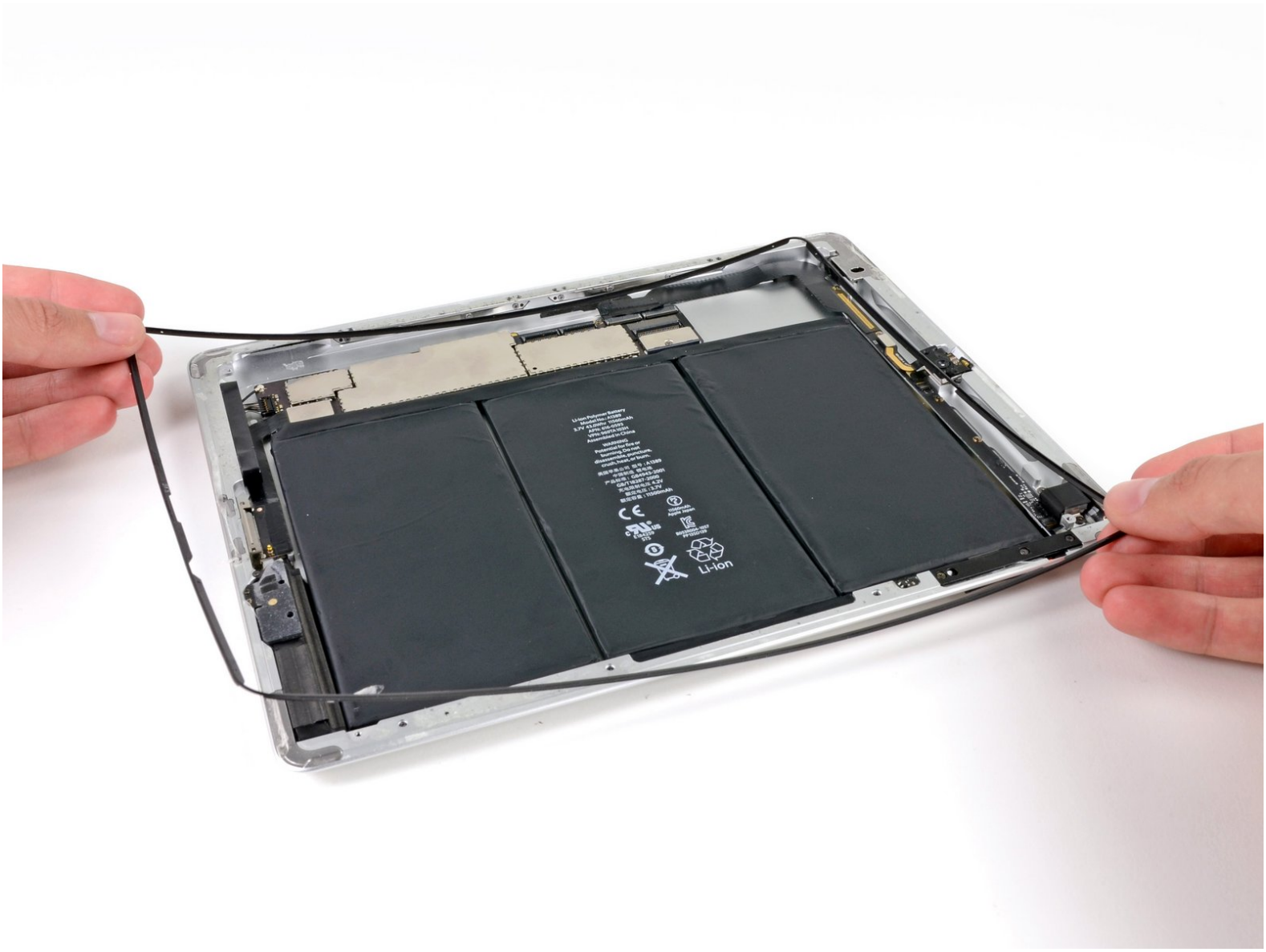
iPad 4 GSM Display Bezel Replacement

Replace the Display Bezel in your iPad 4 GSM.

Written By: Andrew Optimus Goldheart



INTRODUCTION

If you have damaged your display bezel, you can use this guide to help you replace it.

The display bezel guide was initially created for the iPad 3 Wi-Fi. However, the procedure for removing the display bezel is identical for the iPad 4, both 4G and Wi-Fi models.

TOOLS:

- iOpener (1)
- Phillips #00 Screwdriver (1)
- Phillips #0 Screwdriver (1)
- Spudger (1)
- Tweezers (1)
- iFixit Opening Tools (1)
- iFixit Opening Picks set of 6 (1)

PARTS:

- iPad 2/3/4 Display Bezel (1)
- iPad Retina Adhesive Strips (1)

Step 1 — iOpener Heating

We recommend that you clean your microwave before proceeding, as any nasty gunk on the bottom may end up stuck to the iOpener.

- Place the iOpener in the center of the microwave.

For carousel microwaves: Make sure the plate spins freely. If your iOpener gets stuck, it may overheat and burn.

Step 2

- Heat the iOpener for **thirty seconds**.
- Throughout the repair procedure, as the iOpener cools, reheat it in the microwave for an additional thirty seconds at a time.

⚠ Be careful not to overheat the iOpener during the repair. Overheating may cause the iOpener to burst.

⚠ Never touch the iOpener if it appears swollen.

⚠ If the iOpener is still too hot in the middle to touch, continue using it while waiting for it to cool down some more before reheating. A properly heated iOpener should stay warm for up to 10 minutes.

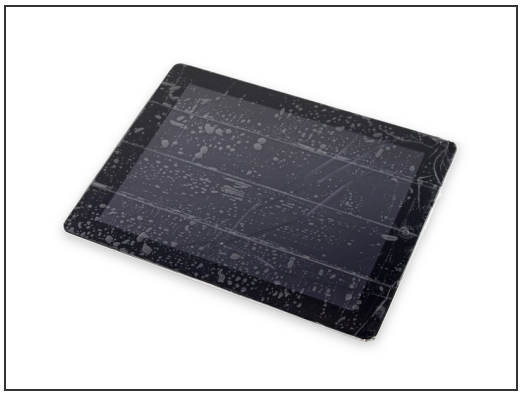
Step 3

- Remove the iOpener from the microwave, holding it by one of the two flat ends to avoid the hot center.

⚠ The iOpener will be very hot, so be careful when handling it. Use an oven mitt if necessary.

Step 4 — Front Panel





- 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.

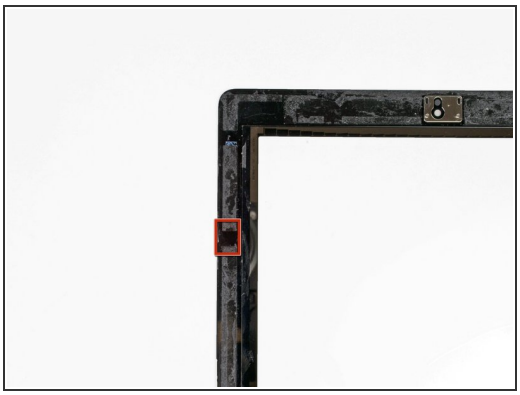
⚠ Wear safety glasses to protect your eyes, and be careful not to damage the LCD screen.

Step 5

Again, as you may find yourself working with broken glass during this procedure, we strongly recommend wearing safety glasses for protection from flying shards.

- Lay the iOpener flat on the right edge of the iPad, smoothing it out so that there is good contact between the surface of the iPad and the iOpener.
- Let the bag sit on the iPad for approximately 90 seconds before attempting to open the front panel.

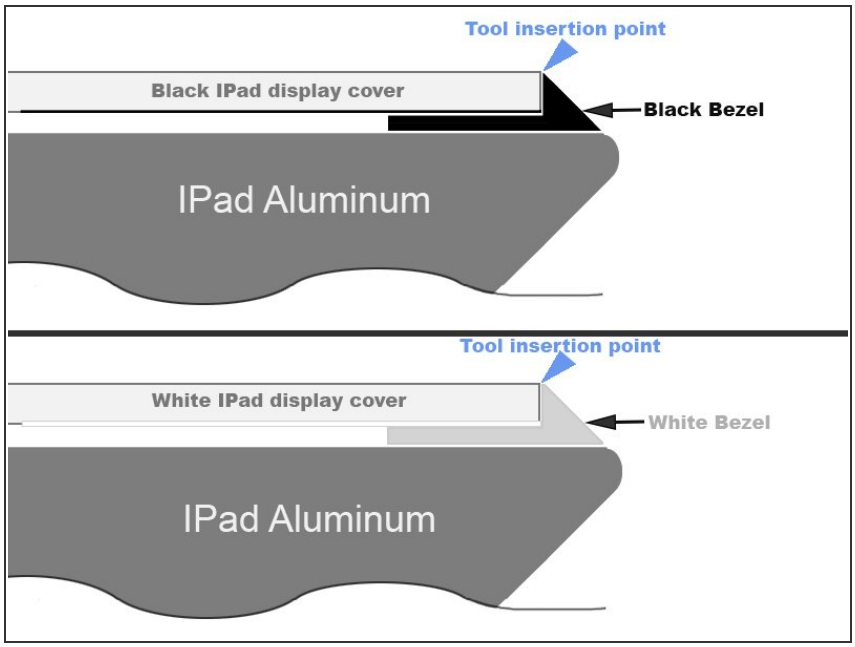
Step 6



- There is a small gap in the iPad's adhesive ring in the upper right corner of the iPad, approximately 2.0 inches (~5 cm) from the top of the iPad. You are going to exploit this weakness.
- Align the tool with the mute button. Insert the tip of a plastic opening tool into the gap between the front glass and the plastic bezel. Just insert the very tip of the opening tool, just enough to widen the crack.

It may require some force to get the wedged tip of the opening tool between the glass and plastic. Work patiently and carefully, wiggling the plastic opening tool back and forth as necessary.

Step 7



- Make sure you place the tool in the proper spot—between the plastic display bezel and the front panel glass.

Step 8

- Keeping the tip of the plastic opening tool wedged between the front glass and plastic bezel, slide a plastic opening pick in the gap, right next to the plastic opening tool.

Step 9

- Remove the plastic opening tool from the iPad, and push the opening pick further underneath the front glass to a depth of ~0.5 inches.

Step 10

- While you work on releasing the adhesive on the right side of the iPad, reheat the iOpener, and replace it on the bottom edge of the iPad.

Step 11

- While the bottom edge is being heated by the iOpener, begin releasing the adhesive from the right edge of the iPad.
- Slide the opening pick down along the edge of the iPad, releasing the adhesive as you go.

The adhesive is very strong, and some serious force may be required. Work carefully.

If you can see the tip of the opening pick underneath the front glass, pull the pick out just a little bit. While using the opening pick this deep won't damage anything, it may get adhesive residue all over the LCD.

Step 12



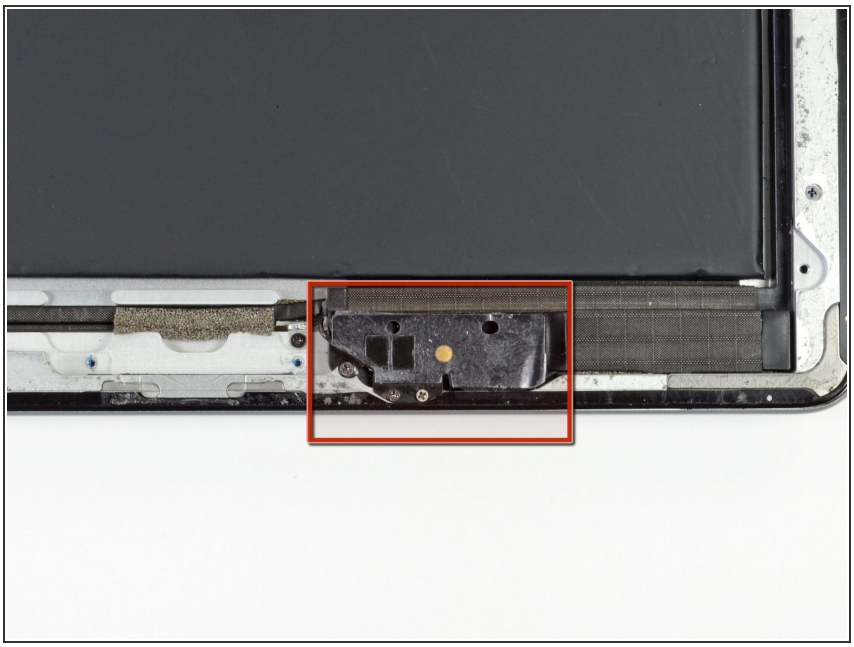
It may be necessary to move the heated iOpener back onto the right edge of the iPad as you release the adhesive. This depends on how long the iPad has been able to cool while you were working on it.

- If the opening pick gets stuck in the adhesive, "roll" the pick along the side of the iPad, continuing to release the adhesive.

Step 13


- Before removing the first opening pick from the bottom corner of the iPad, insert a second pick under the right edge of the front glass to keep the adhesive from re-adhering.
- Re-heat the iOpener, and move it to the top edge of the iPad.

Step 14



The next few steps require extreme caution.

The Wi-Fi antenna is attached to the bottom right edge of the rear case of the iPad via screws and a cable. Because of the orientation of the Wi-Fi antenna, it is imperative to proceed with caution otherwise irreversible damage to the Wi-Fi antenna may result.

- You will have to release the adhesive securing the antenna to the front panel without damaging the delicate parts attaching the antenna to the bottom of the iPad. Follow the next steps carefully.

Step 15

- Slide the opening pick around the bottom right corner of the iPad, releasing the adhesive there.

⚠ Do not slide the pick further than the bottom right corner. You may damage the Wi-Fi antenna by doing so.

Step 16

⚠ This step requires you to move the opening pick along the bottom right edge of the front panel. The Wi-Fi antenna is very close to the corner and is easily severed if the adhesive is released improperly.

ⓘ Do not completely remove the pick from under the front glass, but pull it out just a little bit so that ~1/8" (3 mm) of the tip is still under the front glass.

- Slide the tip of the opening pick along the bottom edge of the iPad, releasing the adhesive over the Wi-Fi antenna.

Step 17

- Once you have moved past the Wi-FI antenna (approximately 3" (75 mm) from the right edge, or right next to the home button) re-insert the opening pick to its full depth.
- Slide the pick to the right, releasing the adhesive securing the Wi-Fi antenna to the front glass.
  - The antenna is attached to the bottom of the iPad via screws and a cable. This step detaches the antenna from the front panel, ensuring that when you remove the panel, the antenna will not be damaged.

Step 18

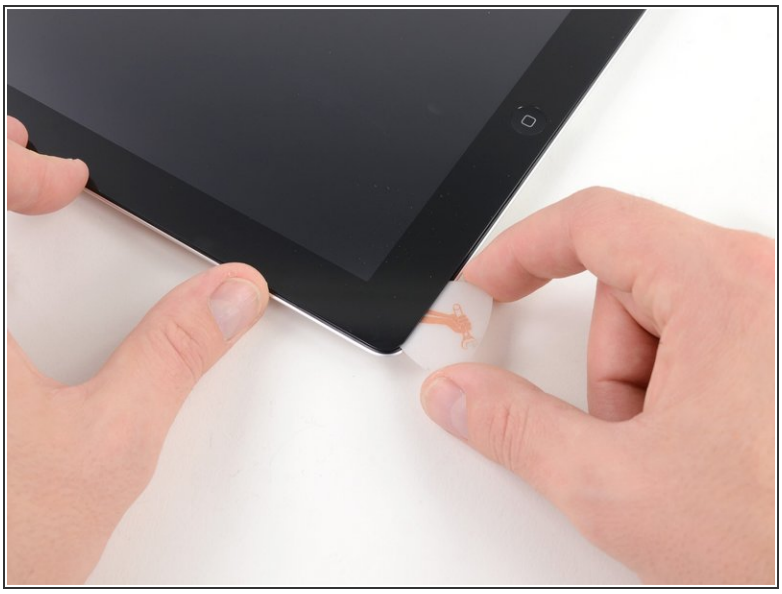


- Continue releasing the adhesive along the bottom of the iPad, pulling the opening pick out far enough to go around the home button, and re-inserting it to a depth of 1/2 inch (10 mm) once the pick is past the home button.

If the adhesive has cooled too much along the bottom edge, reheat the iOpener to warm the adhesive where you are working.

Do not heat the iOpener more than a minute at a time, and always allow at least two minutes before reheating it.

Step 19



- Continue releasing the adhesive all the way along the bottom edge of the iPad.

  ⚠ On iPad 4 models, insert the pick to a maximum depth of 1/2 inch (10 mm) in this area, to avoid damaging the home button ribbon cable.

- Leave the opening pick wedged underneath the front glass near the home button.

Step 20

- Reheat the iOpener in the microwave and set it on the left edge of the iPad to start warming the adhesive in that section.

Step 21



- Slide the opening pick along the top edge of the iPad, pulling it out slightly to go around the front-facing camera bracket.
- The adhesive along this section is very thick, and a fair amount of force may be required. Work carefully and slowly, making sure to not slip and damage yourself or your iPad.

If the adhesive has cooled too much, replace the iOpener along the top edge and continue working. If the iOpener has cooled too much, reheat it.

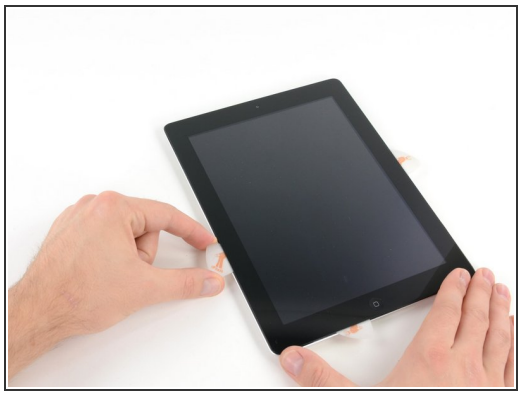
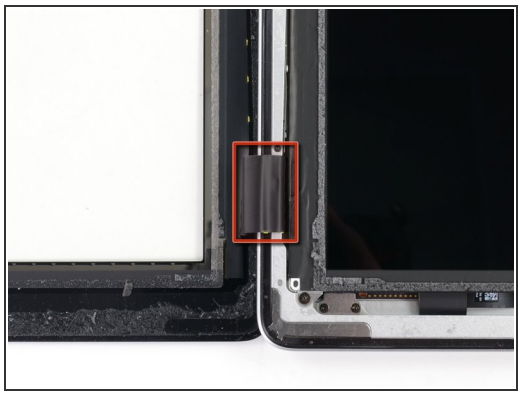
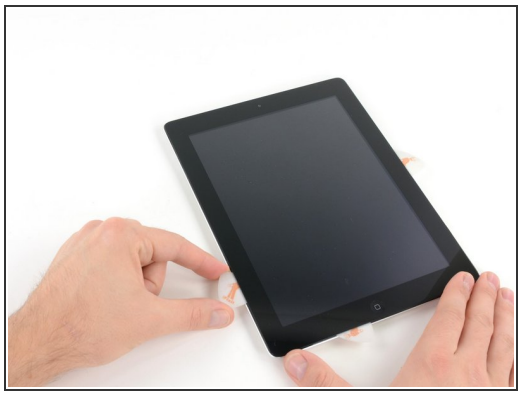
If the opening pick is getting stuck in the adhesive, "roll" the pick as shown in step 9.

Step 22

- Continue releasing the adhesive along the top edge of the iPad, and slide the opening pick around the top left corner.

If the adhesive is warm enough, remove the iOpener from the iPad for convenience. However, if the adhesive is still quite sticky, re-heat the iOpener and lay it on the left edge while you work.

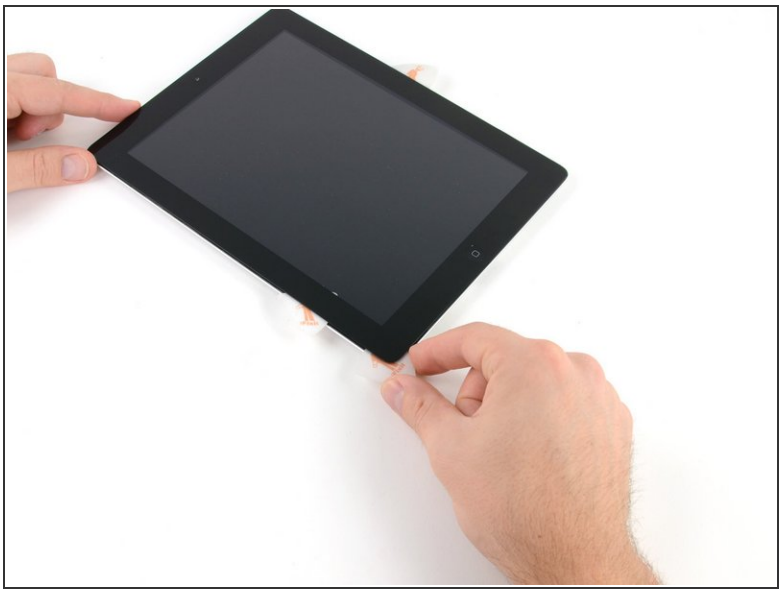
Step 23

- Slide the opening pick along the left edge of the iPad, releasing the adhesive as you go. The adhesive is thin here due to the digitizer along the whole left side. Make sure the pick is not too deep (max 1/2 inch) 10 mm to prevent damaging the digitizer.

⚠ The digitizer cable is located approximately 2" (50 mm) from the bottom of the iPad. Stop sliding the pick when you get ~2.25" (60 mm) from the bottom of the iPad.

Step 24



- Using the opening pick that is still underneath the bottom edge of the iPad, release the adhesive along the bottom left corner.

⚠ The bottom of the digitizer cable is only ~1" (25 mm) from the bottom of the iPad. Work carefully and slowly, making sure to not sever this cable.

Step 25

- Using one of the opening picks, pry up the bottom right corner of the iPad and grab it with your fingers.

Some of the adhesive along the perimeter of the iPad may have stuck back down again. If this is the case, slide a pick underneath the edge of the iPad where the front glass is still stuck and "cut" the adhesive.

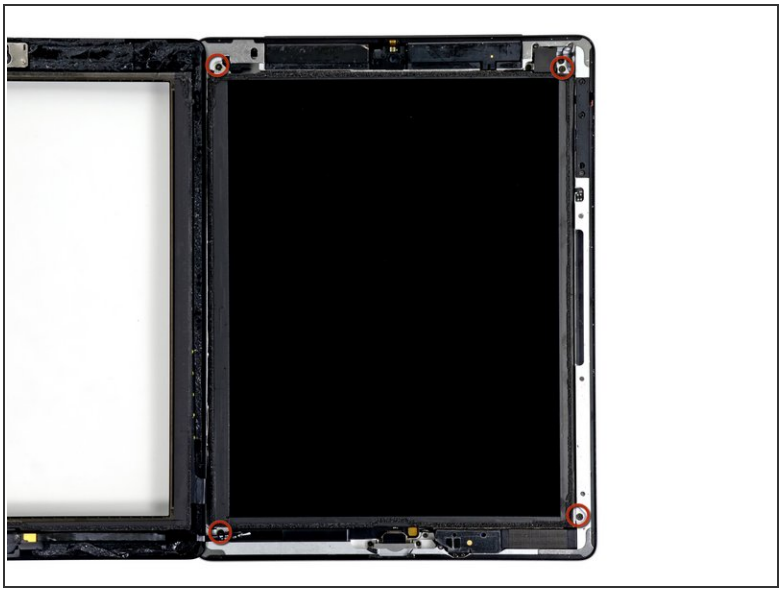
Step 26

- Holding the iPad by the top and bottom right corners, rotate the front glass away from the iPad.

Be careful of any adhesive that may still be attached, and use an opening pick to cut any adhesive that may still be holding the front panel down.

During reassembly use a microfiber cloth and compressed air to clean any dust or fingerprints off the LCD before reinstalling the glass.

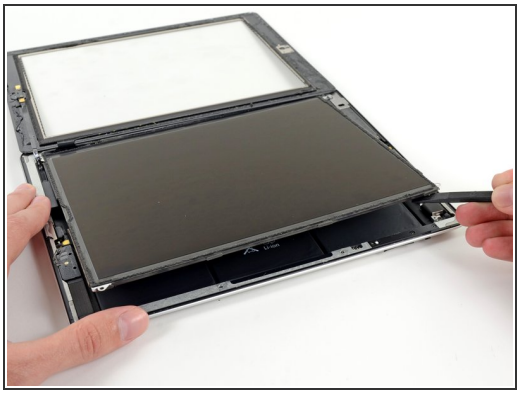
Step 27 — Front Panel Assembly

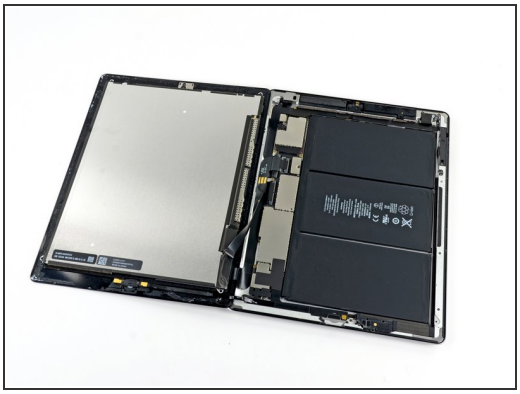


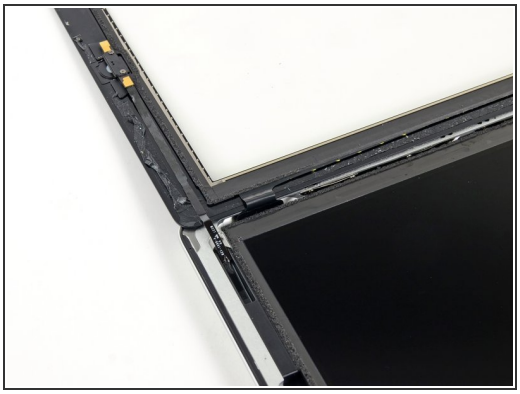
- Remove the four 2 mm Phillips #00 screws securing the LCD to the aluminum frame.

The bottom left screw is obscured by the home button ribbon cable connector. Carefully move the home button ribbon cable aside to remove the bottom left screw.

Step 28







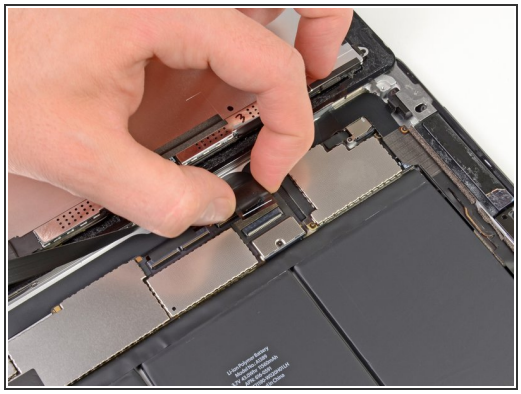
- Using a plastic opening tool or a spudger, lift the right edge of the LCD out of the iPad.
- Rotate the LCD along its left edge and lay it down on top of the front glass panel.

Be careful as you move the LCD. The ribbon cable is fragile and may break if it is flexed too much.

Step 29 — LCD

- Using the tip of a spudger, peel back the piece of tape covering the LCD ribbon cable connector.

Step 30



- Flip up the retaining flap on the LCD ribbon cable ZIF connector.
- Using your fingers or a pair of tweezers, pull the LCD ribbon cable from its socket on the logic board.

You may have to force restart the iPad by holding down the power button and home button for at least ten seconds until you see the Apple logo if the LCD screen doesn't power on after connecting the ZIF connector for the LCD screen when putting everything back together.

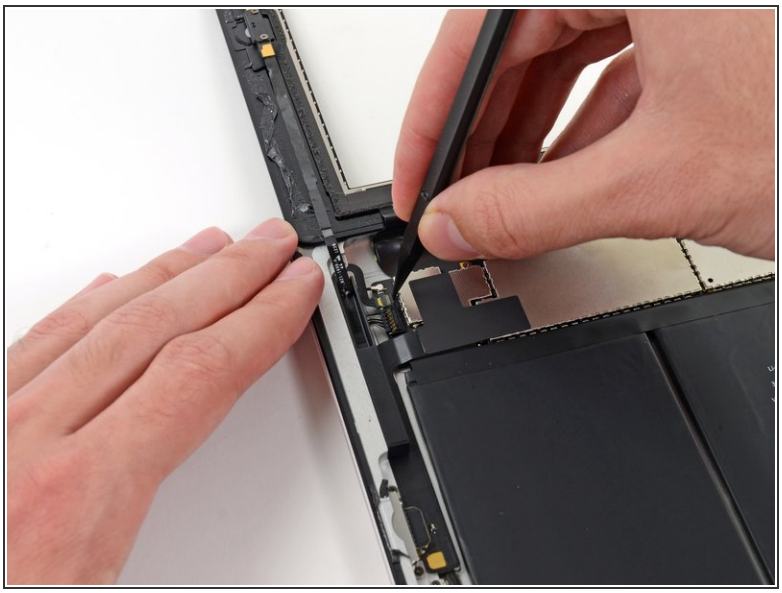
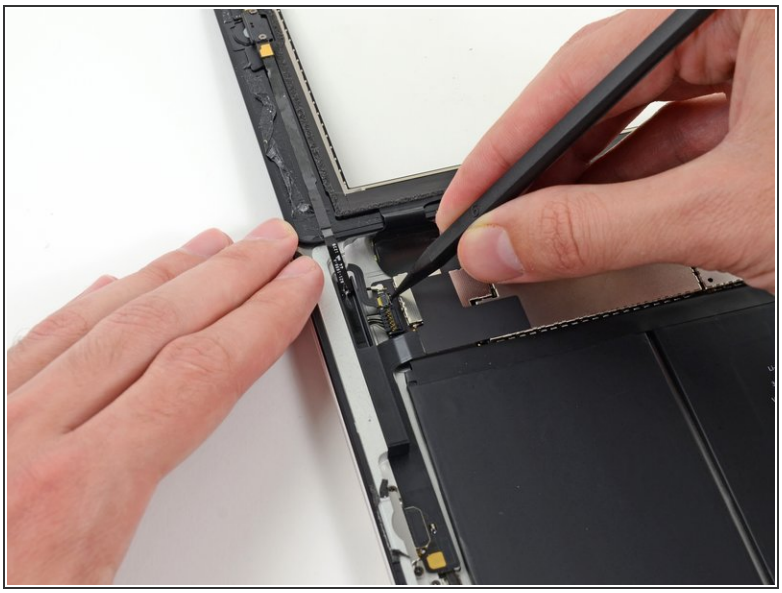
Step 31

- Without touching the front of the LCD, lift the LCD off the front panel.

Step 32 — Front Panel Assembly

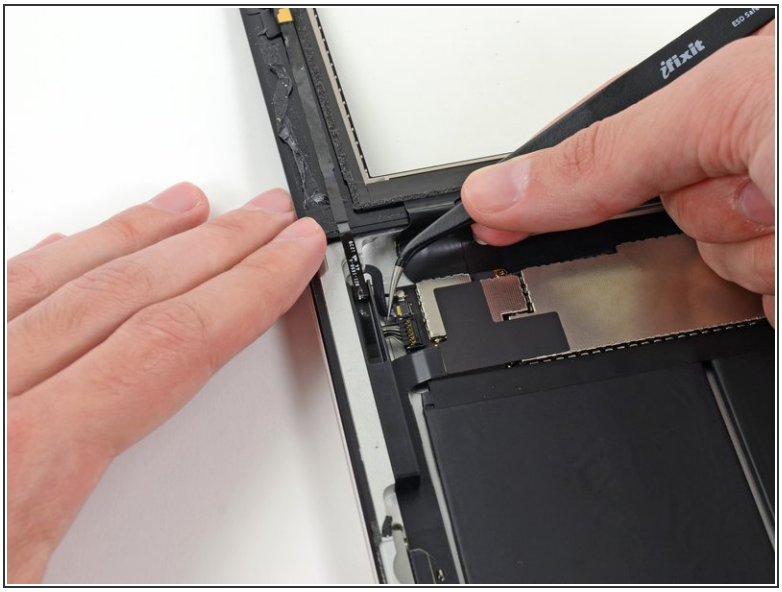
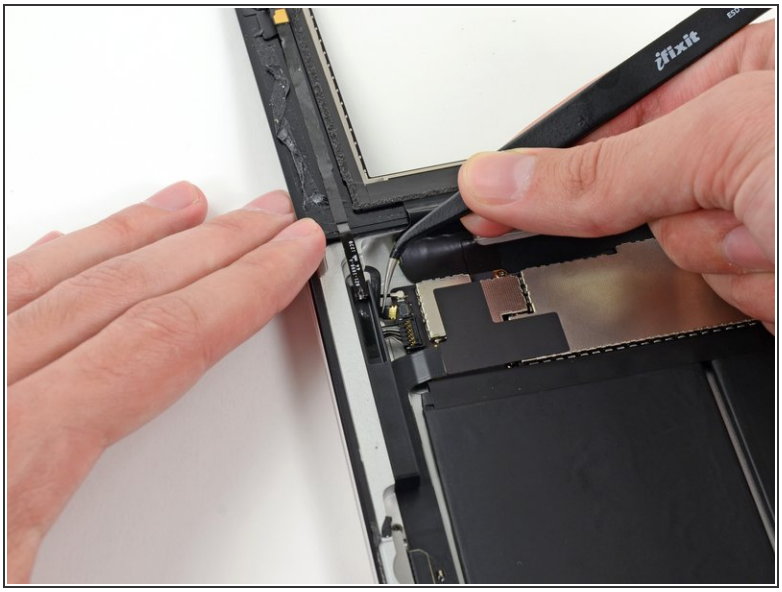
If present, remove the piece of electrical tape covering the Wi-Fi antenna, speaker cable, and home button ribbon cable.

Step 33

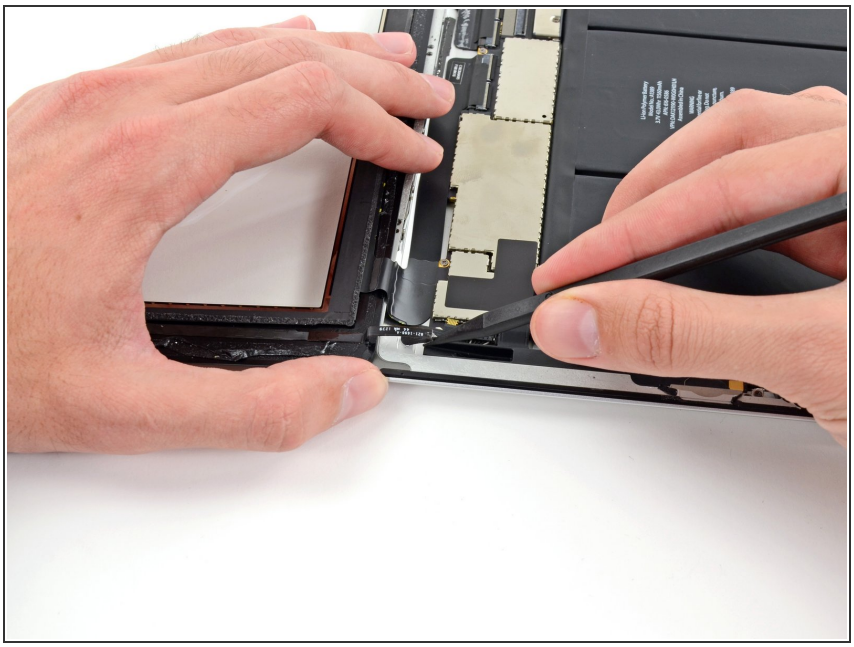
- Flip up the retaining flap on the home button ribbon cable ZIF connector.

Step 34

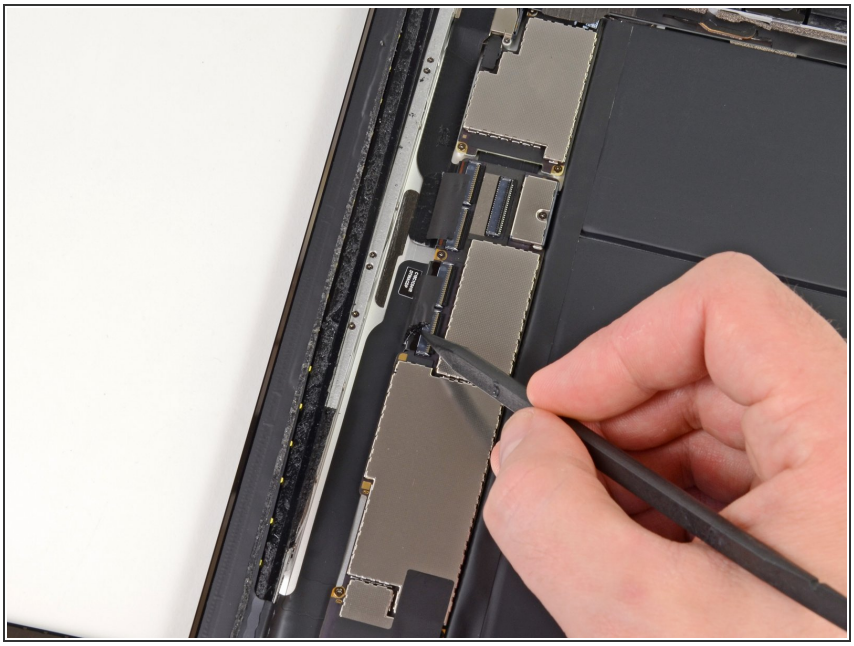
- Use a pair of tweezers to pull the home button ribbon cable straight out of its socket on the logic board.

Step 35



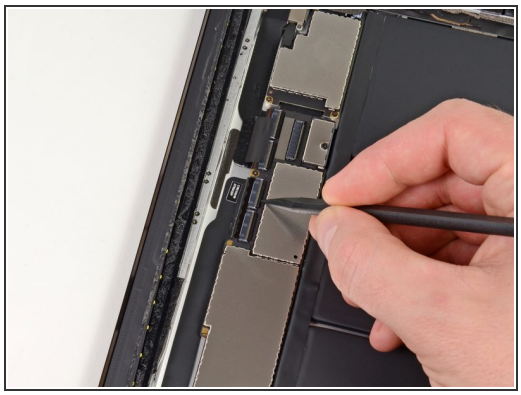
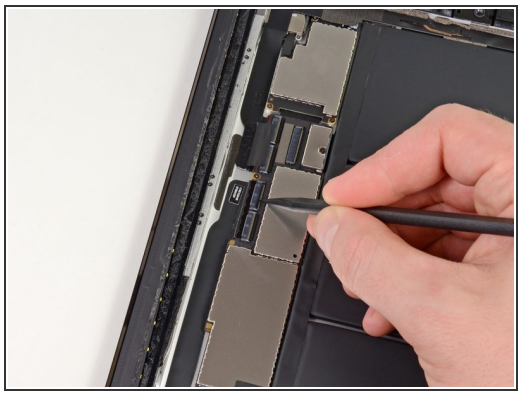
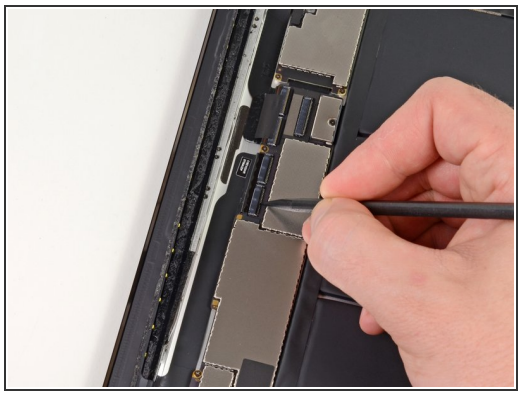
- De-route the home button ribbon cable from its recess in the rear case.

Step 36



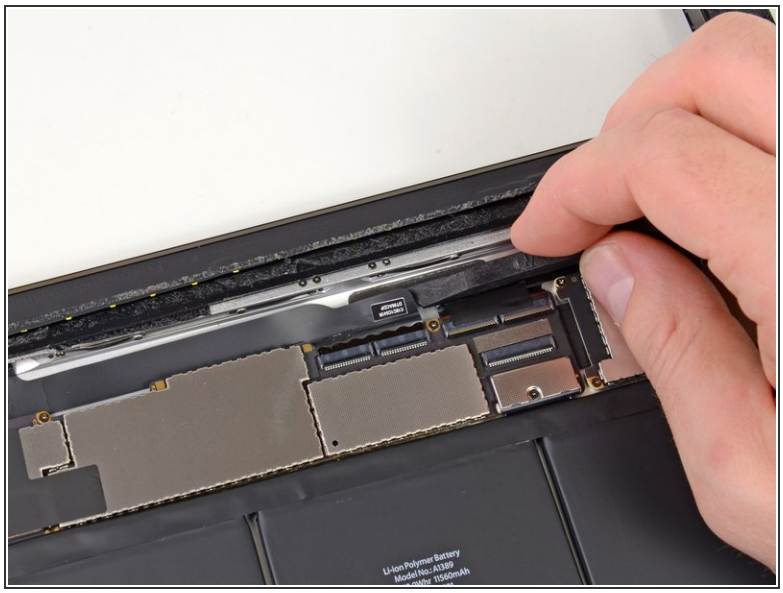
- Using the tip of a spudger, peel back the piece of tape that secures the digitizer ribbon cable to the logic board.

Step 37

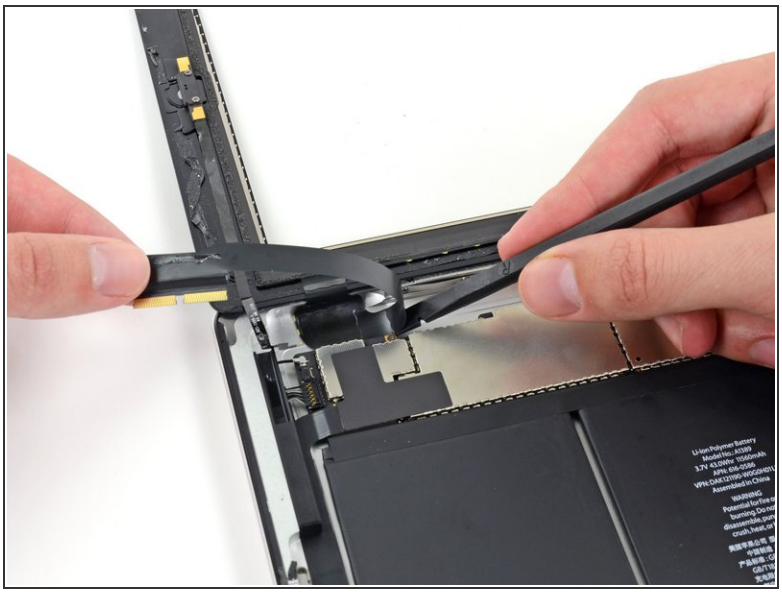
- Flip up the retaining flap on **both** of the digitizer ribbon cable ZIF connectors.

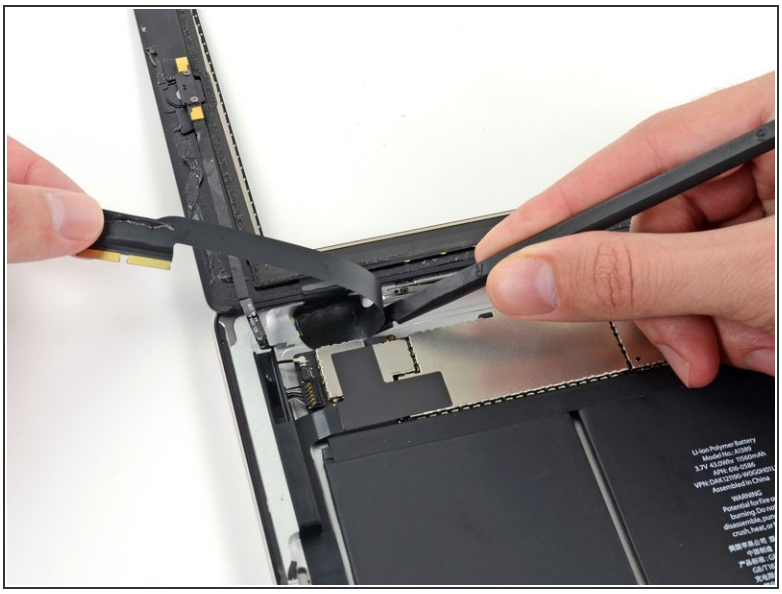
Step 38




- Use the flat end of a spudger to loosen the adhesive underneath the digitizer ribbon cable.
- Pull the digitizer ribbon cable straight out of its sockets on the logic board.

Step 39



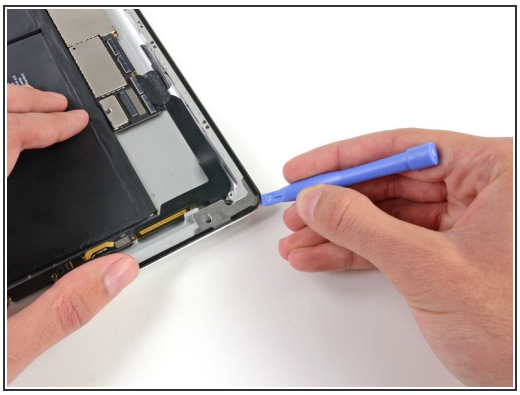
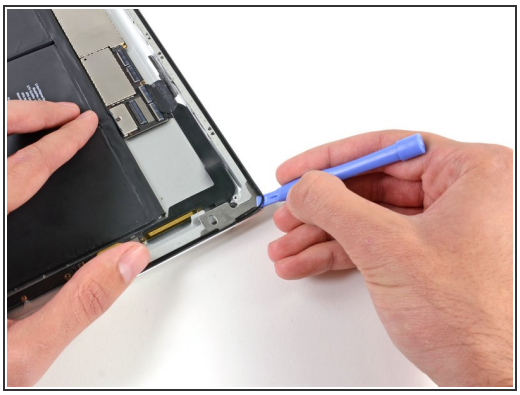


- Peel back the digitizer ribbon cable and use the flat end of a spudger to release the adhesive securing the cable to the rear aluminum case.

Step 40

- Using your fingers, pull the digitizer ribbon cable out of its recess in the aluminum frame.
- Remove the front panel from the iPad.

Step 41 — Display Bezel

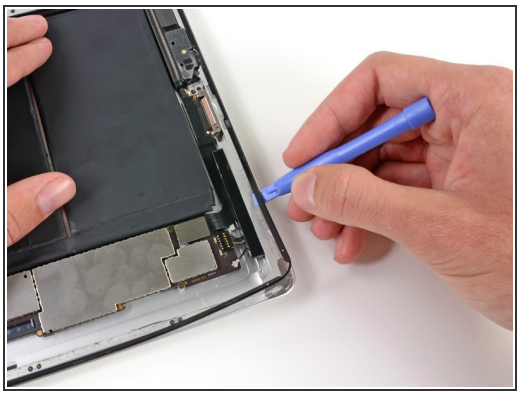




- Insert the edge of plastic opening tool between the plastic and aluminum frames near one of the corners.
- Carefully slide the plastic opening tool along the edge of the iPad, releasing the adhesive.

Step 42


- In the same manner, continue sliding the plastic opening tool along all the left edge of the iPad.

Step 43



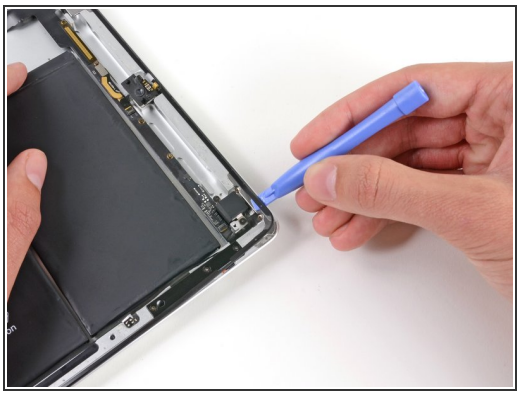
- When you get close to the bottom left edge, rotate the plastic opening tool around the corner, and continue sliding it along the bottom edge.

Step 44



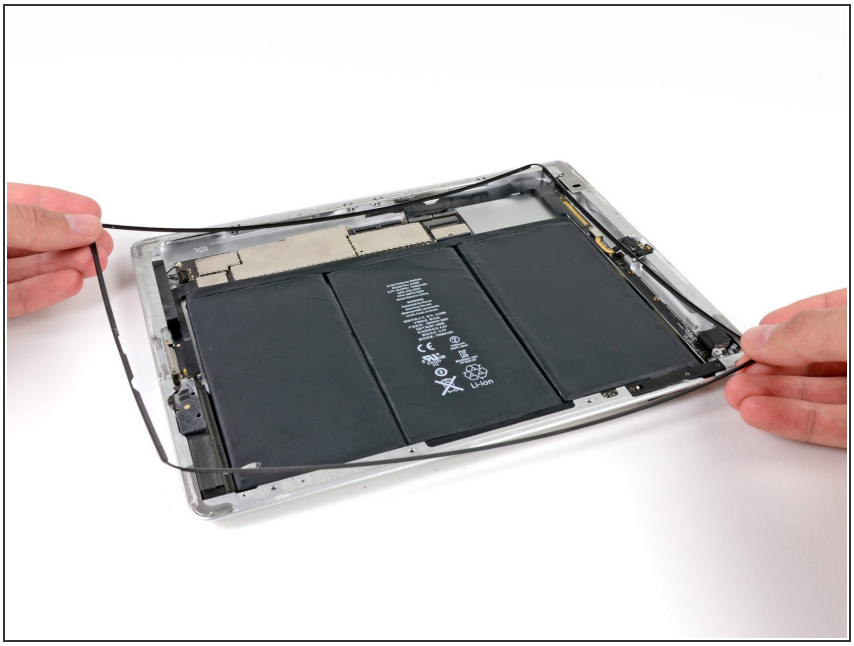
- Continue sliding the plastic opening tool along the right edge of the iPad.

Step 45



- Be mindful of the front facing camera when sliding the plastic opening tool along the top edge of the iPad.

Step 46



- When the adhesive has been released along all the edges of the iPad, lift the plastic display bezel off of the iPad.

To reassemble your device, follow these directions in reverse and use our [iPad 4 GSM Front Panel Adhesive strips] guide to reattach the front panel.