

iPad Pro 9.7" Battery Replacement

Follow this guide to remove and replace the...

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INTRODUCTION

Follow this guide to remove and replace the battery for the iPad Pro 9.7".

This extensive procedure requires you to remove the logic board in order to free the battery for removal.

This guide is written with a cellular model iPad Pro. If your iPad is not the cellular model, skip the first step.

Because there are steps in this guide where the battery may remain connected to the logic board, leave the iPad on until the battery is **completely discharged** (the iPad turns itself off) before attempting this guide.

Have plenty of high concentration (over 90%) isopropyl alcohol to help make residue cleanup easier.

If your battery is swollen, take appropriate precautions.

TOOLS:

Anti-Clamp (1)

Slip Joint Pliers (1)

SIM Card Eject Tool (1)

iOpener (1)

Suction Handle (1)

Phillips #00 Screwdriver (1)

Battery Blocker (1)

Spudger (1)

iFixit Opening Picks (Set of 6) (1)

Tweezers (1)

iFixit Opening Tool (1)

Plastic Cards (1)

iFixit Adhesive Remover (1)

Painter's Tape (1)

High Content Rubbing Alcohol (1)

Nitrile Gloves 100 Box (1)

Scissors (1)

Large Needle Nose Pliers (1)

Safety Glasses (1)

Isopropyl Alcohol (90% or Greater) (1)

Deck of Cards (1)

PARTS:

iPad Pro 9.7" Battery (1) iPad Pro 9.7" Adhesive Strips (1) Tesa 61395 Tape (1)

Step 1 — SIM Card Tray



- Insert a SIM card eject tool, bit, or a paperclip into the small hole in the SIM card tray, located near the bottom edge of the iPad.
- Press firmly to eject the tray.
- Remove the SIM tray.

Step 2 — 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.
 - (i) 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.



- i 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.

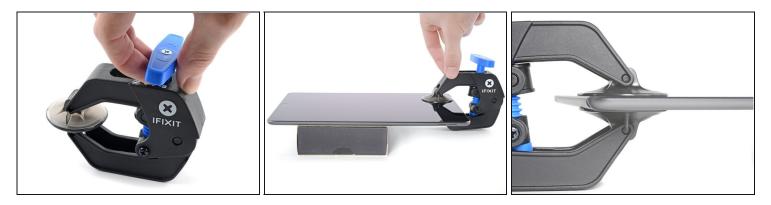






- (i) While the iPad looks uniform from the outside, there are delicate components under certain portions of the front glass. To avoid damage, only heat and pry in the areas described in each step.
- As you follow the directions, take special care to avoid prying in the following areas:
 - Home Button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

Step 5 — 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 two steps for an alternate method.**
 - i 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.
 - (i) 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.

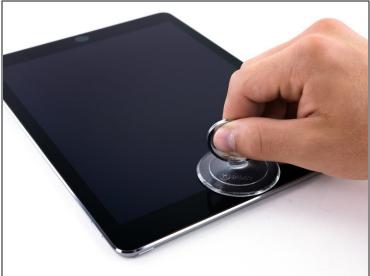






- Push the blue handle away from the hinge to engage opening mode.
- Turn the handle clockwise until you see the cups start to stretch.
 - (i) Make sure the suction cups <u>remain aligned to each other</u>. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
- 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.
 - (i) 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.





- 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 8







- Firmly pull up on the suction cup to create a small gap between the front panel and the rear case.
 - \triangle 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.

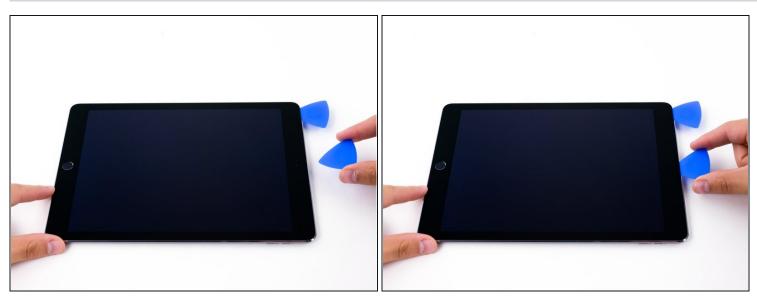


- Slide the pick along the edge of the display, towards the headphone jack.
 - If there is still a considerable amount of resistance when sliding the opening pick, repeat the iOpener heating procedure and apply additional heat.

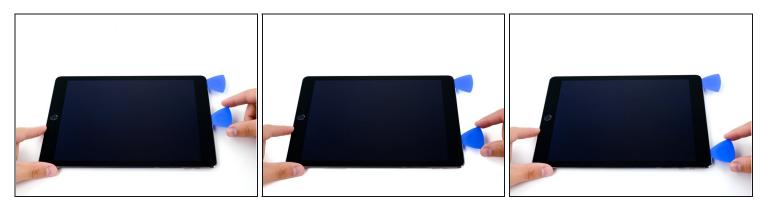
⚠ Don't insert the pick past the bezel into the display area, or you will damage it.

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

Step 10

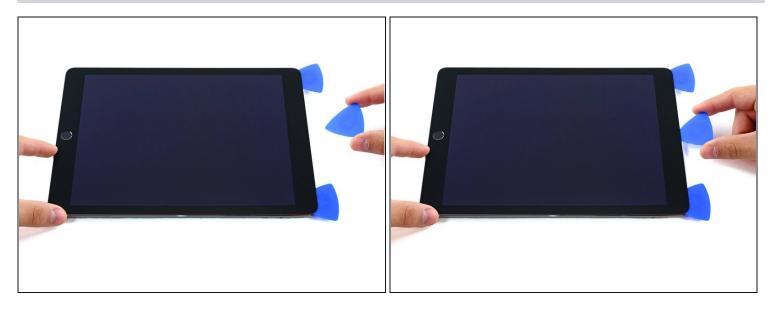


Insert a second opening pick by the front-facing camera.



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

Step 12

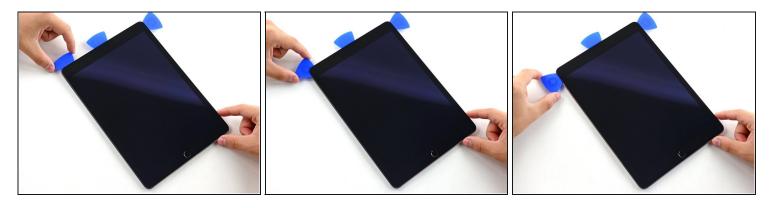


Insert a third pick by the front-facing camera.



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

Step 14



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



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

Step 16



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



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

Step 18

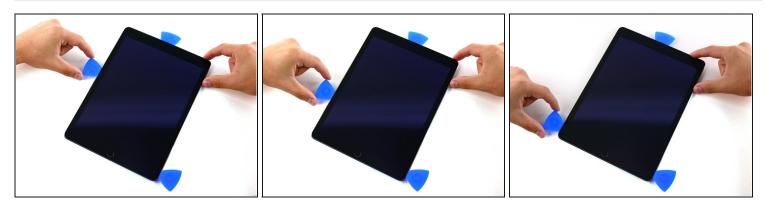


Slide the left-hand opening pick about halfway down the edge of the display.



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

Step 20

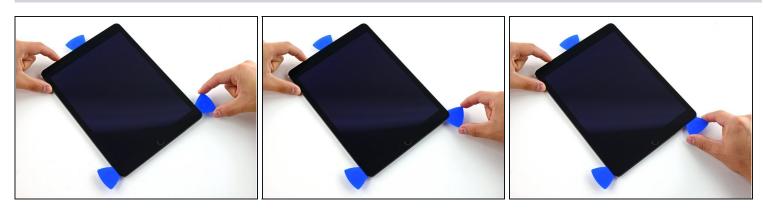


 Slide the left-hand opening pick down the edge of the display until you reach the corner.



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

Step 22

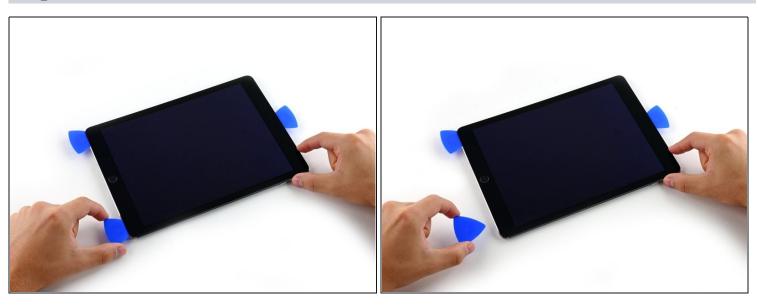


• Bring the right-hand opening pick around the bottom corner of the iPad.



- Repeat for the left-hand pick.
- (i) Reheat and reapply the iOpener as needed.

Step 24



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



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

A 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.

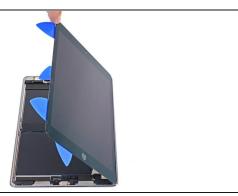
Step 26 — Slice through the remaining adhesive



- 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.

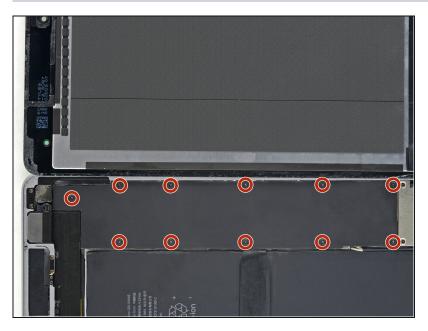






- Swing the display assembly towards the right of the case, using the right edge as a hinge.
 - As you move the display assembly, make sure that the display ribbon cable is not being stressed.
- Continue swinging the display assembly until it lays flat next to the rear case.

Step 28 — Disconnect the battery

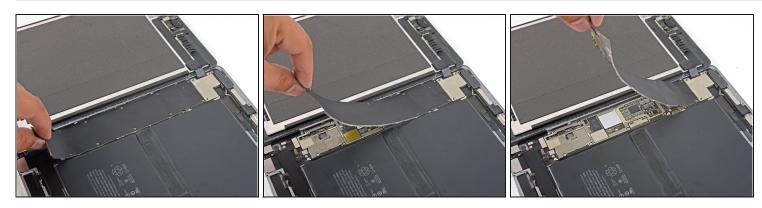


 Use a Phillips screwdriver to remove the eleven 1.3 mm screws securing the EMI shield.

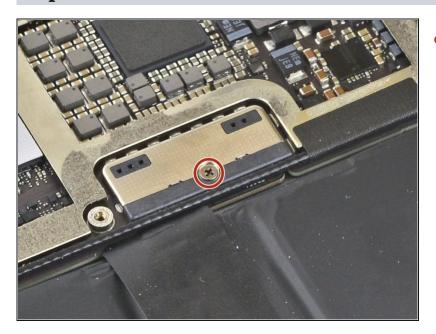


 Apply a <u>heated iOpener</u> to the EMI shield on the logic board for one minute.

Step 30

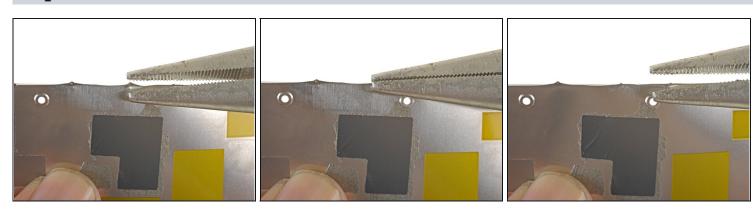


- Lift the logic board EMI shield, starting at the edge nearest the top of the iPad.
- Slowly peel the EMI shield up from the logic board.
 - (i) This takes a bit of force due to the many tiny clips securing the shield, and the shield may deform slightly. That's okay—try to keep the deformation to a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



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

Step 32



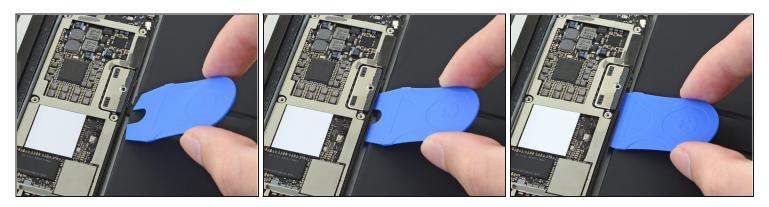
- If the EMI shield has any sharp protrusions after removal, you should flatten them before reinstalling the shield.
- Squeeze the sharp protrusion with a pair of pliers to flatten it.
- Repeat the process for all sharp protrusions along the edges of the EMI shield.

Step 33 — Battery connector information



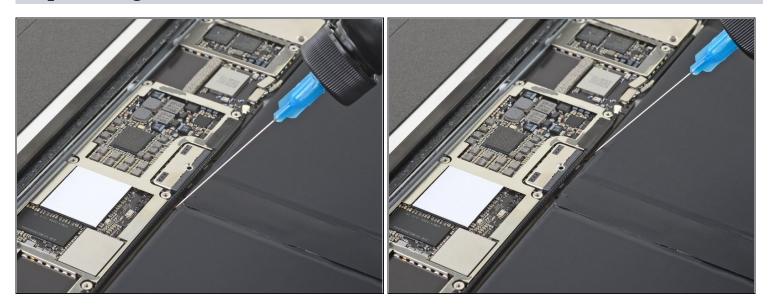
- (i) These photos show what the battery connector looks like underneath the logic board. Use these photos as a reference while you safely disconnect the battery.
- (i) Notice that the battery connector has cantilever springs on the logic board that press against the battery contact pads. Since both 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 34 — Disconnect the battery



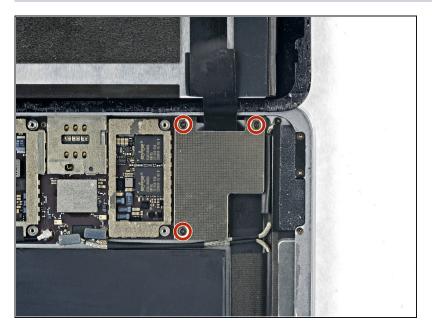
- A Be careful when you isolate the battery using a battery blocker. The battery contacts are easily bent or broken, resulting in irreversible damage.
- ② Ensure that the iFixit logo on the battery blocker is facing up.
- Slide the battery blocker underneath the left side of the logic board's battery connector at a 35 degree angle.
 - (i) 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.
 - ② 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.
 - (i) 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 35 — Logic board adhesive information



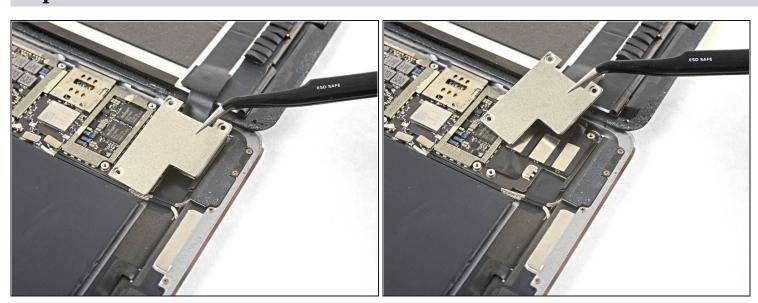
- (i) If the battery blocker doesn't easily slide under the logic board, follow these steps to partially loosen the logic board from the frame:
 - Apply a few drops of high-concentration (90% or higher) isopropyl alcohol under the logic board to the left and right of the battery connection.
 - Wait one 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.
 - (i) 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 36 — Remove the display bracket screws



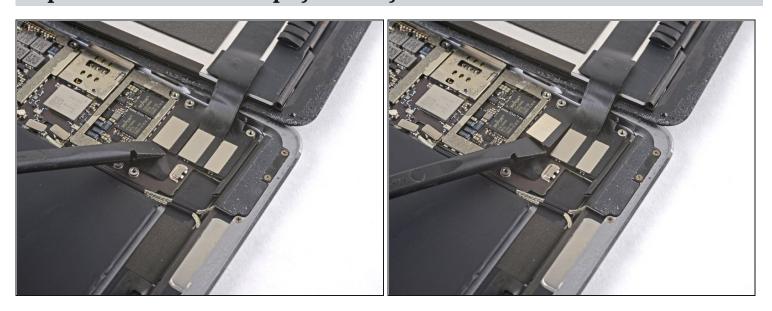
 Use a Phillips screwdriver to remove the three 1.3 mm Phillips screws securing the display cable bracket.

Step 37 — Remove the bracket



• Remove the display cable bracket.

Step 38 — Disconnect the display assembly



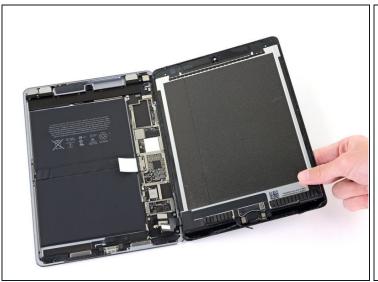
• Use the flat end of the spudger to disconnect the display assembly connector from the motherboard socket.

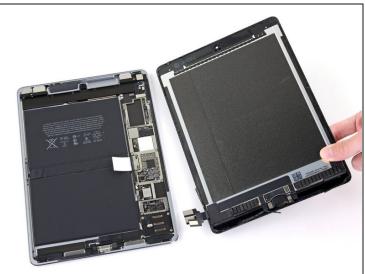
Step 39



• Repeat the previous step for the two remaining connectors.

Step 40 — Remove the display assembly





- Remove the display assembly from the frame.
- If you are reusing the original display assembly, <u>follow this display adhesive</u> <u>application guide</u> to apply replacement display adhesive during reassembly.

Step 41 — Detach the right ambient light sensor

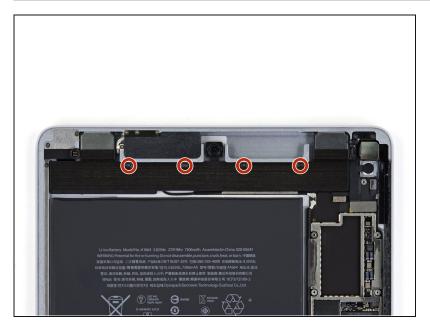






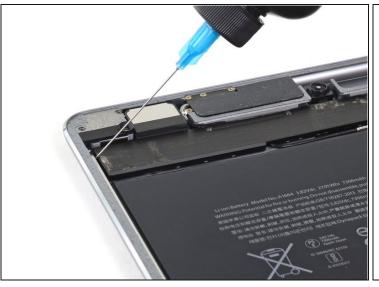
- Slide an opening pick under the right ambient light sensor to loosen its adhesive.
- There are two pegs on the shelf that position the ambient light sensor—one on the bottom edge and one near the top edge.

Step 42 — Remove the four screws



 Use a Phillips screwdriver to remove the four 1.9 mm-long screws securing the upper speaker to the frame.

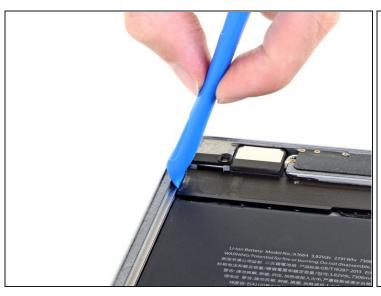
Step 43 — Apply isopropyl alcohol





- *i* Strong adhesive secures the upper speaker to the frame.
- Apply a few drops of high-concentration (90% or higher) isopropyl alcohol under the upper speaker.
- Wait one minute for the isopropyl alcohol to weaken the adhesive under the upper speaker.

Step 44 — Pry up the upper speaker





- Use an opening tool to pry up the left edge of the upper speaker.
- Try to avoid bending the upper speaker while prying it up. Some bending will likely happen during this process, but excessive bending may damage the upper speaker.
- (i) If the upper speaker isn't detaching from the frame, apply a few more drops of isopropyl alcohol.

Step 45 — Move the left side of the upper speaker





• Use the flat end of a spudger to push the left side of the upper speaker toward the battery just enough for the left speaker to slide out of its recess in the frame.

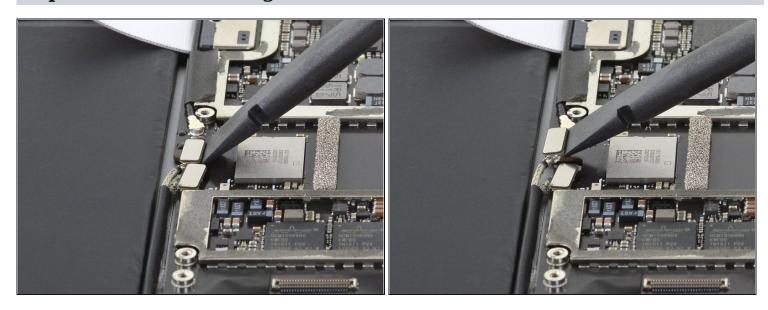
Step 46 — Remove the upper speaker





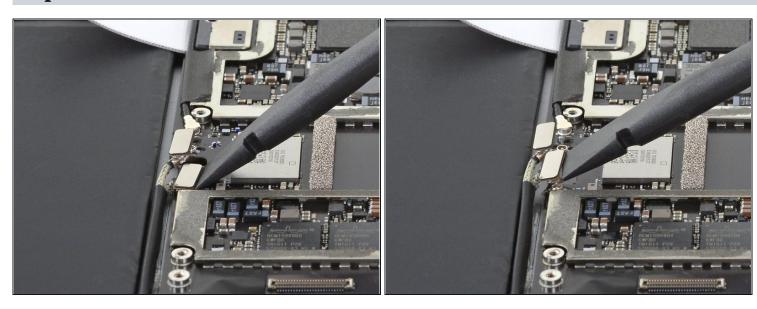
- Lift and remove the upper speaker from the frame.
 - There are multiple cables under the upper speaker. Be careful not to damage them while removing it.
 - (i) If any cables are still attached to the upper speaker while you lift it up, carefully peel them off of the upper speaker. You can apply more isopropyl alcohol if they don't easily peel away.
 - i If the <u>ZIF connector sticker</u> near the front camera comes off while removing the upper speaker, reapply it to the ZIF connector.
 - (i) If the <u>ZIF connector</u> near the front camera disconnects while removing the upper speaker, use the pointed end of a spudger to flip up the locking flap. Then, reinsert the ribbon cable and close the locking flap.
- During reassembly, make sure the right ambient light sensor is on top of its shelf.
- If there's any alcohol solution remaining in the device, carefully wipe it off or allow it to air dry before reinstalling the upper speaker.

Step 47 — Disconnect the right antenna



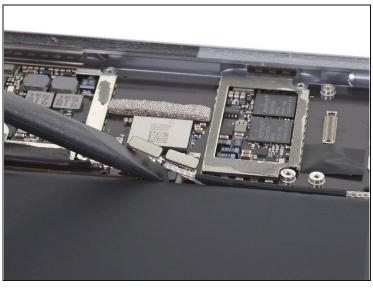
- Use the flat end of a spudger to disconnect the right antenna's coaxial connector from its socket.
- To reinstall, hold the connector in place and gently press straight down. The connector will "snap" into its socket.

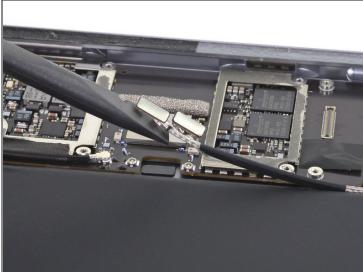
Step 48 — Disconnect the left antenna



- 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 49 — Lift the antenna cables





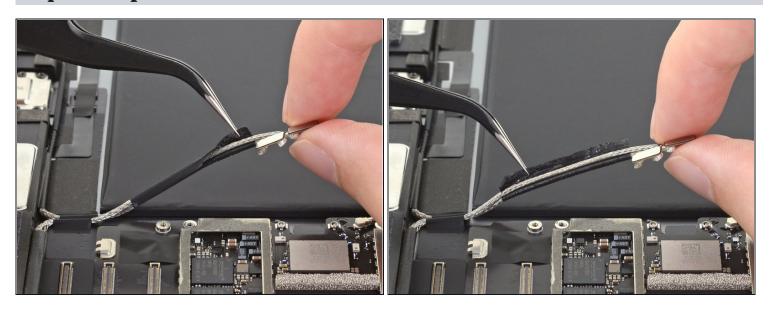
- Use the flat end of a spudger to lift the bundled left and right antenna cables away from the frame.
 - \triangle Be careful not to puncture the battery with the spudger.
 - ① The sticker bundling the antenna cables together is lightly adhered to the frame.

Step 50 — Remove the adhesive



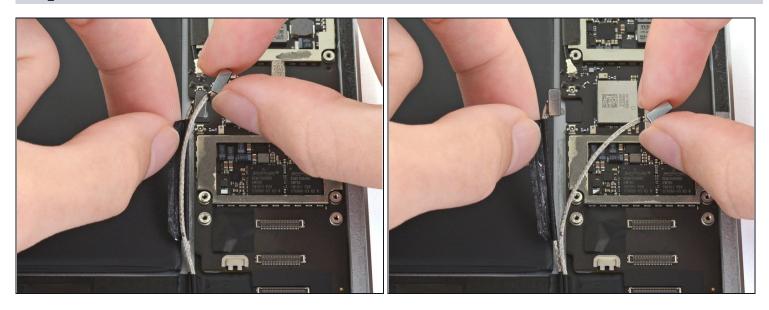
- Use a pair of tweezers to remove the adhesive that was securing the bundled antenna cables to the frame.
- ⚠ Take care not to damage the antenna cables with the sharp tips on the tweezers.
- During reassembly, apply <u>precut adhesive</u> to the bundled antenna cables to secure them to the frame.

Step 51 — Separate the antenna cables



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

Step 52



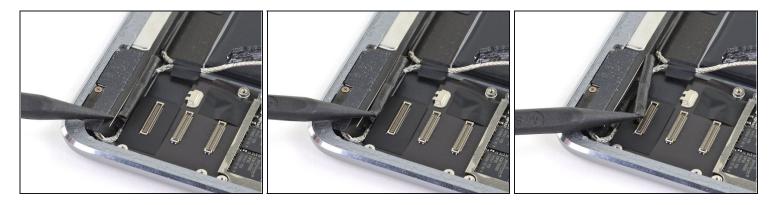
• Peel the right antenna cable off of the sticker.

Step 53 — Lift up the small sticker



• Use a pair of tweezers to lift up the small sticker near the lower right speaker securing the right antenna to the frame.

Step 54 — Detach the foam spacer



• Use the pointed end of a spudger to detach the foam spacer adhered to the second right antenna sticker.

Step 55 — Remove the foam spacer



 Remove the foam spacer from the second right antenna sticker.

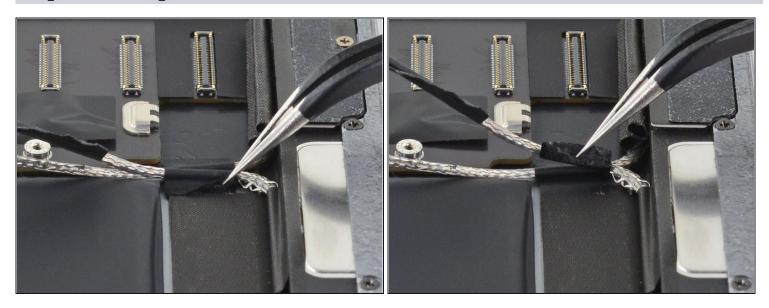
Step 56 — Detach the large sticker





• Use a pair of tweezers to detach the large right antenna sticker between the logic board and the antenna.

Step 57 — Lift up the first sticker



• Use a pair of tweezers to lift up the small sticker next to the lower right speaker securing the left antenna cable to the frame.

Step 58 — Detach the second sticker



• Use a pair of tweezers to detach the large left antenna cable sticker near the lower right speaker.

Step 59 — Lift up the third sticker



• Use a pair of tweezers to lift the left antenna and its third sticker away from the Lightning port area of the frame.

Step 60 — Detach the foam spacer



• Use the pointed end of a spudger to detach the foam spacer adhered to the fourth left antenna cable sticker.

Step 61 — Remove the foam spacer



 Remove the foam spacer from the fourth left antenna cable sticker.

Step 62



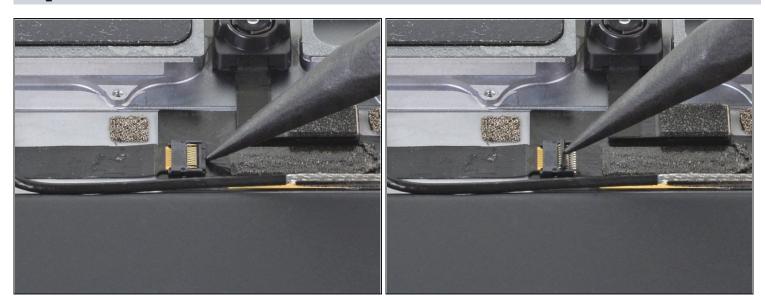
• Use a pair of tweezers to lift up the fourth left antenna cable sticker.

Step 63 — Remove the left ambient light sensor's sticker



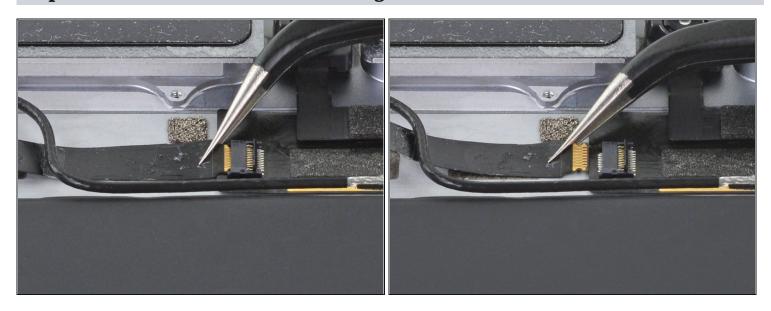
 Use a pair of tweezers to remove the sticker covering the left ambient light sensor's ZIF connector.

Step 64 — Unlatch the ZIF connector



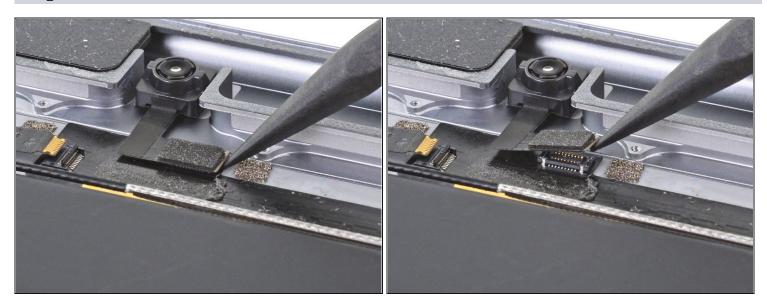
• Use the pointed end of a spudger to flip up the locking flap on the left ambient light sensor's <u>ZIF connector</u>.

Step 65 — Disconnect the left ambient light sensor



- Use a pair of tweezers to grip the left ambient light sensor ribbon cable as close as possible to its contacts.
- Pull the ribbon cable out of the ZIF connector.

Step 66 — Disconnect the front camera



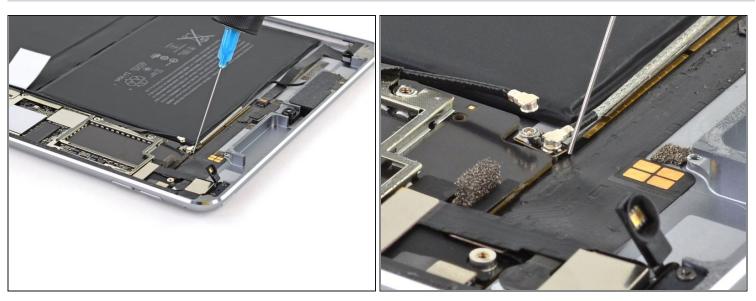
- Use the pointed end of a spudger to disconnect the front camera's <u>press connector</u> from its socket.
 - ⚠ Be careful to pry only under the edge of the connector, and not under the socket itself. If you pry under the socket, you will separate it from the circuit board.
- To reconnect, align the connector carefully over its socket and press down with your fingertip—first at one side, then the other—until it clicks into place.
 - ⚠ Do not press down on the middle until the connector is fully seated—if it's misaligned, the connector can bend, causing permanent damage.

Step 67 — Disconnect the coaxial connector



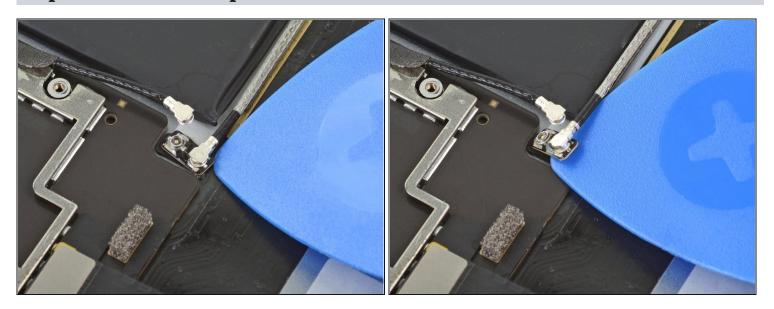
- Use a pair of tweezers to grip the bottom <u>coaxial connector</u> on the top interconnect board by its metal frame.
- Lift straight up to disconnect the coaxial connector from the interconnect board.

Step 68 — Apply isopropyl alcohol



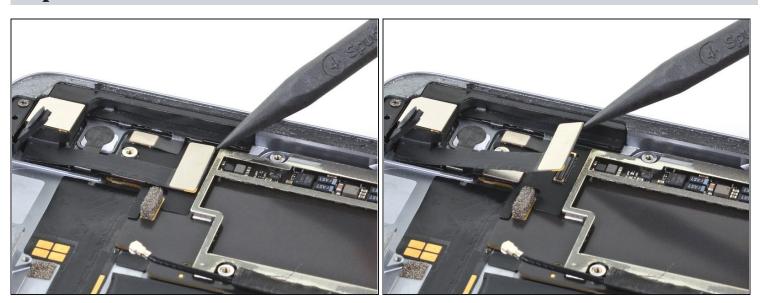
- Apply a few drops of high-concentration (90% or higher) isopropyl alcohol to the edges of the top interconnect board.
- Wait thirty seconds for the isopropyl alcohol to weaken the adhesive under the top interconnect board.

Step 69 — Detach the top interconnect board



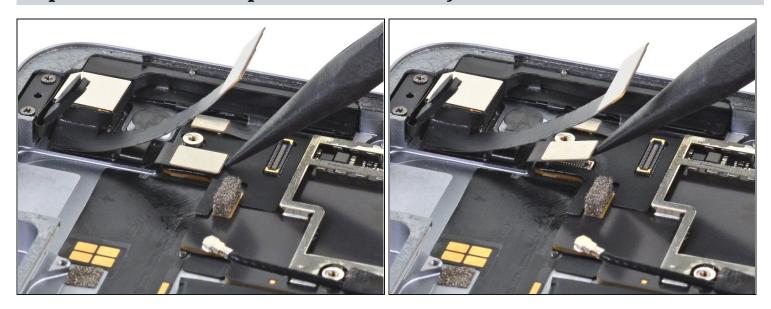
• Use an opening pick to cut through the adhesive under the top interconnect board and detach it from the frame.

Step 70 — Disconnect the rear camera



• Use the pointed end of a spudger to disconnect the rear camera's press connector from its socket.

Step 71 — **Disconnect the power button assembly**



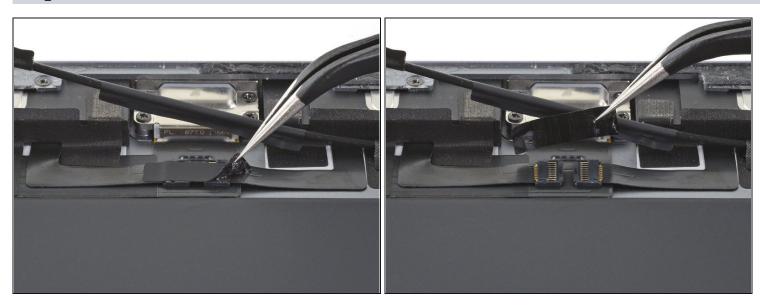
• Use the pointed end of a spudger to disconnect the power button assembly's press connector from its socket.

Step 72 — Disconnect the volume buttons



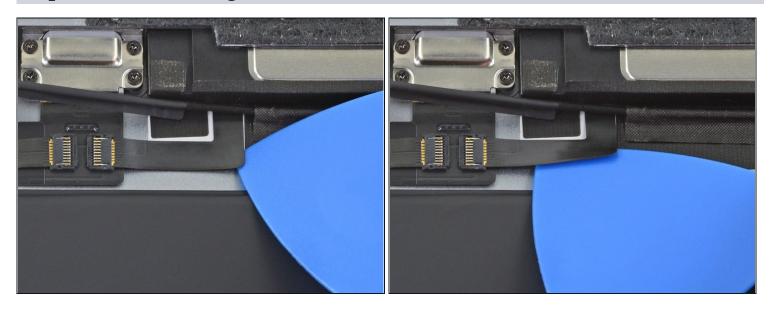
• Use the pointed end of a spudger to disconnect the volume buttons' press connector from its socket.

Step 73 — Remove the sticker from the ZIF connectors



• Use a pair of tweezers to remove the sticker covering the ZIF connectors near the Lightning port.

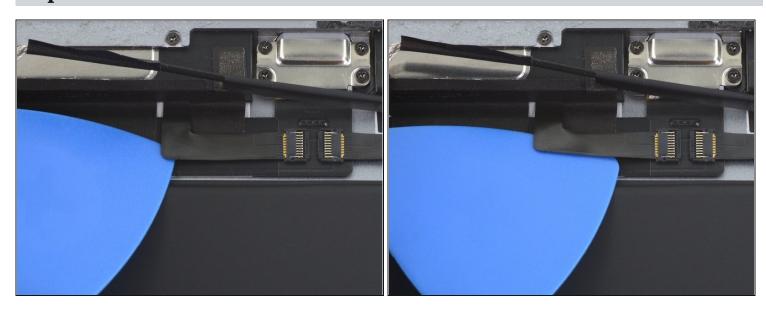
Step 74 — Detach the right ribbon cable



• Use an opening pick to cut through the adhesive under the right ribbon cable next to the lower speaker (Lightning port oriented up) and detach it from the frame.

⚠ Be careful not to pull the ribbon cable out of the ZIF connector. Pulling the ribbon cable out while the ZIF connector locking flap is closed may damage the connection.

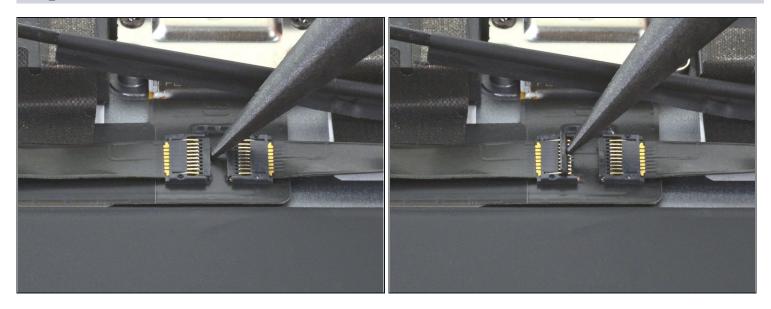
Step 75 — Detach the left ribbon cable



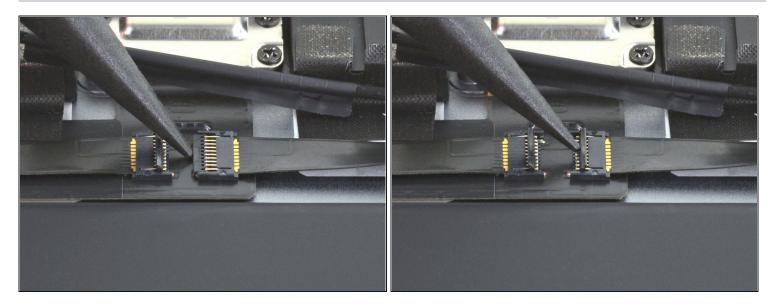
• Use an opening pick to cut through the adhesive under the left ribbon cable next to the lower speaker and detach it from the frame.

⚠ Be careful not to pull the ribbon cable out of the ZIF connector. Pulling the ribbon cable out while the ZIF connector locking flap is closed may damage the connection.

Step 76 — Disconnect the ribbon cables



• Use the pointed end of a spudger to flip up the hinged locking flap on the left ribbon cable ZIF connector.



• Use the pointed end of a spudger to flip up the hinged locking flap on the right ribbon cable ZIF connector.

Step 78



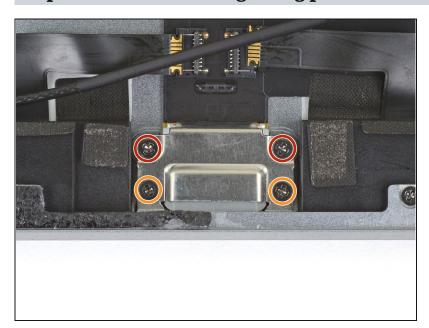
• Use a pair of tweezers to grip the left ribbon cable as close as possible to its contacts and pull the ribbon cable out of the ZIF connector.





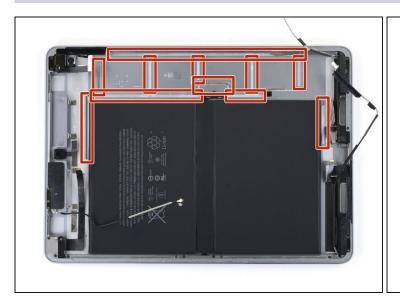
• Use a pair of tweezers to grip the right ribbon cable as close as possible to its contacts and pull the ribbon cable out of the ZIF connector.

Step 80 — Remove the Lightning port screws



- Remove the four Phillips screws securing the Lightning port:
 - Two 2.5 mm screws
 - Two 1.5 mm screws

Step 81 — Logic board adhesive information





- (i) This image shows the device with the logic board removed.
- Strips of adhesive secure the logic board to the frame. In the next steps, you'll weaken and cut through the adhesive to detach the logic board from the frame.

Step 82 — Apply an iOpener to the rear case

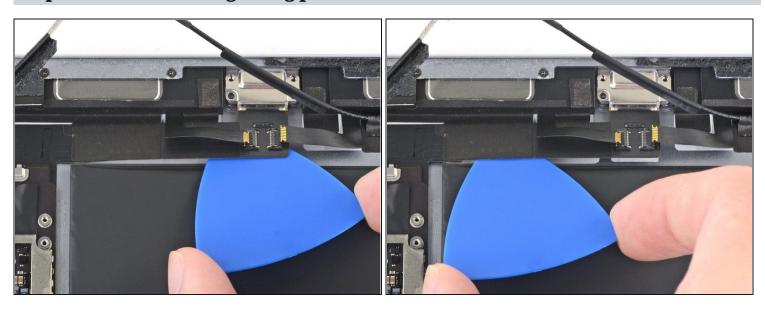






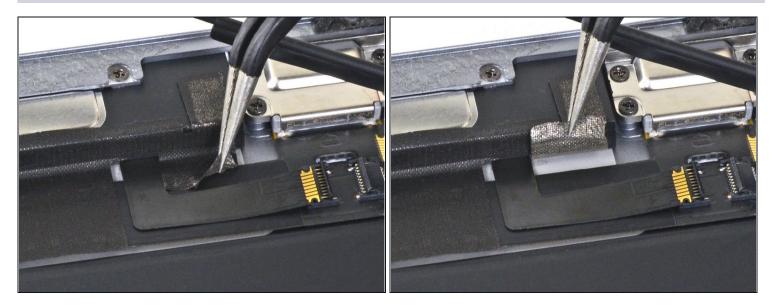
- Carefully turn the iPad over.
 - ⚠ Many cables are loose at this point. Make sure no cables are bent or torn while turning the iPad over.
- <u>Heat an iOpener</u> and apply it to the top, left, and bottom edges of the rear case for one minute on each edge.

Step 83 — Detach the Lightning port ribbon cable



• Use an opening pick to cut through the adhesive under the Lightning port ribbon cable to detach it from the frame.

Step 84 — Lift up the stickers



• Use a pair of tweezers to lift up the smaller sticker to the left of the Lightning port (when the Lightning port is oriented up).



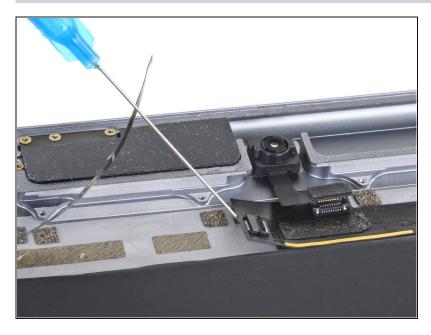
• Use a pair of tweezers to lift up the larger sticker to the left of the Lightning port.

Step 86 — Pull the Lightning port out



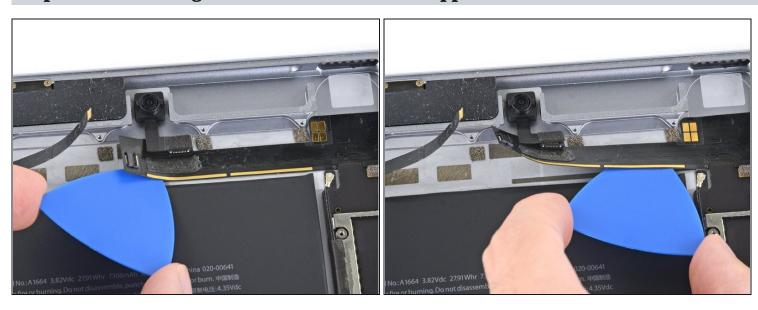
- Use a pair of tweezers to grip the Lightning port by the bottom right screw hole.
- Pull the Lightning port out of its recess.

Step 87 — Apply isopropyl alcohol

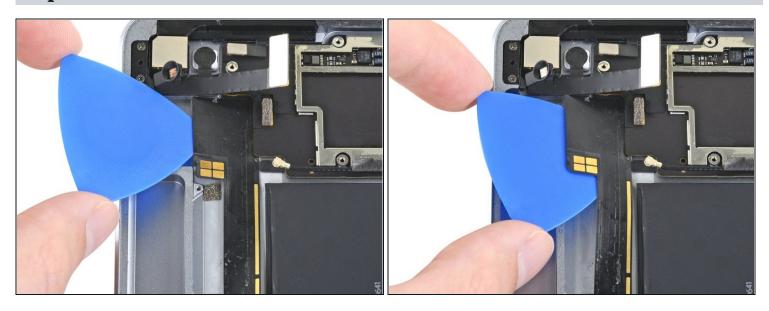


- Apply a few drops of highconcentration isopropyl alcohol under the left edge of the upper logic board arm (Lightning port oriented down).
- Wait thirty seconds for the isopropyl alcohol to weaken the adhesive under the upper logic board arm.

Step 88 — Cut through the adhesive under the upper arm

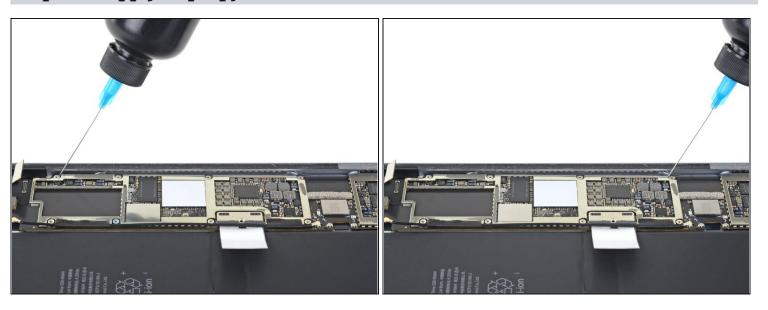


- Use an opening pick to cut through the adhesive under the upper logic board arm and detach it from the frame.
- ⚠ The upper logic board arm is thin. Be careful not to tear it during this process.
- (i) It may help to grip the upper logic board arm with your fingers and peel it away from the frame.
- (i) Apply a few more drops of isopropyl alcohol under the logic board arm when it becomes difficult to detach from the frame.

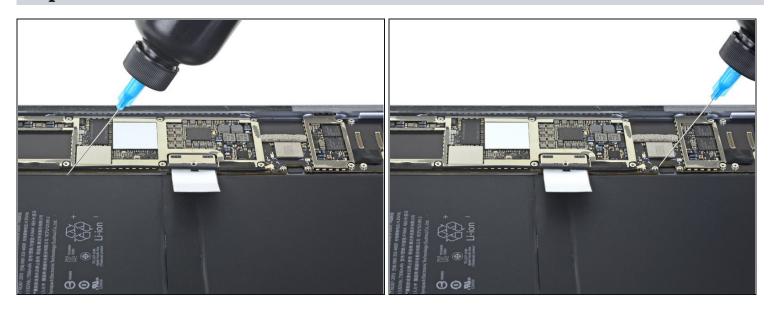


- Insert an opening pick about 0.5 inches (13 mm) under the top edge of the larger portion of the upper logic board arm.
- Leave the opening pick under the upper logic board arm to prevent it from re-adhering to the frame.

Step 90 — Apply isopropyl alcohol

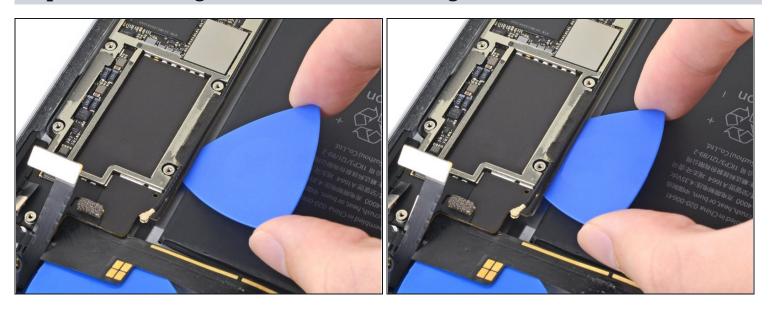


 Apply a few drops of high-concentration isopropyl alcohol to the right edge of the logic board.

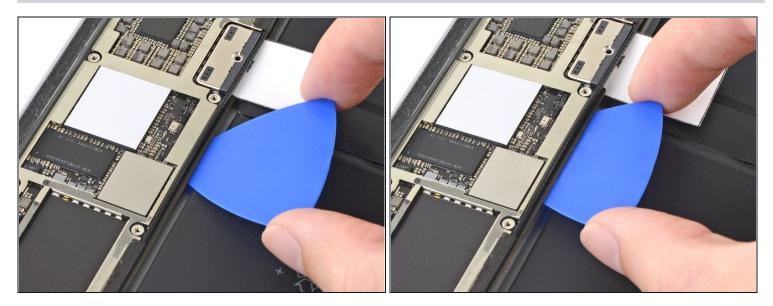


- Apply a few drops of high-concentration isopropyl alcohol to the left edge of the logic board.
- Wait one minute for the isopropyl alcohol to weaken the adhesive under the logic board.

Step 92 — Cut through the adhesive under the logic board

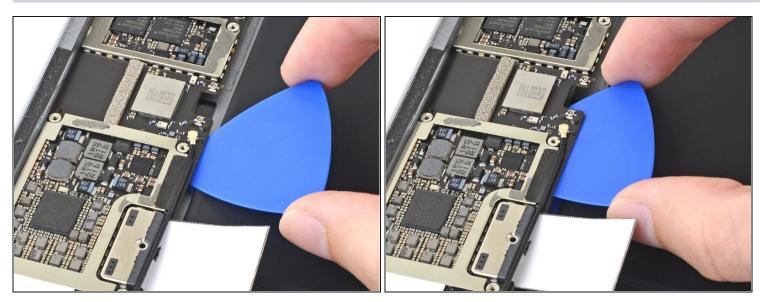


- Slide an opening pick about 0.5 inches (13 mm) under the top of the logic board's left side to cut through the adhesive.
- Remove the opening pick.

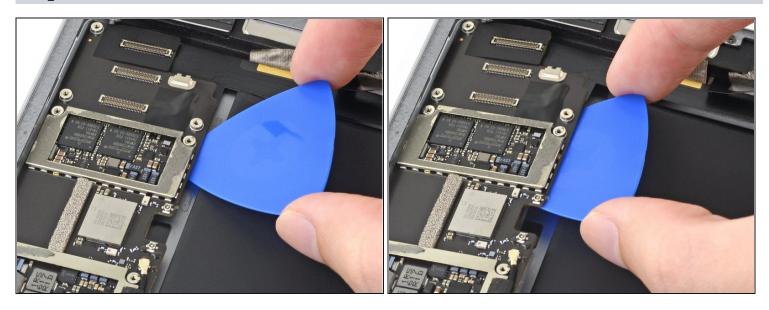


- Slide the opening pick about 0.5 inches (13 mm) under the logic board's left side next to the battery connector.
- Remove the opening pick.

Step 94

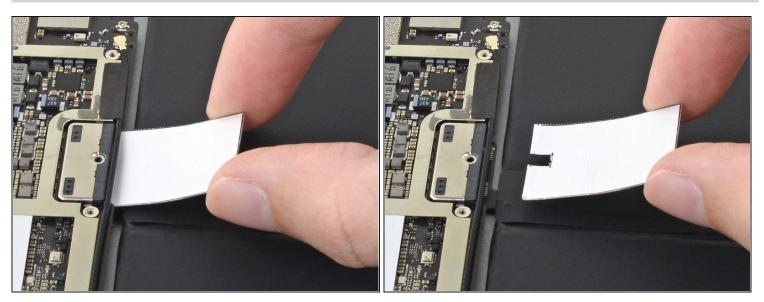


- Slide the opening pick about 0.5 inches (13 mm) under the logic board on the other side of the battery connector.
- Remove the opening pick.



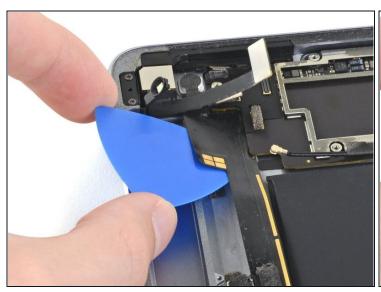
- Slide the opening pick about 0.5 inches (13 mm) under the bottom of the logic board's left side.
- Remove the opening pick.

Step 96 — Remove the battery blocker



- Remove the battery blocker from the logic board.
- During reassembly, reinsert the battery blocker after you install the logic board into the device.

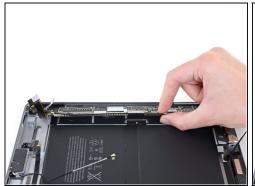
Step 97 — Remove the opening pick





Remove the opening pick from the upper logic board arm.

Step 98 — Remove the logic board







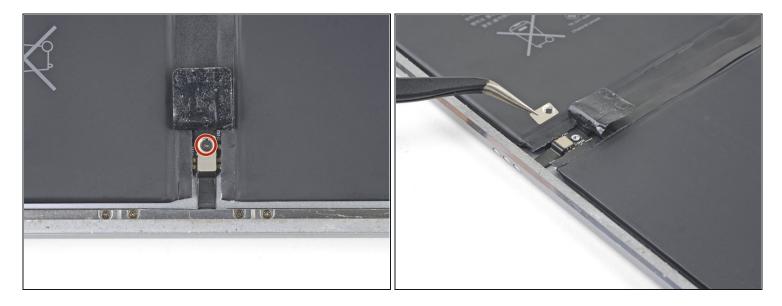
- Remove the logic board from the frame.
 - (i) If the logic board doesn't easily lift out of the frame, apply a few more drops of isopropyl alcohol to any stuck areas and use an opening pick to cut through more of the adhesive.
- If there's any alcohol solution remaining in the device, carefully wipe it off or allow it to air dry before installing your logic board.
- During reassembly, <u>follow this guide</u> if you are using a pre-cut adhesive card to secure the logic board to the frame.

Step 99 — Lift the tape covering the Smart Connector



- ⚠ Take care not to puncture or bend the battery—a punctured or bent battery may leak dangerous chemicals or cause a thermal event.
- Use tweezers to gently lift the end of the black tape covering the mid-battery circuit board nearest the Smart Connector.
- ② You only need to peel the tape back enough to reveal the connector underneath.

Step 100 — Remove the screw securing the smart connector cable cover



- Remove the 1.7 mm Phillips screw holding the Smart Connector cable cover in place.
- Remove the Smart Connector cable cover.

Step 101 — Disconnect the smart connector



- Use the point of a spudger to pry up and disconnect the Smart Connector from its socket between the battery cells.
- Push the Smart Connector flex cable up and out of the way.

Step 102 — Apply tape to the components near the battery







- (i) The next three steps detail how to mask off the iPad in preparation for the liquid adhesive remover. The tape will help block and absorb excess liquids, keeping major components safe.
- Apply a piece of masking or painter's tape to the upper components. The edge of the tape should be close to, but not touching, the battery.
- Press down on the tape so that it adheres firmly to the frame and components.

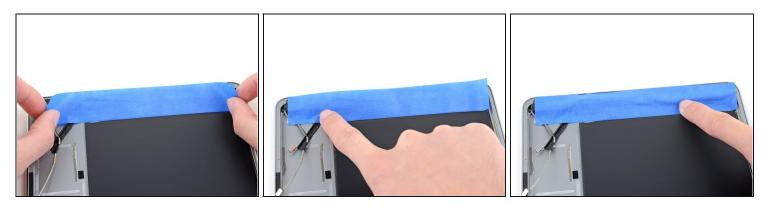
Step 103





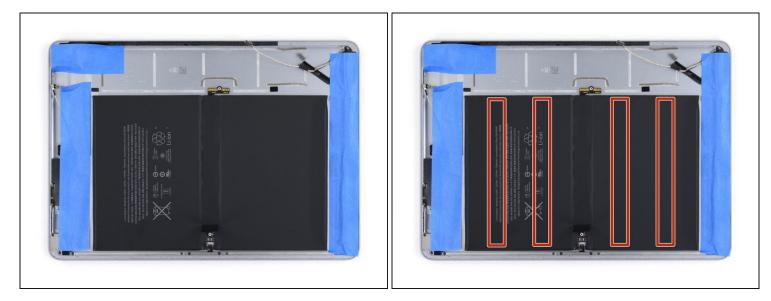


• Repeat the taping procedure for the rear camera and volume button area.



• Repeat the taping procedure for the lower components.

Step 105 — Tape and battery adhesive information



• Once complete, the masking should look like the first image.

The adhesive remover may discolor or damage plastic components such as the speaker housings. Make sure you have applied the tape properly before you continue.

Four strips of strong adhesive hold the battery in place.

Step 106 — Set up a place to tilt the iPad





- Prepare a work area where the iPad can rest in a tilted position, to allow adhesive remover to trickle down to the adhesive strips.
- (i) You can use books, boxes, etc. as long as they will not move.

Step 107 — Adhesive remover safety information



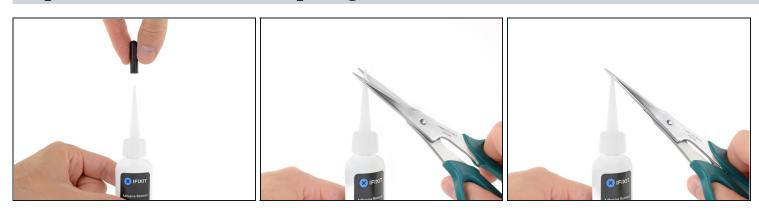


⚠ iFixit adhesive remover contains acetone, a mild skin and eye irritant.

- Wear eye protection when handling and applying the adhesive remover. (Eye protection is included in your kit.)
- **Do not** wear contact lenses without eye protection.

A Protective gloves are highly recommended beyond this step, as the dissolved adhesive will be very tacky and hard to wash off.

Step 108 — Adhesive remover opening information



• Pull off the black rubber stopper from your bottle of adhesive remover.

Twist to loosen or remove the bottle cap before you cut the applicator tip.

- i This unseals the bottle and allows the pressure to equalize before you cut the applicator tip. If you skip this step, the adhesive remover may spray out unexpectedly when the tip is cut.
- Use scissors to cut off the sealed tip of the applicator.
 - ② Cutting close to the narrow tip will give you better control so you can apply the adhesive remover in small amounts.

Twist and close the bottle cap securely before you proceed further.

Step 109 — Make a gap for the adhesive remover



- Carefully insert a plastic card under the bottom right corner of the battery.
- Slowly slide the plastic card across the bottom edge of the battery to make a gap for the liquid adhesive remover.
 - (13 mm) is more than sufficient.

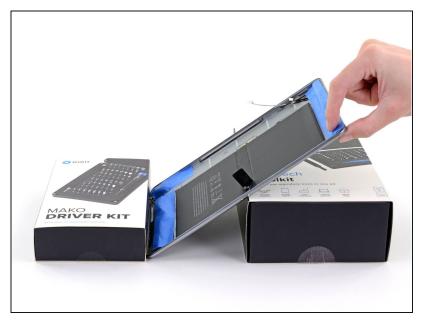
⚠ While some bending of the battery pack will be inevitable, try not to form any sharp creases, which will compromise the battery structure and potentially trigger a fire hazard.

Step 110 — Apply adhesive remover to the bottom of the battery



- Tilt the bottom of the iPad up.
- Apply a few drops of adhesive remover evenly along the elevated edge of the battery.
 - (i) A little bit goes a long way, so start with a very small amount. You can always add more later if needed. Applying the solvent in small amounts helps prevent unwanted leaks.

Step 111 — Allow the adhesive remover to soften the adhesive



 Rest the iPad in a slanted position, bottom edge up, and wait 2-3 minutes to allow the adhesive remover to penetrate and soften the first adhesive strip.

Step 112 — Slice through the adhesive strip



- Slide a plastic card into the bottom edge of the battery.
- Push the card in slowly and firmly. Gently wiggle and twist the card to help it slice through the adhesive.
- (i) If you are struggling, tilt the iPad, apply a few more drops of adhesive remover and wait a minute before trying again.

Step 113 — Alternate prying approach information



- You can also approach the adhesive strip with the plastic card from battery's other bottom corner.
- Continue slicing until you have separated the battery from the first adhesive strip.

Step 114 — Repeat the application, waiting, and slicing process



- Tilt the bottom of the iPad up.
- Reapply adhesive remover into the gap for the second adhesive strip, located deeper underneath the bottom battery cell.
- Repeat the application, waiting, and slicing process until the second adhesive strip is separated from the battery.

Step 115 — Create a gap for the adhesive remover



- Slide an opening pick under the **top edge** of the battery, creating a gap large enough for a plastic card.
- Insert a plastic card under the top edge and slide it across the entire length, creating a gap for the adhesive remover.

Step 116 — Apply adhesive remover to the top of the battery



• Apply adhesive remover into the gap to help weaken the third adhesive strip.

Step 117 — Allow the adhesive remover to soften the adhesive



 Rest the iPad in a slanted position, top edge up, for 2-3 minutes to allow the adhesive remover to weaken the third strip.

Step 118 — Slice through the adhesive strip



- Use a plastic card to slice through the third adhesive strip.
- i If you are struggling, tilt the iPad, apply a few more drops of adhesive remover, and wait a minute before trying again.

Step 119 — Repeat the application, waiting, and slicing process







 Repeat the application, waiting, and slicing process to release the last adhesive strip located deeper underneath the top battery cell.

Step 120 — Flip the bottom half of the battery over

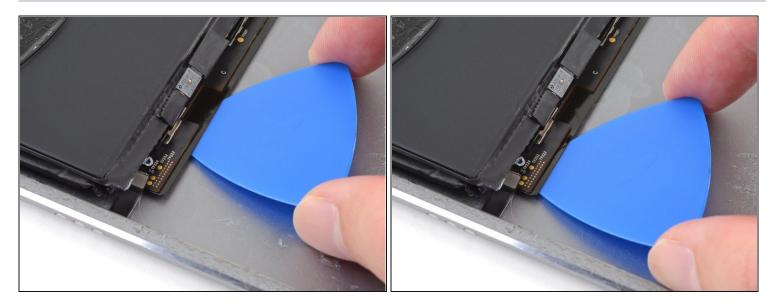






• Use the plastic card or your fingers to flip the bottom half of the battery over so that it rests on top of the upper half.

Step 121 — Slice through the adhesive under the circuit board

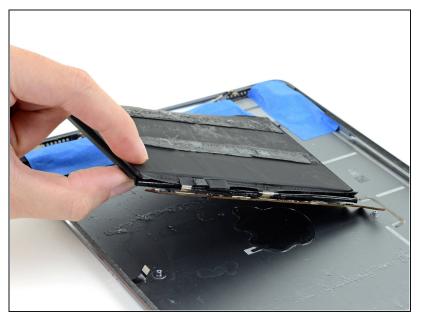


- (i) The end of the mid-battery circuit board closer to the Smart Connector is held down with adhesive.
- Slide an opening pick underneath the mid-battery circuit board, near the Smart Connector.
- Carefully slice underneath the board around the post to release the board from the rear case.



• Slide the long edge of a plastic card about 0.5 inches (13 mm) under the center of the mid-battery circuit board to cut through the remaining adhesive.

Step 123 — **Remove the battery**



- Lift and remove the battery from the frame.
 - i Two screw posts position the battery on the frame—one near the Smart Connector and one under the battery connector.

Step 124 — Replacement battery installation information



- The next steps detail how to install a new battery. **Never reinstall a used battery.**
- Thoroughly clean the back case of all adhesive residue.
 - Apply adhesive remover or high concentration (over 90%) isopropyl alcohol to the residue.
 - Use an opening tool to scrape and loosen the residue.
 - Be sure to wipe the residue away in one direction to prevent smearing.
- i It is easier to wipe off the residue when it is sufficiently soaked. Once it starts drying up, the residue becomes incredibly tacky.
- (i) If you used adhesive remover, be sure to wipe the surface down with isopropyl alcohol to remove any adhesive remover residue.
- You can remove the masking tape as well as any protective gear once you are done cleaning.





• Place the replacement battery pack so that the two screw posts line up with their holes on the mid-battery circuit board and battery connector.





- Lift the bottom edge of the battery up slightly.
- ⚠ Do not hinge the battery beyond 45 degrees, or you risk damaging the inter-cell connectors.
- Use tweezers or your fingers to peel the single clear plastic covering off of the entire bottom side of the battery.
 - (i) At this point, the battery's four adhesive strips are exposed. Be careful handling the battery and try not to touch the strips.
- Align the battery such that it falls in place with the <u>screw post</u> near the Smart Connector.
 - i Be sure not to trap the Smart Connector cable underneath the battery.
- Gently lay the battery down into its recess and press it firmly into place.
- For optimal performance, calibrate your newly installed battery after completing this guide: Charge it to 100% and keep charging it for at least 2 more hours. Then use your device until it shuts off due to low battery. Finally, charge it uninterrupted to 100%.

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? Check out our <u>iPad Pro 9.7" Answers Community</u> for troubleshooting help.