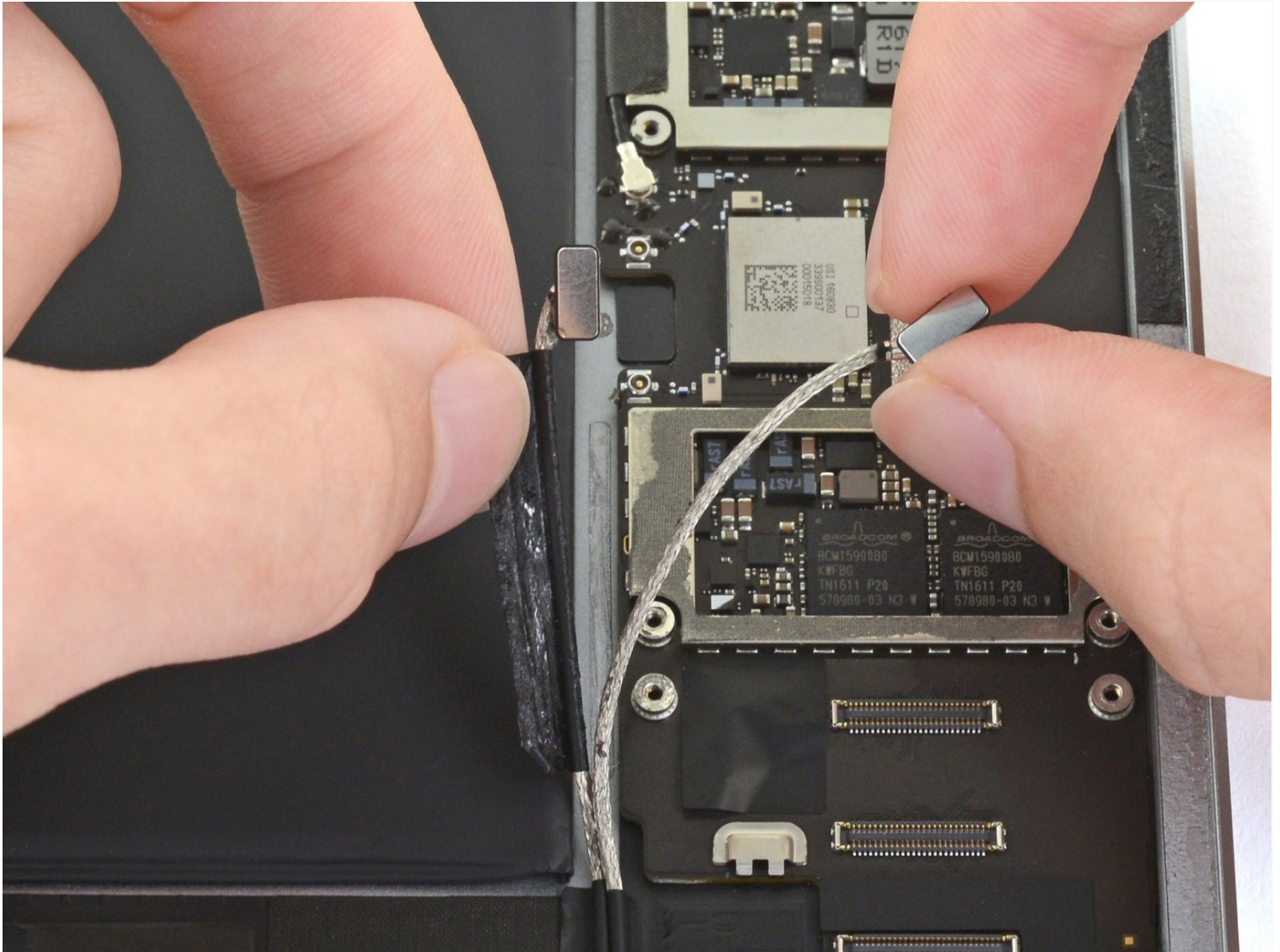




# iPad Pro 9.7" Antenna Cables Disconnect

This is a prerequisite-only guide! This guide...

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# INTRODUCTION

**This is a prerequisite-only guide! This guide is part of another procedure and is not meant to be used alone.**

Follow this guide to disconnect and separate the left and right Wi-Fi/Bluetooth antenna cables on an iPad Pro 9.7".

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## TOOLS:

- [iOpener](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks \(Set of 6\)](#) (1)
- [Slip Joint Pliers](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Battery Blocker](#) (1)
- [Tweezers](#) (1)
- [Spudger](#) (1)
- [Isopropyl Alcohol \(90% or Greater\)](#) (1)
- [Deck of Cards](#) (1)

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## Step 1 — iPad Pro 9.7" Opening Procedure



- If your display glass is cracked, keep further breakage contained and prevent bodily harm during your repair by taping the glass.
- Lay overlapping strips of clear packing tape over the iPad's display until the whole face is covered.
  - ⓘ This will keep glass shards contained and provide structural integrity when prying and lifting the display.
- Do your best to follow the rest of the guide as described. However, once the glass is broken, it will likely continue to crack as you work, and you may need to use a metal prying tool to scoop the glass out.

**⚠ Wear safety glasses to protect your eyes, and be careful not to damage the LCD screen.**

## Step 2



- ① The following steps involve using an iOpener to soften the adhesive holding the front panel assembly in place. When using the iOpener, be sure to heat it in the microwave for no more than 30 seconds.
- Handling it by the tabs on either end, place a heated iOpener over the top edge of the iPad.
- Let the iOpener sit on the iPad for two minutes to soften the adhesive securing the front panel to the rest of the iPad.

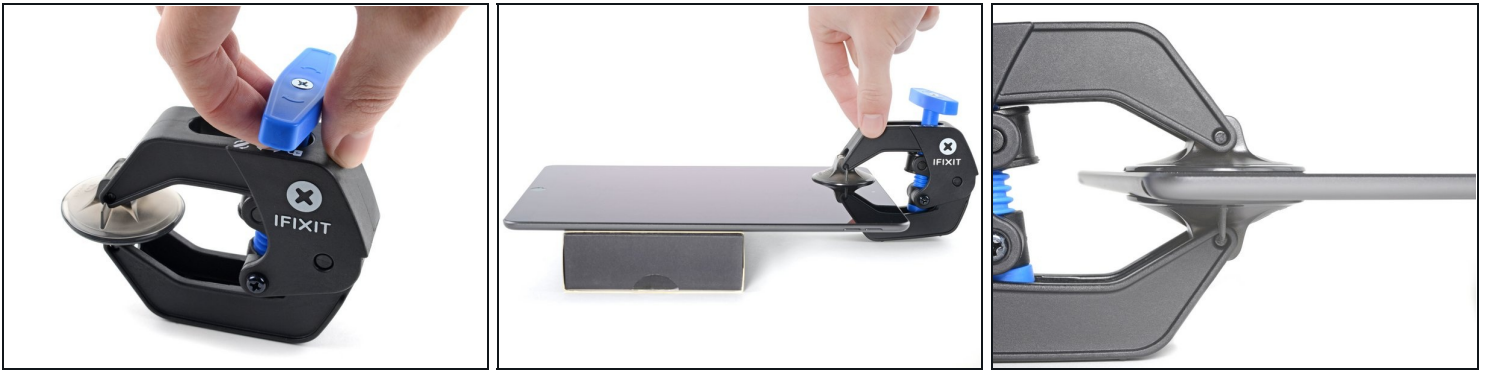


### Step 3



- ⓘ While the iPad looks uniform from the outside, there are delicate components under certain portions of the front glass. To avoid damage, only heat and pry in the areas described in each step.
- As you follow the directions, take special care to avoid prying in the following areas:
    - Home Button
    - Front Facing Camera
    - Main Camera

## Step 4 — Anti-Clamp instructions



- ① The next two steps demonstrate the [Anti-Clamp](#), a tool we designed to make the opening procedure easier. **If you aren't using the Anti-Clamp, skip down two steps for an alternate method.**
- ① For complete instructions on how to use the Anti-Clamp, [check out this guide](#).
- Elevate the iPad enough for the Anti-Clamp's arms to rest above and below the screen.
- Pull the blue handle towards the hinge to disengage opening mode.
- Position the suction cups near the top edge of the iPad—one on the front, and one on the back.
- Push down on the cups to apply suction to the desired area.
- ① If you find that the surface of your device is too slippery for the Anti-Clamp to hold onto, you can use packing tape to create a grippier surface.

## Step 5



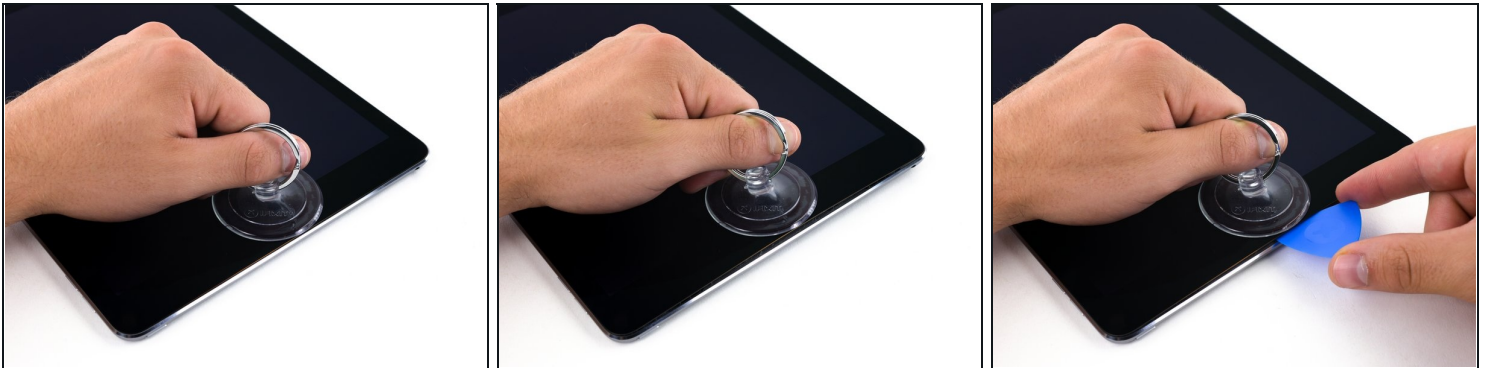
- Push the blue handle away from the hinge to engage opening mode.
  - Turn the handle clockwise until you see the cups start to stretch.
    - ⓘ Make sure the suction cups remain aligned to each other. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
  - Wait one minute to give the adhesive a chance to release and present an opening gap.
  - 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, apply more heat to the area and rotate the handle clockwise half a turn.
- ⚠ Don't crank more than a half a turn at a time, and wait one minute between turns. Let the Anti-Clamp and time do the work for you.**
- **Skip the next two steps.**

## Step 6



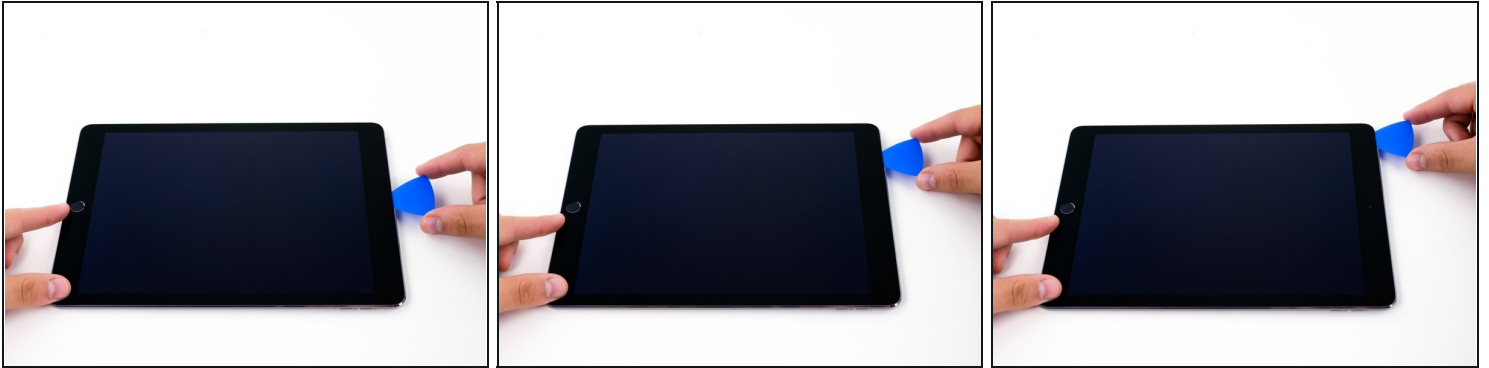
- Place a suction cup over the iPad's front-facing camera and press down to create a seal.
  - ① To get the most leverage, place the suction cup as close to the edge as possible without going past the edge of the display.

## Step 7



- Firmly pull up on the suction cup to create a small gap between the front panel and the rear case.
  - ⚠ Do not pull too hard or you may shatter the glass.
- Once you've opened a sufficient gap, insert an opening pick into the gap to prevent the adhesive from resealing.

## Step 8

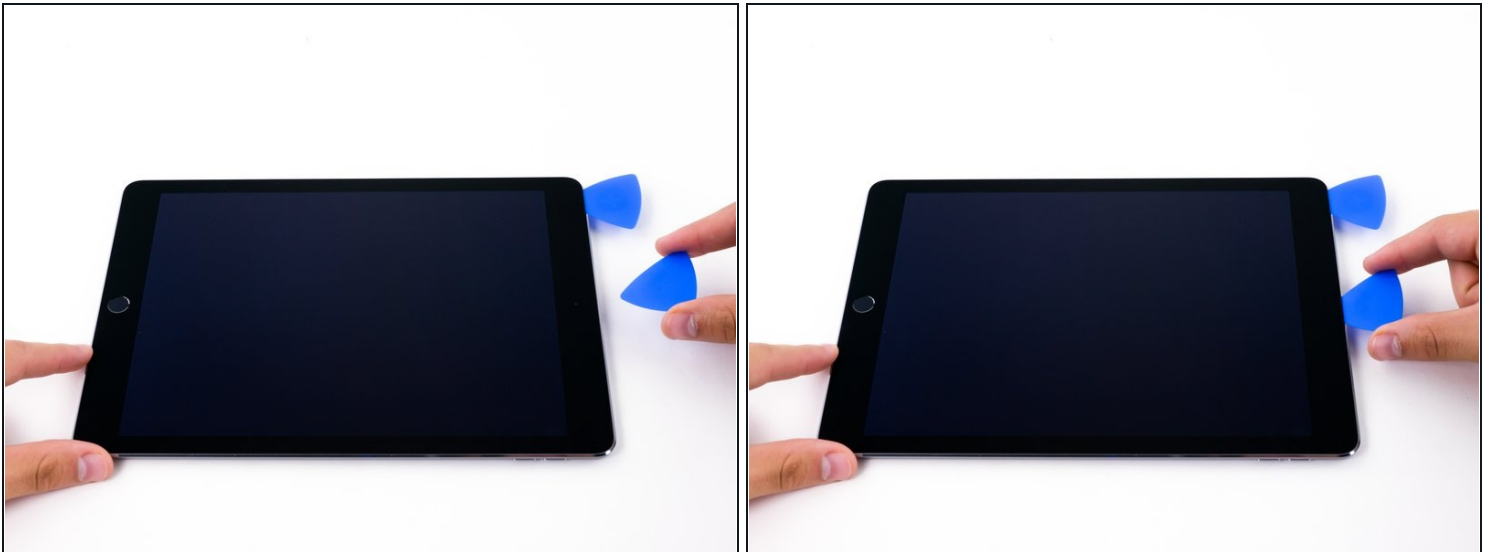


- Slide the pick along the edge of the display, towards the headphone jack.
- If there is still a considerable amount of resistance when sliding the opening pick, repeat the iOpener heating procedure and apply additional heat.

**⚠ Don't insert the pick past the bezel into the display area, or you will damage it.**

- ① A good rule of thumb is to never insert the opening pick more than a quarter inch into the iPad.

## Step 9



- Insert a second opening pick by the front-facing camera.

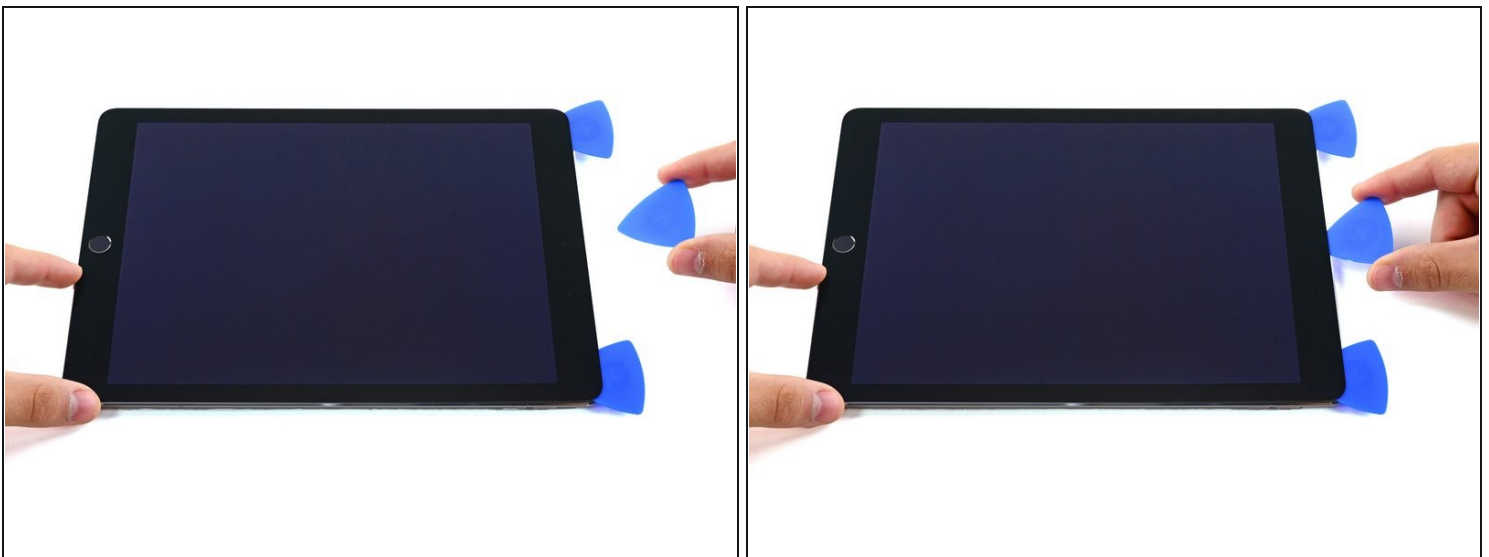


## Step 10



- Slide the second pick along the top edge of the iPad, towards the Sleep/Wake Button.

## Step 11



- Insert a third pick by the front-facing camera.

## Step 12



- Bring the right opening pick down and around the top right corner of the iPad.

## Step 13



- Bring the left opening pick around the top left corner of the tablet.

## Step 14



- Reheat the iOpener and lay it over the right edge of the display to loosen the adhesive underneath.

## Step 15



- Slide the right opening pick roughly halfway down the display.

## Step 16



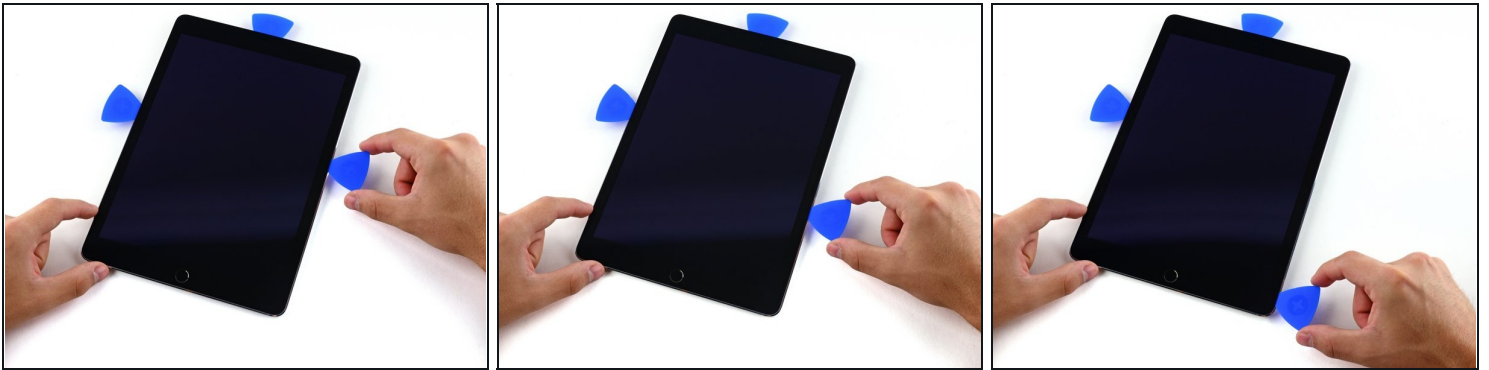
- Reheat the iOpener and apply heat to the left side of the iPad.

## Step 17



- Slide the left-hand opening pick about halfway down the edge of the display.

## Step 18



- Slide the opposite opening pick down to the bottom right corner of the iPad.
- ⓘ If necessary, reheat the adhesive on the right edge to loosen the display assembly.

## Step 19



- Slide the left-hand opening pick down the edge of the display until you reach the corner.



## Step 20



- Use the iOpener to apply heat to the bottom edge of the iPad.

## Step 21



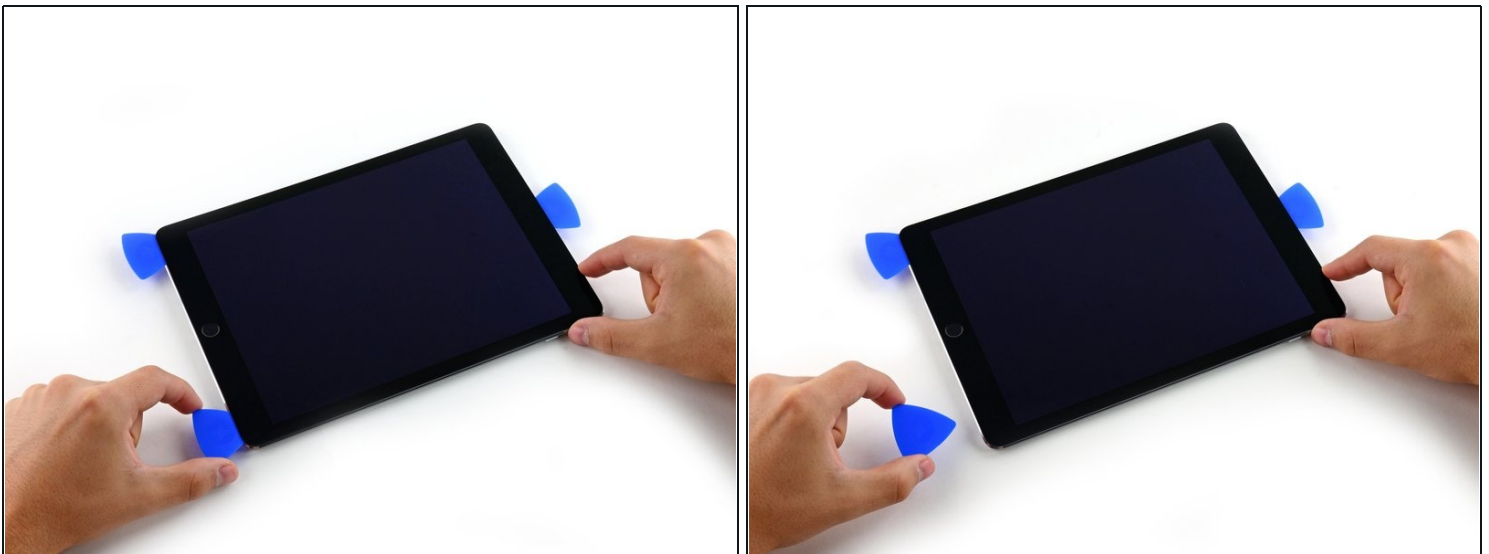
- Bring the right-hand opening pick around the bottom corner of the iPad.

## Step 22



- Repeat for the left-hand pick.
- ① Reheat and reapply the iOpener as needed.

## Step 23



- Remove the right-hand opening pick at the bottom of the iPad.

## Step 24



- Slide the left-hand opening pick along the bottom edge of the display, then remove it from the bottom right corner of the iPad.

**⚠ Be very careful to not insert the pick more than a quarter inch into the display to avoid damaging the Home Button and display cables underneath.**

## Step 25 — Slice through the remaining adhesive



- Use picks to ensure most of the adhesive has been cut through on the top, left, and bottom sides.
- Twist the top and bottom picks to separate the display assembly from the rear case.

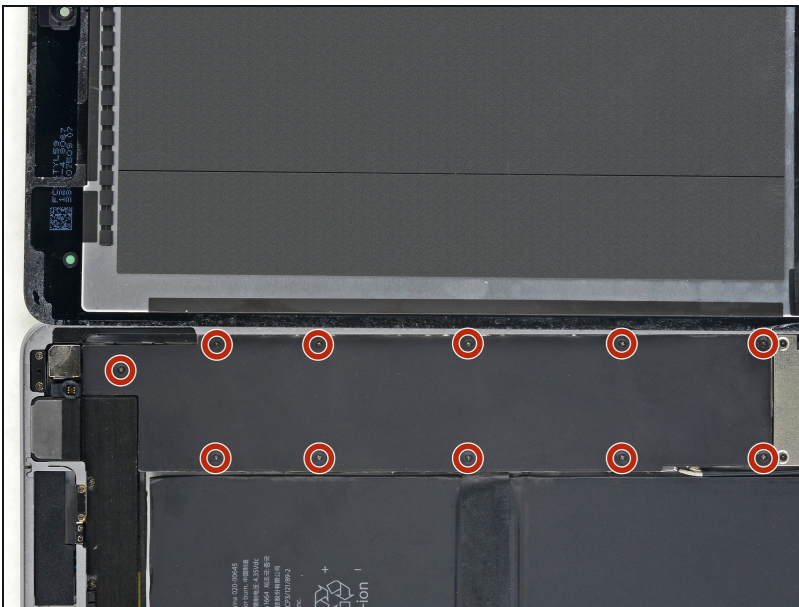
**⚠ Do not attempt to remove the display—it is still attached to the rear case.**

## Step 26



- Swing the display assembly towards the right of the case, using the right edge as a hinge.
  - As you move the display assembly, make sure that the display ribbon cable is not being stressed.
- Continue swinging the display assembly until it lays flat next to the rear case.

## Step 27 — Disconnect the battery



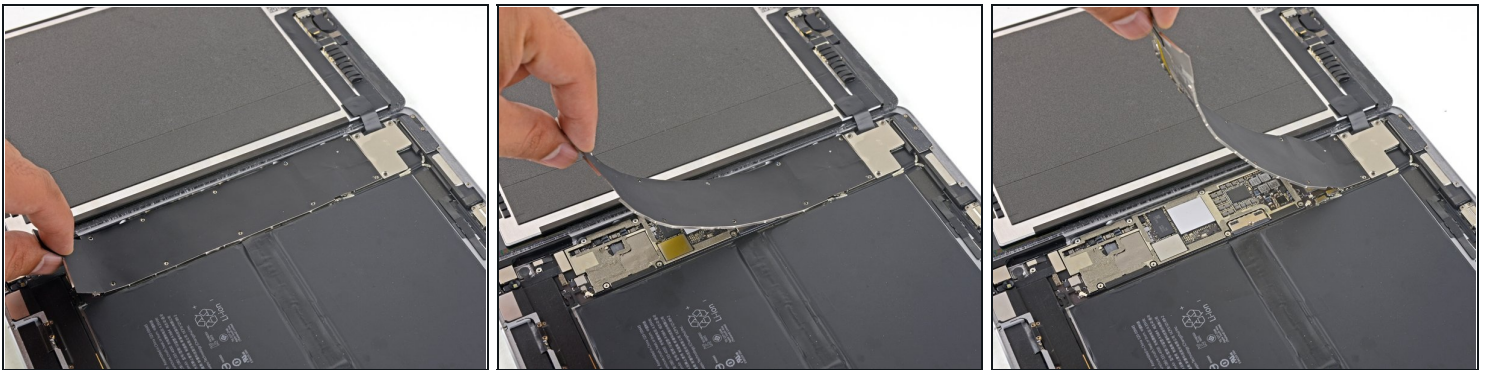
- Use a Phillips screwdriver to remove the eleven 1.3 mm screws securing the EMI shield.

## Step 28



- Apply a [heated iOpener](#) to the EMI shield on the logic board for one minute.

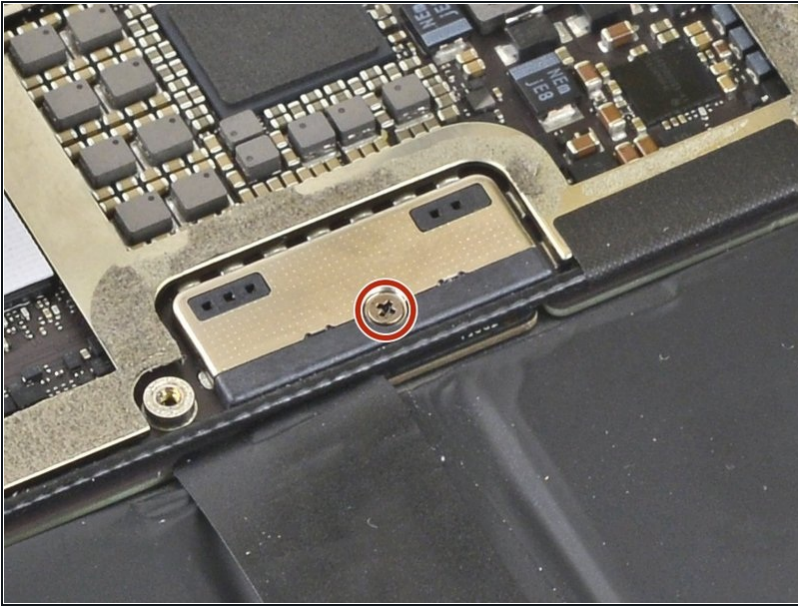
## Step 29



- Lift the logic board EMI shield, starting at the edge nearest the top of the iPad.
- Slowly peel the EMI shield up from the logic board.
  - ⓘ This takes a bit of force due to the many tiny clips securing the shield, and the shield may deform slightly. That's okay—try to keep the deformation to a minimum, and it will lay flat when reinstalled and screwed down.
- Remove the logic board EMI shield.

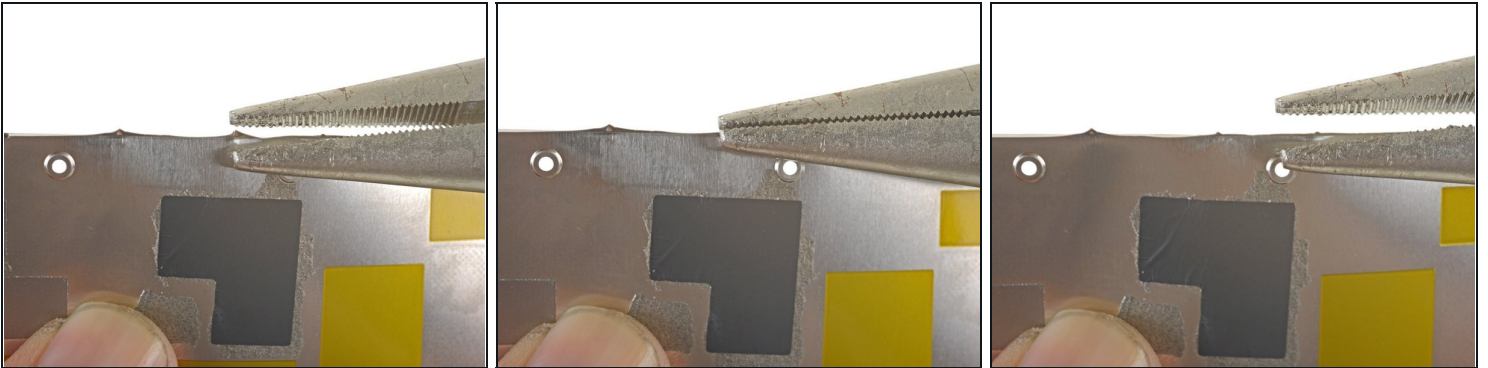


## Step 30



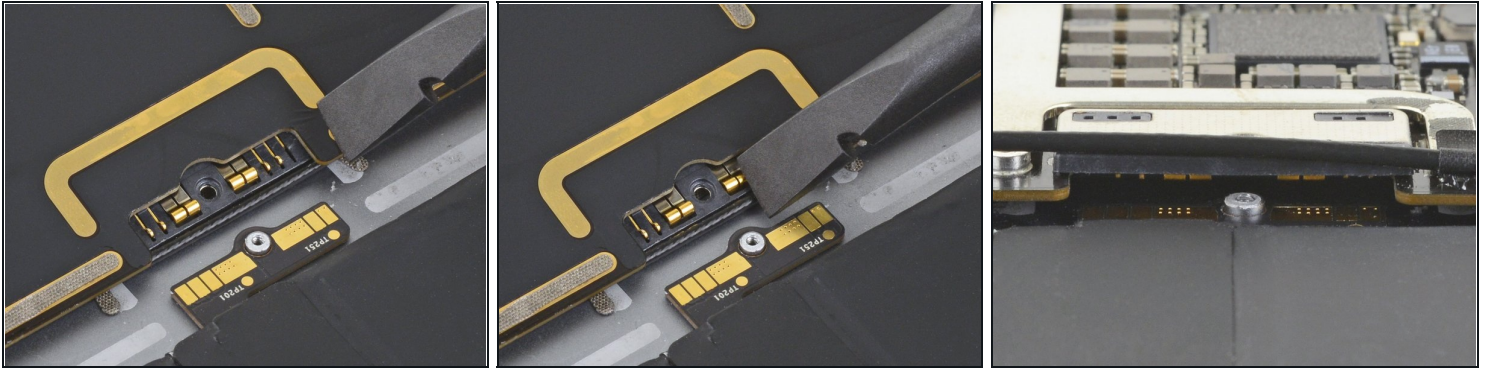
- Use a Phillips driver to remove the 1.7 mm-long screw securing the battery connector.

## Step 31



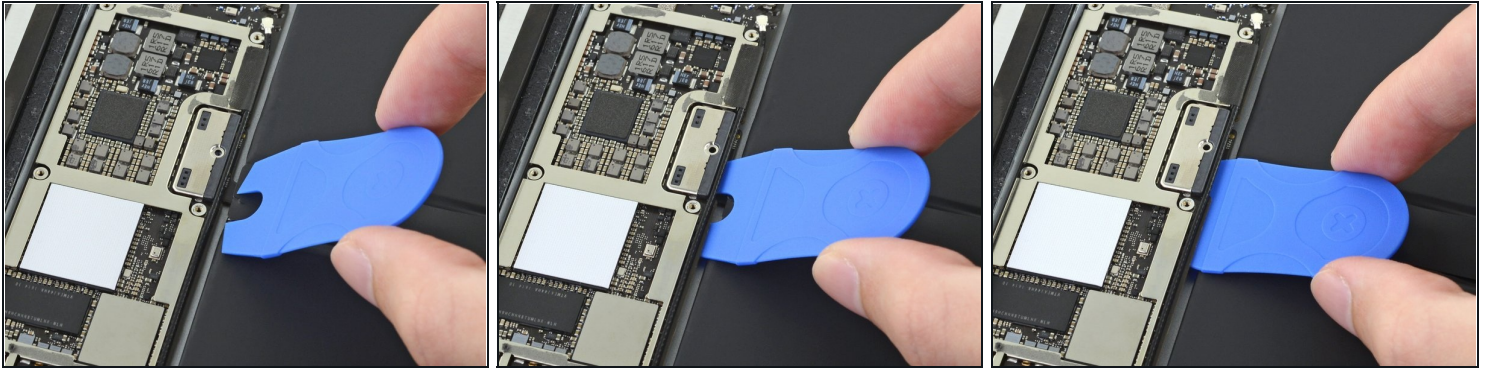
- ☑ If the EMI shield has any sharp protrusions after removal, you should flatten them before reinstalling the shield.
- Squeeze the sharp protrusion with a pair of pliers to flatten it.
- Repeat the process for all sharp protrusions along the edges of the EMI shield.

## Step 32 — 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 33 — Disconnect the battery

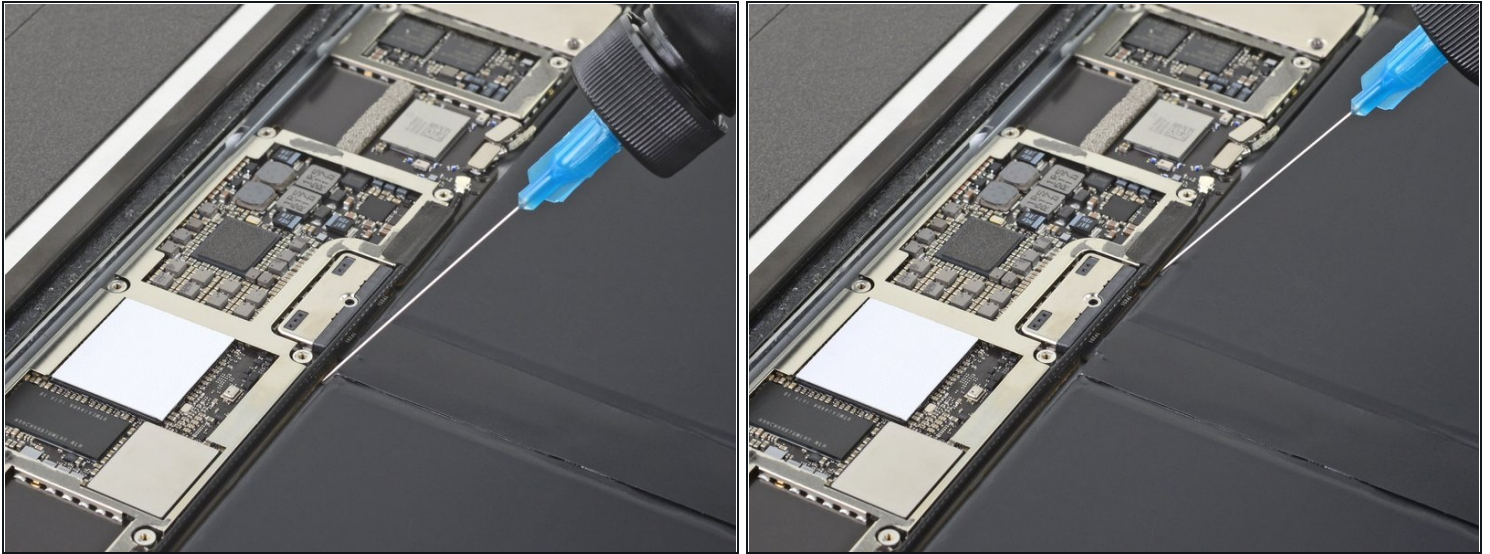


**⚠ Be careful when you isolate the battery using a battery blocker. The battery contacts are easily bent or broken, resulting in irreversible damage.**

- ① Ensure that the iFixit logo on the battery blocker is facing up.
- Slide the battery blocker underneath the left side of the logic board's battery connector at a 35 degree angle.
  - ① The battery blocker's right prong should slide between the left side of the logic board's battery connector and the battery's contact pads. The left prong should slide under the logic board.
  - ① Don't push the battery blocker underneath the connector or logic board with excessive force. If you're having trouble fitting the battery blocker underneath the logic board, refer to the next step for information on loosening the logic board. You can also try [using a playing card](#) to disconnect the battery instead.
  - ① The battery blocker or playing card should slide under the logic board without encountering any blockages. After insertion, they should rest at a 15 degree angle.
- Leave the battery blocker in place as you work.

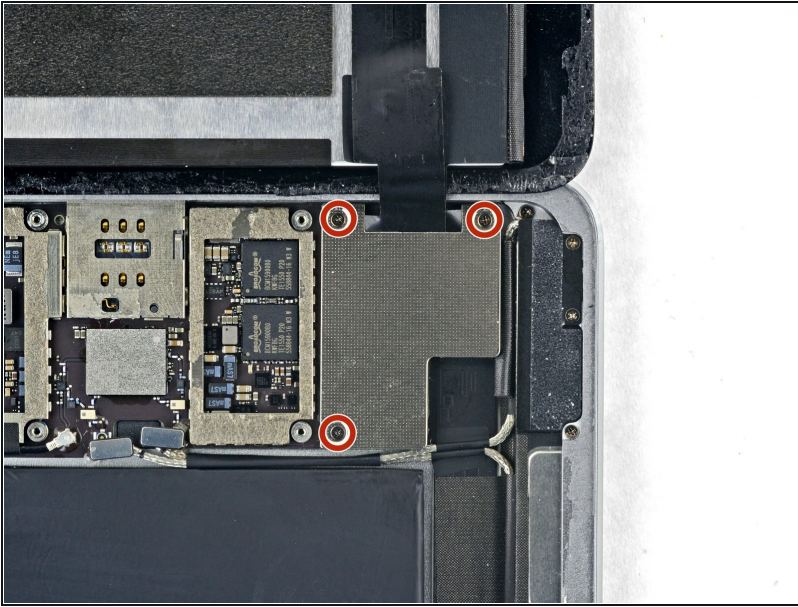


## Step 34 — Logic board adhesive information



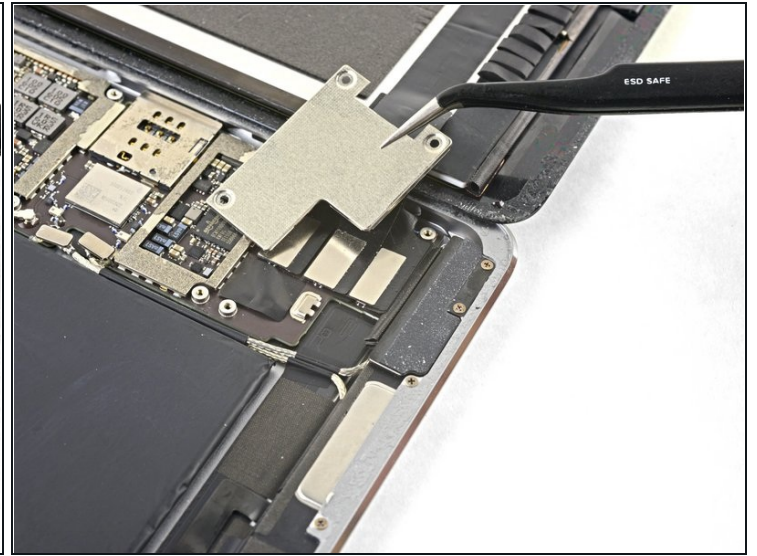
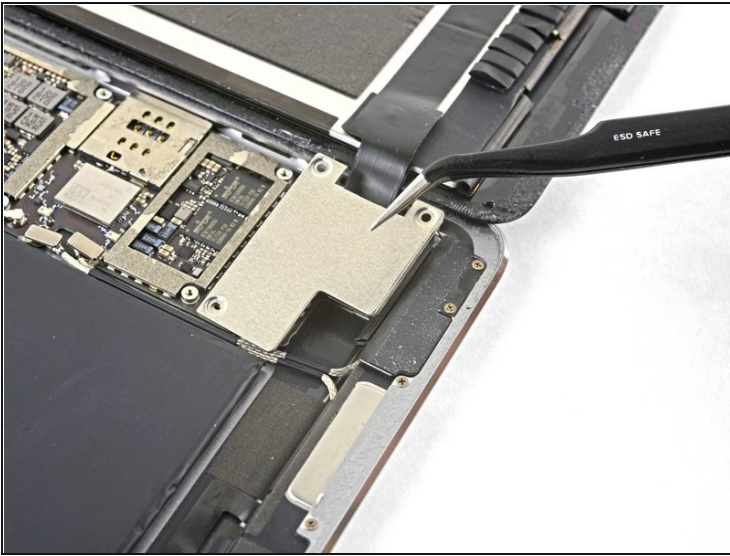
- ⓘ If the battery blocker doesn't easily slide under the logic board, follow these steps to partially loosen the logic board from the frame:
- Apply a few drops of high-concentration (90% or higher) isopropyl alcohol under the logic board to the left and right of the battery connection.
  - Wait one minute for the isopropyl alcohol to weaken the adhesive under the logic board.
  - Try to insert the battery blocker. If the logic board doesn't easily lift up, apply a few more drops of isopropyl alcohol.
- ⓘ This doesn't apply when using the playing card method to disconnect the battery because the playing card is only inserted between the battery connector and the battery contact pads.

### Step 35 — Remove the display bracket screws



- Use a Phillips screwdriver to remove the three 1.3 mm Phillips screws securing the display cable bracket.

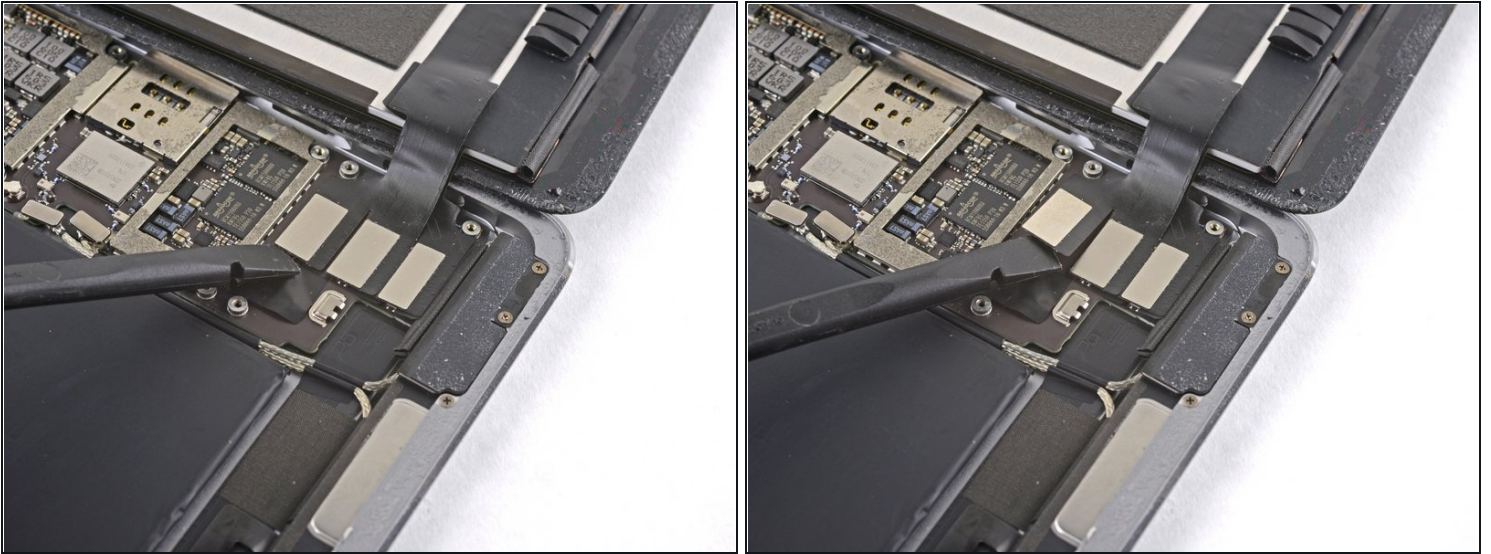
### Step 36 — Remove the bracket



- Remove the display cable bracket.

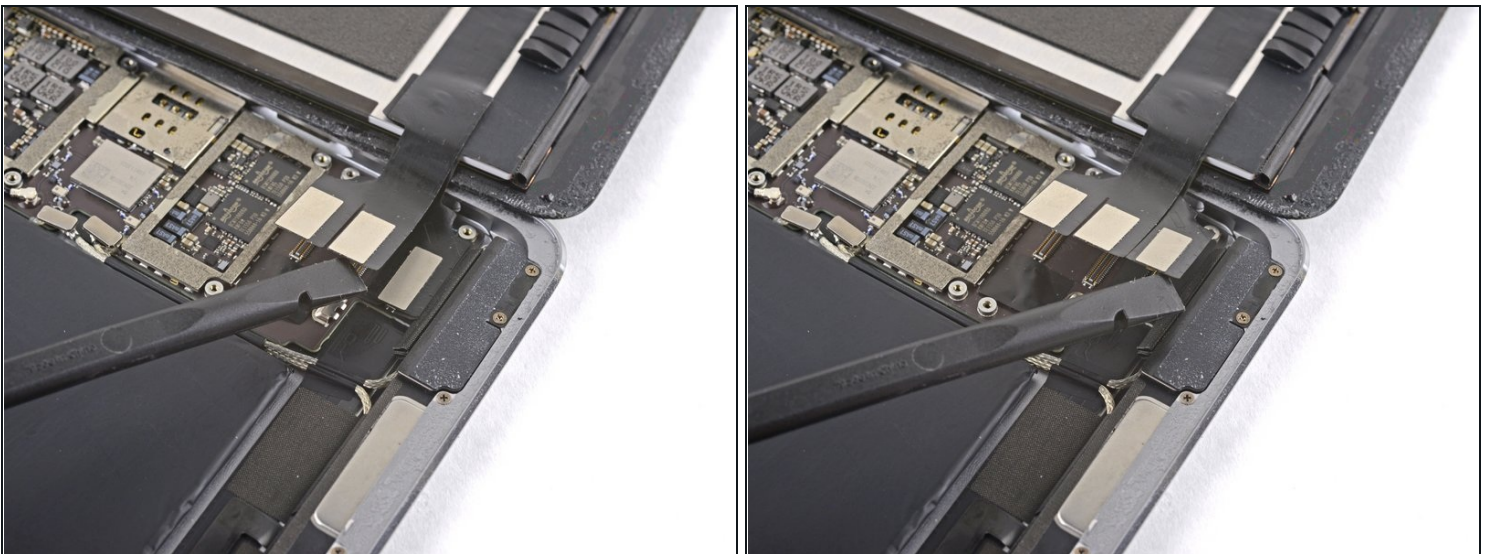


## Step 37 — Disconnect the display assembly



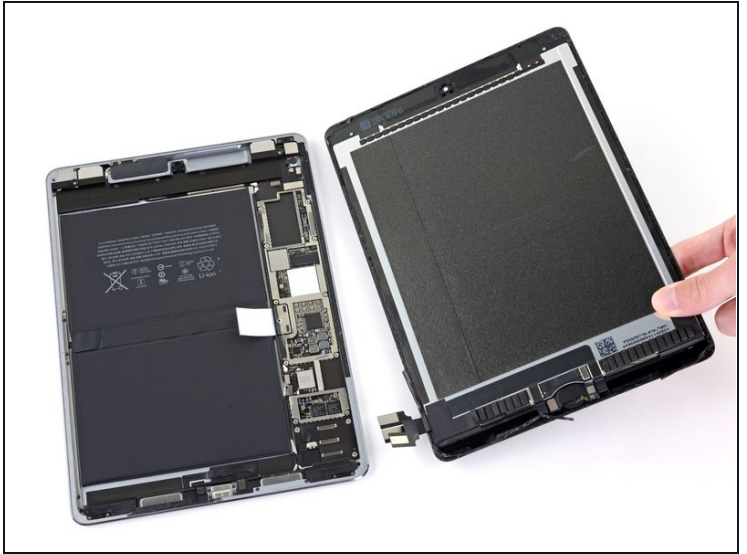
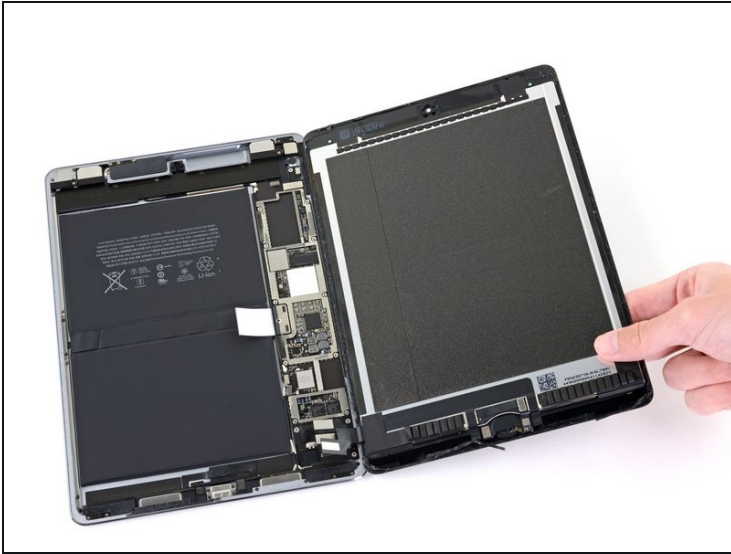
- Use the flat end of the spudger to disconnect the display assembly connector from the motherboard socket.

## Step 38



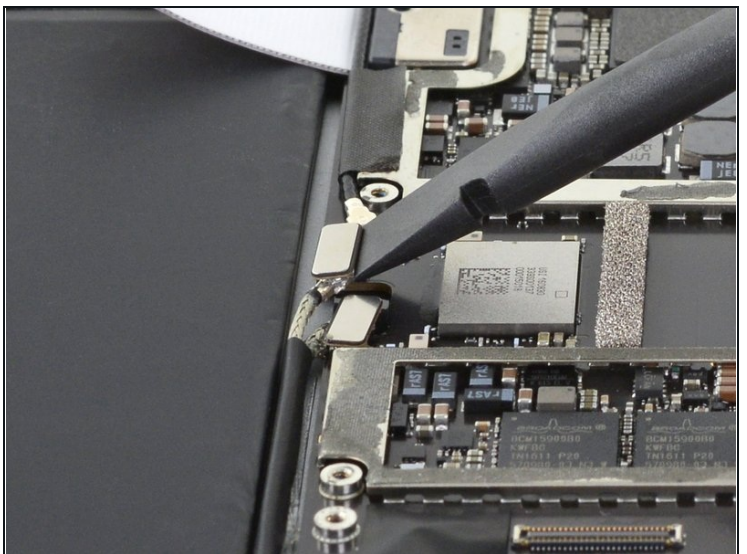
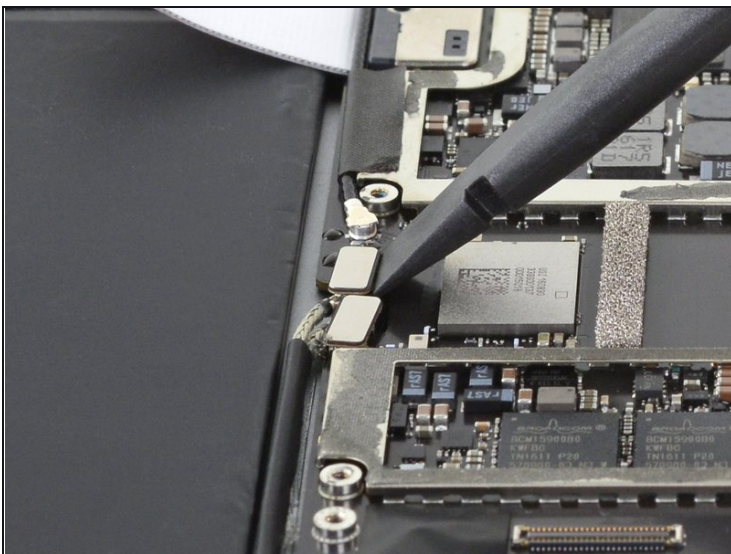
- Repeat the previous step for the two remaining connectors.

## Step 39 — Remove the display assembly



- Remove the display assembly from the frame.
- ☑ If you are reusing the original display assembly, [follow this display adhesive application guide](#) to apply replacement display adhesive during reassembly.

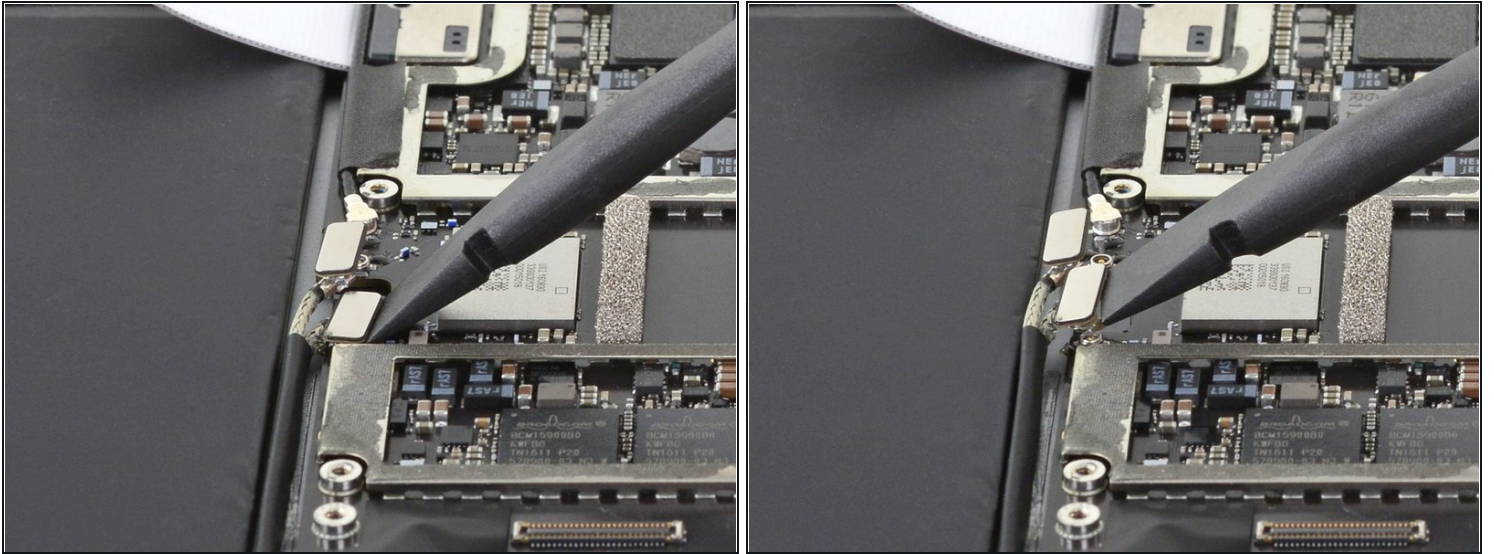
## Step 40 — Disconnect the right antenna



- Use the flat end of a spudger to disconnect the right antenna's coaxial connector from its socket.
- ☑ To reinstall, hold the connector in place and gently press straight down. The connector will “snap” into its socket.

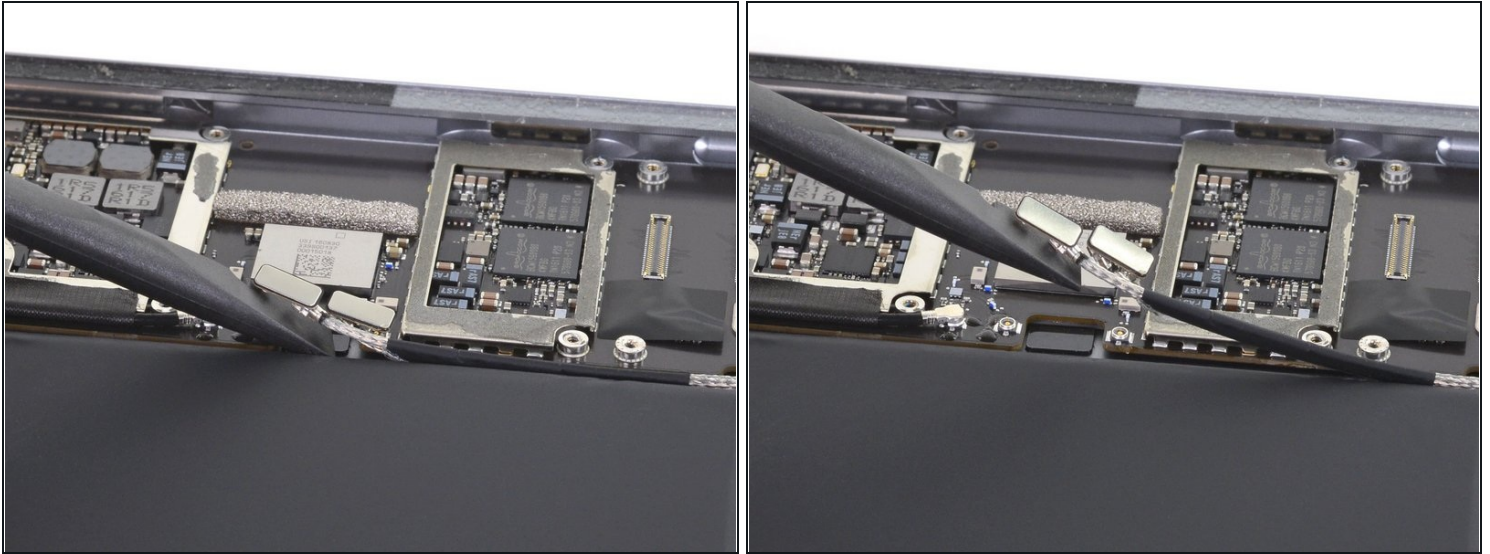


## Step 41 — Disconnect the left antenna



- Use the flat end of a spudger to disconnect the left antenna's coaxial connector from its socket.
- ☑ To reinstall, hold the connector in place and gently press straight down. The connector will “snap” into its socket.

## Step 42 — Lift the antenna cables

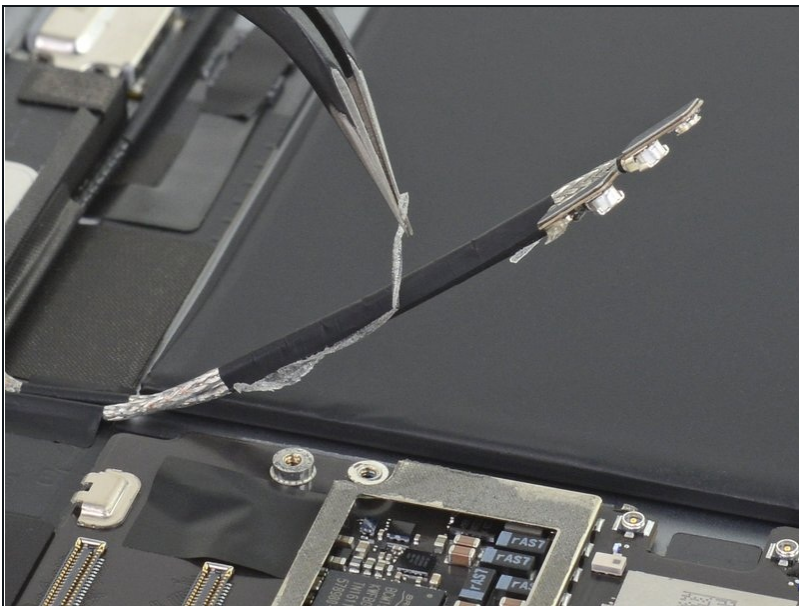


- Use the flat end of a spudger to lift the bundled left and right antenna cables away from the frame.

⚠ Be careful not to puncture the battery with the spudger.

ⓘ The sticker bundling the antenna cables together is lightly adhered to the frame.

## Step 43 — Remove the adhesive



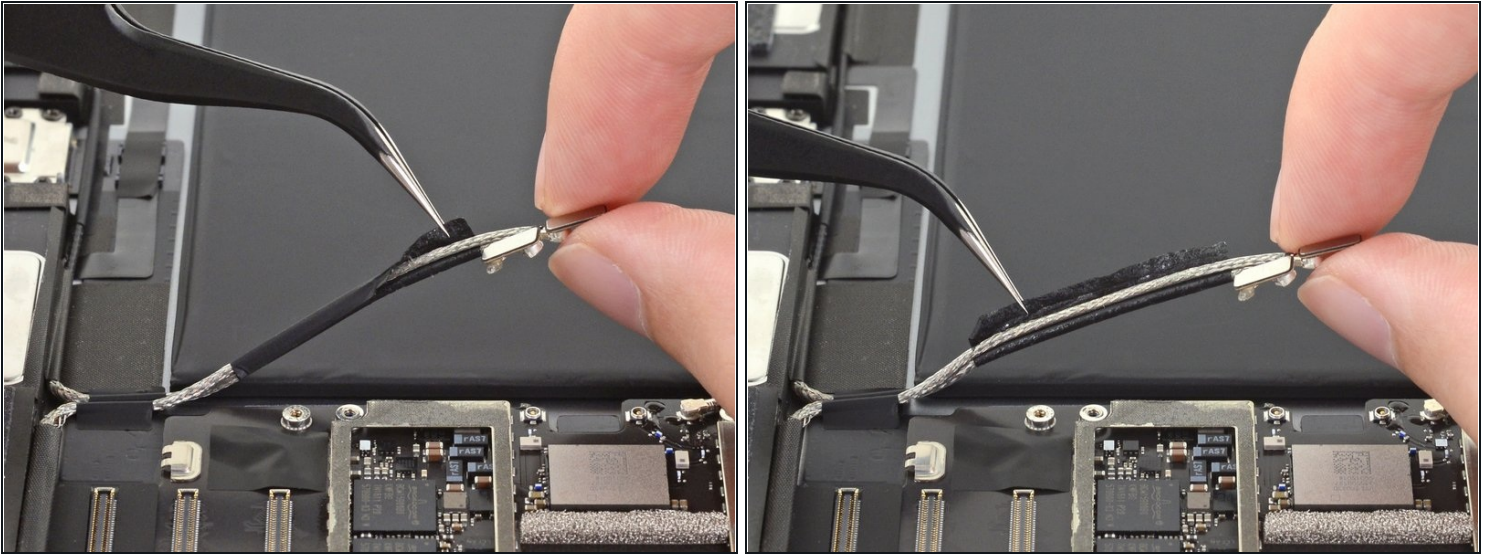
- Use a pair of tweezers to remove the adhesive that was securing the bundled antenna cables to the frame.

⚠ Take care not to damage the antenna cables with the sharp tips on the tweezers.

- ☑ During reassembly, apply [pre-cut adhesive](#) to the bundled antenna cables to secure them to the frame.

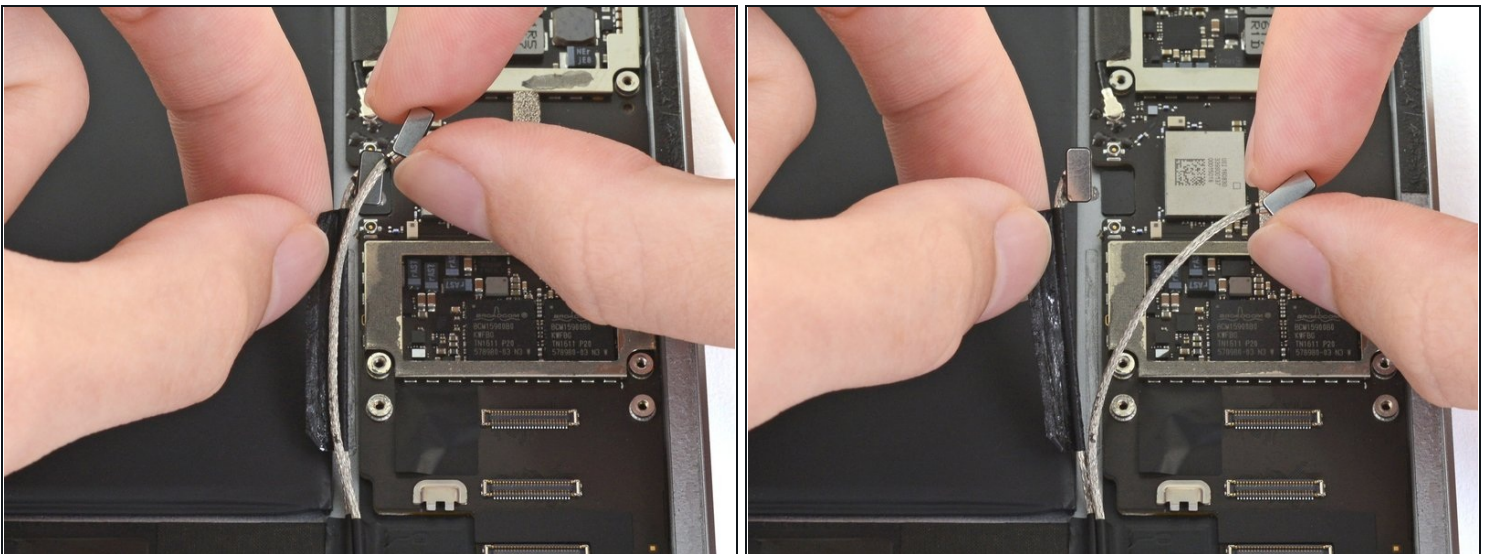


## Step 44 — Separate the antenna cables



- Use a pair of tweezers to peel up the sticker bundling the left and right antenna cables together.

## Step 45



- Peel the right antenna cable off of the sticker.

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