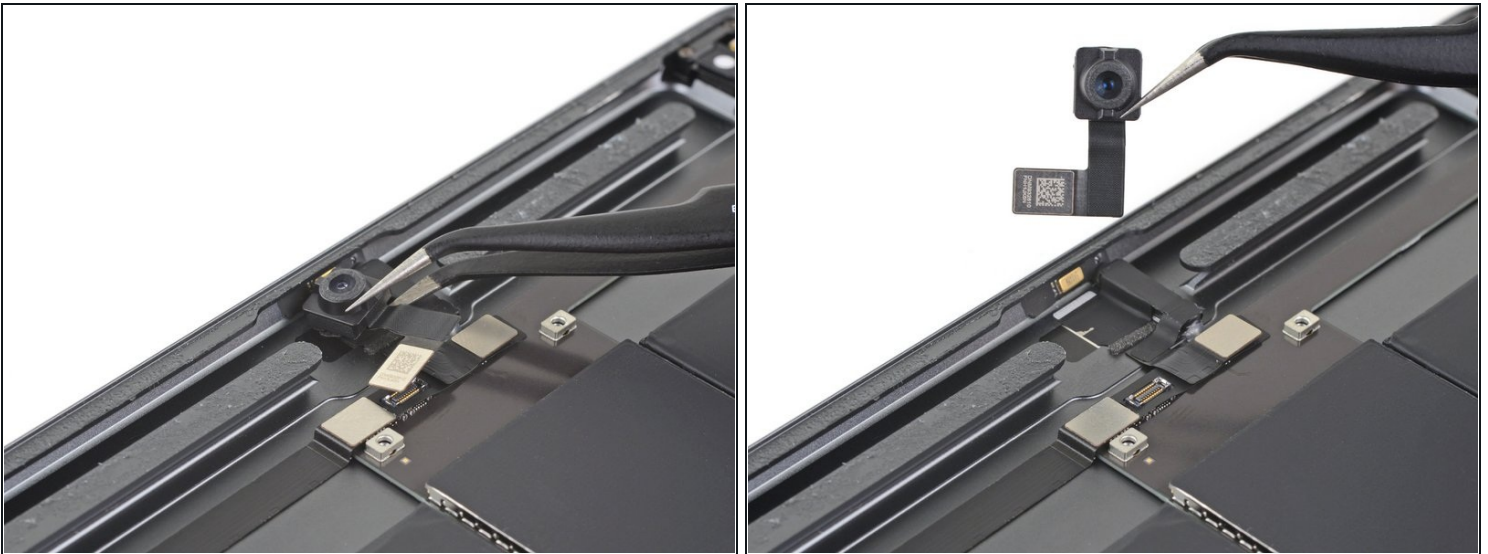
- Use the flat end of a spudger to disconnect the front camera cable by lifting straight up on the press connector.

Step 21 — Remove the front camera



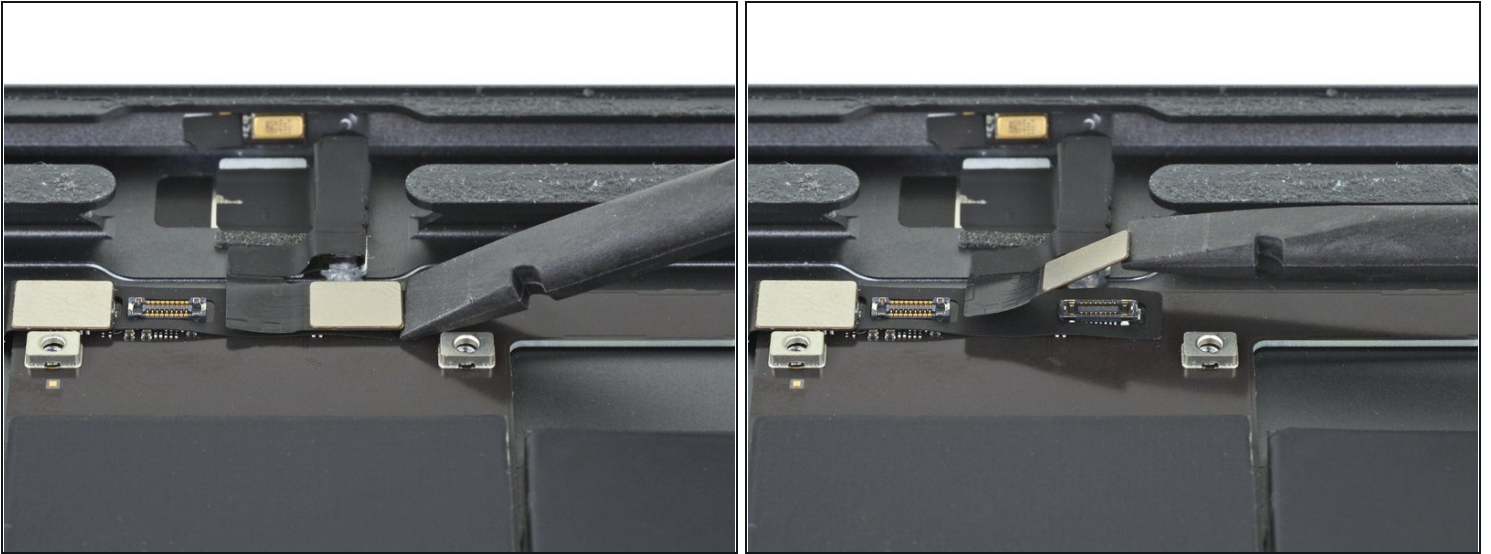
- Insert an opening pick or a halberd spudger underneath the front camera to cut the adhesive securing it to the rear case.

Step 22



- Use a pair of tweezers to remove the front camera.
- ☒ During reassembly, [follow this guide](#) if you are using a pre-cut adhesive card to secure the front camera.

Step 23 — Disconnect the microphone assembly



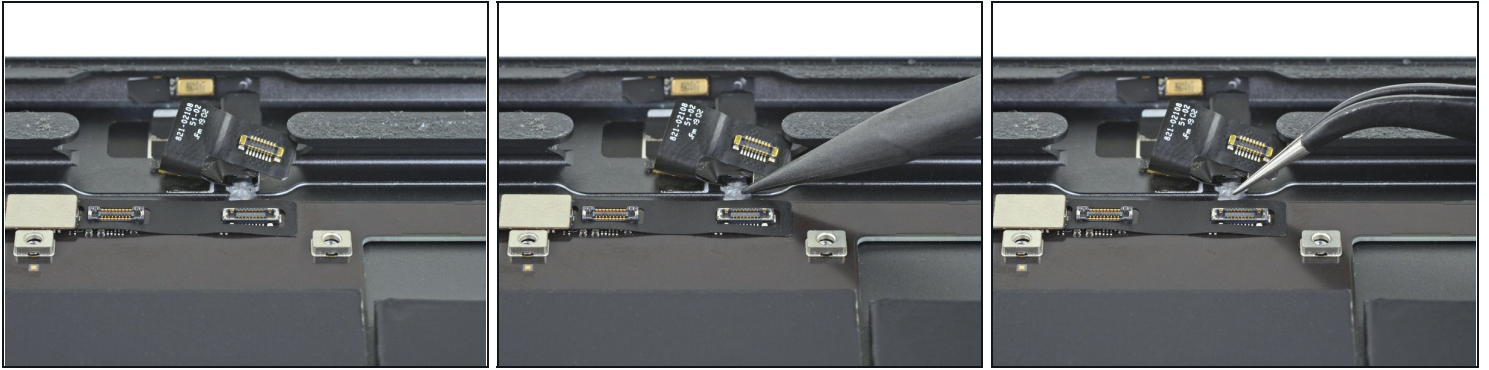
- Use the flat end of a spudger to disconnect the microphone assembly cable by lifting straight up on the press connector.

Step 24 — Loosen the adhesive



- Apply a heated iOpener to the top edge of the iPad to loosen the microphone assembly adhesive.

Step 25



- If you encounter a ball of adhesive resembling hot glue holding down the microphone assembly, use the pointed end of a spudger to pick it off.

⚠ Take care not to puncture or damage the microphone assembly cable.

ⓘ If the adhesive is extra stubborn, try using a pair of tweezers to remove it.

Step 26 — Peel up the microphone assembly



- Insert an opening pick or a halberd spudger underneath the bottom of the microphone assembly cable.
- Slice the adhesive securing the microphone assembly to the rear case.

Step 27 — Remove the tape



- Use a pair of tweezers to remove the tape securing the microphone assembly to the rear case.

Step 28



- Use a pair of tweezers to remove the small strip of tape underneath the upper lip of the rear case.

Step 29 — Peel up the lower microphone



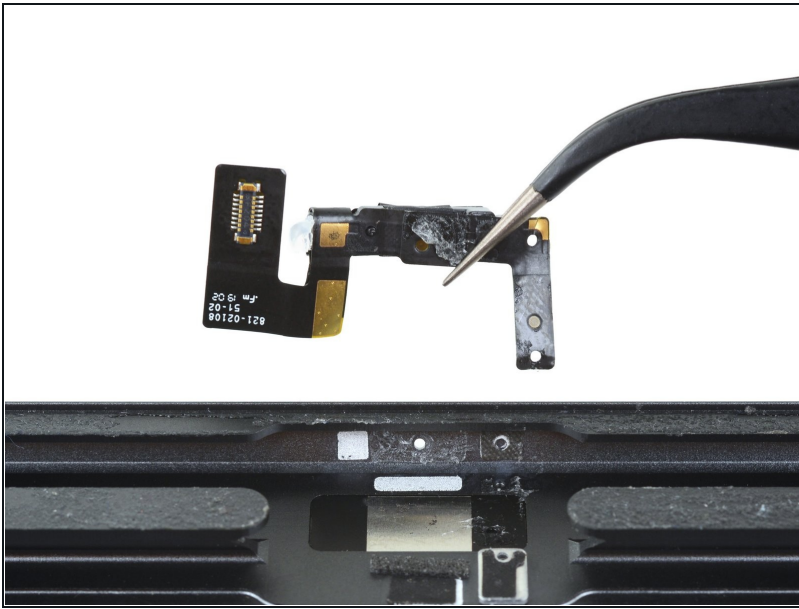
- Insert an opening pick or a halberd spudger underneath the lower microphone and peel it up from the rear case.

Step 30 — Peel up the upper microphone



- Slide an opening pick or a halberd spudger behind the microphone located on the upper lip of the rear case.
- Peel the upper microphone away from the rear case.

Step 31 — Remove the microphone assembly



- Remove the microphone assembly from the rear case.
- ☑ Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before you install it.
- ☑ During reassembly, [follow this guide](#) if you are using a pre-cut adhesive card to attach the new microphone assembly cable to the rear case.

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

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [iPad Air 3 Answers community](#) for help.