



iPhone 6s Lightning Connector Assembly Replacement

If you've tried cleaning the lightning port to...

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INTRODUCTION

If you've tried [cleaning the lightning port](#) to no avail, follow the steps in this guide to replace the Lightning connector flex cable in an iPhone. This flex cable includes the Lightning connector, headphone jack, dual microphones, and spring contacts for the Taptic Engine and loudspeaker.

🔧 TOOLS:

[Anti-Clamp](#) (1)
[P2 Pentalobe Screwdriver iPhone](#) (1)
[Suction Handle](#) (1)
[Spudger](#) (1)
[Phillips #000 Screwdriver](#) (1)
[Tweezers](#) (1)
[SIM Card Eject Tool](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[iFixit Opening Tool](#) (1)
[iOpener](#) (1)

⚙️ PARTS:

[iPhone 6s Lightning Connector and Headphone Jack](#) (1)
[iPhone 6s Lightning Connector Cable Adhesive](#) (1)
[iPhone 6s Lightning Port Connector Foam Pads](#) (1)
[iPhone 6s Display Assembly Adhesive](#) (1)

Step 1 — SIM Tray



- Insert a SIM card eject tool or a paperclip into the small hole in the SIM card tray.
- Press to eject the tray.
 - ⓘ This may require a significant amount of force.

Step 2



- Remove the SIM Card tray assembly from the iPhone.
- ✦ When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.

Step 3 — Pentalobe Screws



⚠ Before disassembling your iPhone, discharge the battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally punctured.

- ⓘ Power off your iPhone before beginning disassembly.
- Remove the two 3.4 mm P2 Pentalobe screws on the bottom edge of the iPhone, on either side of the Lightning connector.

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 three steps for an alternate method.**
- ① For complete instructions on how to use the Anti-Clamp, [check out this guide](#).
- Pull the blue handle backwards to unlock the Anti-Clamp's arms.
- Slide the arms over either the left or right edge of your iPhone.
- Position the suction cups near the bottom edge of the iPhone just above the home button—one on the front, and one on the back.
- Squeeze the cups together to apply suction to the desired area.
- ① If you find that the surface of your iPhone is too slippery for the Anti-Clamp to hold onto, you can [use tape](#) to create a grippier surface.

Step 5



- Pull the blue handle forwards to lock the arms.
- Turn the handle clockwise 360 degrees or until the cups start to stretch.
 - ① Make sure the suction cups remain aligned with each other. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
- Insert an opening pick under the screen when the Anti-Clamp creates a large enough gap.
 - ① If the Anti-Clamp doesn't create a sufficient gap, rotate the handle a quarter turn.
- ⚠ **Don't crank more than a quarter turn at a time, and wait a few seconds between turns. Let the Anti-Clamp and time do the work for you.**
- **Skip the next three steps.**

Step 6 — Opening Procedure



- If you don't have an [Anti-Clamp](#), follow the next three steps to use a suction handle.
- Apply mild heat to the lower edge of the iPhone using an [iOpener](#) or hair dryer for about a minute.
- ⓘ Heat softens the adhesive securing the display, making it easier to open.

Step 7



- ① Opening the display on the 6s separates a thin strip of adhesive around the perimeter of the display. If you prefer to replace the adhesive, have a set of new adhesive strips ready before you continue. It's possible to complete the repair without replacing the adhesive, and you probably won't notice any difference in functionality.
- Apply a suction cup to the lower left corner of the display assembly.
 - Take care **not** to place the suction cup over the home button.
- ① If your display is badly cracked, [covering it with a layer of clear packing tape](#) may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken screen.

Step 8



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.
 - ① Take your time and apply firm, constant force. The display assembly is a much tighter fit than most devices and is held down with adhesive.
- ⚠ Pulling too hard may damage the display assembly. Apply just enough pressure to create a small gap between the display assembly and the rear case.
- ① If you have any trouble, heat the front of the iPhone using an iOpener, hair dryer, or heat gun until it's slightly too hot to touch. This will help soften the adhesive securing the edges of the display.

Step 9



ⓘ There is a notch on the underside of the display, just above the headphone jack. This is the safest place to begin prying the phone open.

- Place the flat edge of a spudger into the gap between the screen and rear case, directly above the headphone jack.

Step 10



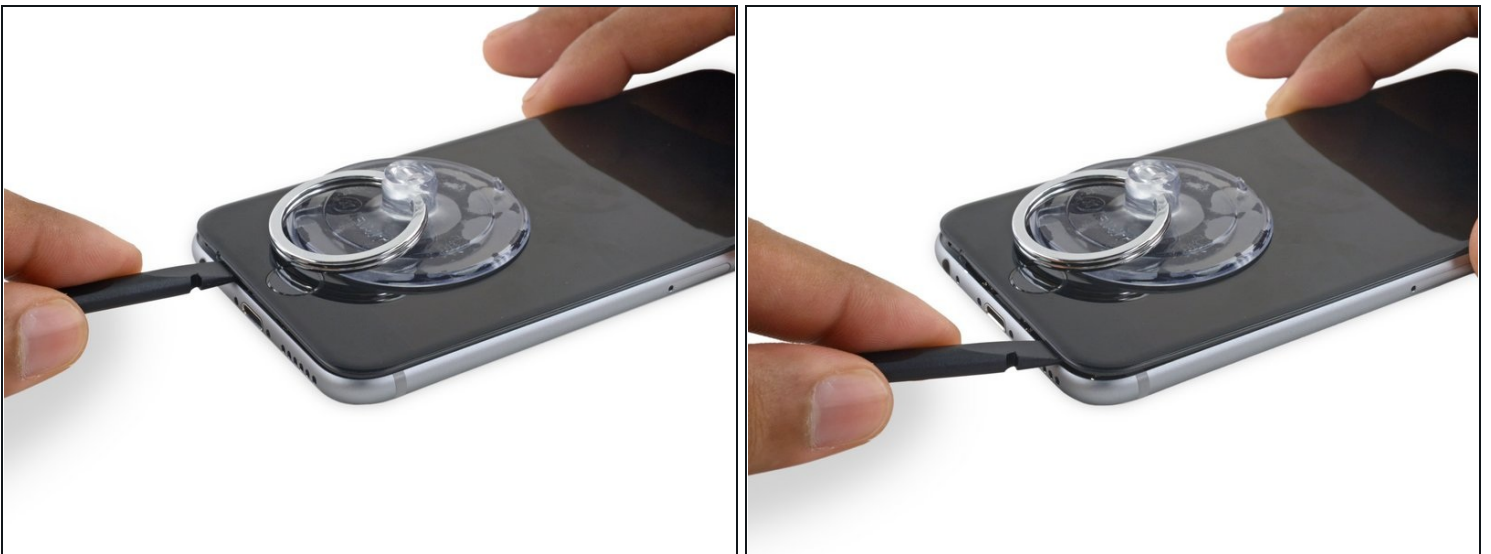
- Twist the spudger to widen the gap between the front panel assembly and the rest of the phone.

Step 11



- Insert the flat end of the spudger on the left side of the phone, between the display assembly and rear case.
- Slide the spudger up the side of the phone to separate the adhesive and pop the clips free.

Step 12



- Remove the spudger and reinsert it on the bottom edge, where you pried the phone open.
- Slide the spudger to the right, along the bottom edge of the phone.

Step 13



- Slide the spudger up the right side to continue separating the adhesive and popping the display clips free from the iPhone.

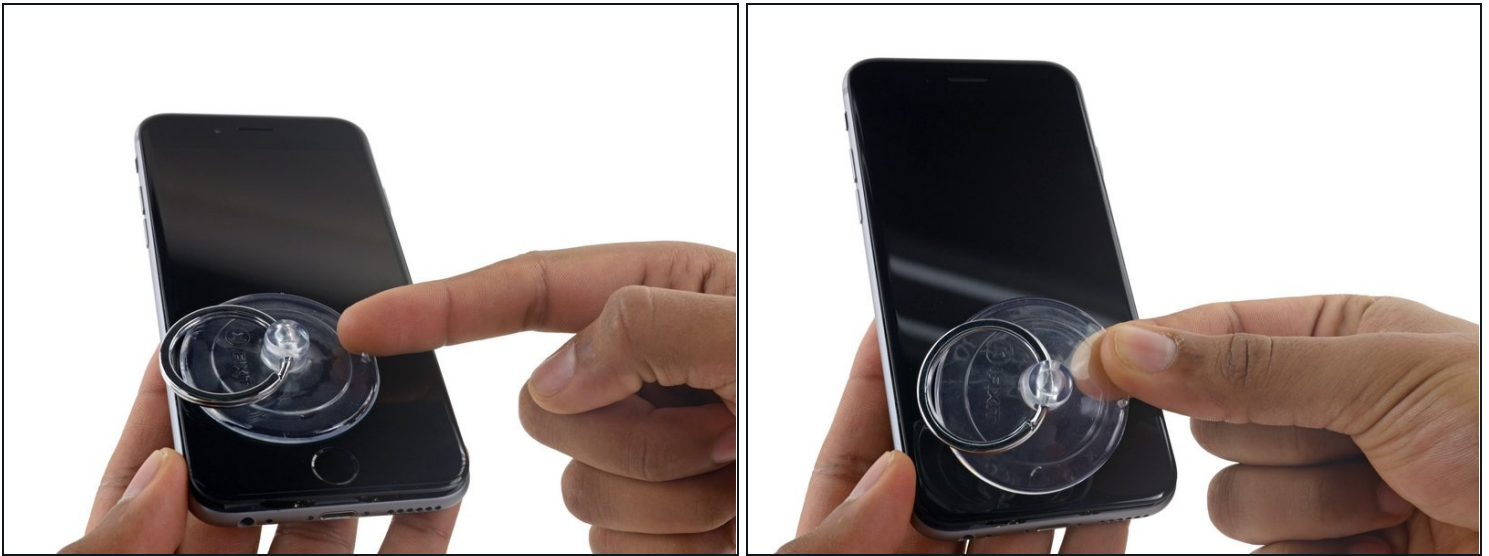
Step 14



- Use the suction cup to open the display, breaking the last of the adhesive.

⚠ Don't open the display more than 90°, as it is still connected at the top by three cables that may break if stretched.

Step 15



- Pull up on the nub on the top side of the suction cup to remove it from the front panel.

Step 16



- Gently grasp the display assembly and lift it up to open the phone, using the clips at the top of the front panel as a hinge.
- Open the display to about a 90° angle, and lean it against something to keep it propped up while you're working on the phone.
 - Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.
- ① In a pinch, you can use an unopened canned beverage to hold the display.

Step 17 — Battery Connector



- Remove two Phillips screws securing the battery connector bracket, of the following lengths:
 - One 2.9 mm screw
 - One 2.2 mm screw
- ❗ Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your iPhone.

Step 18



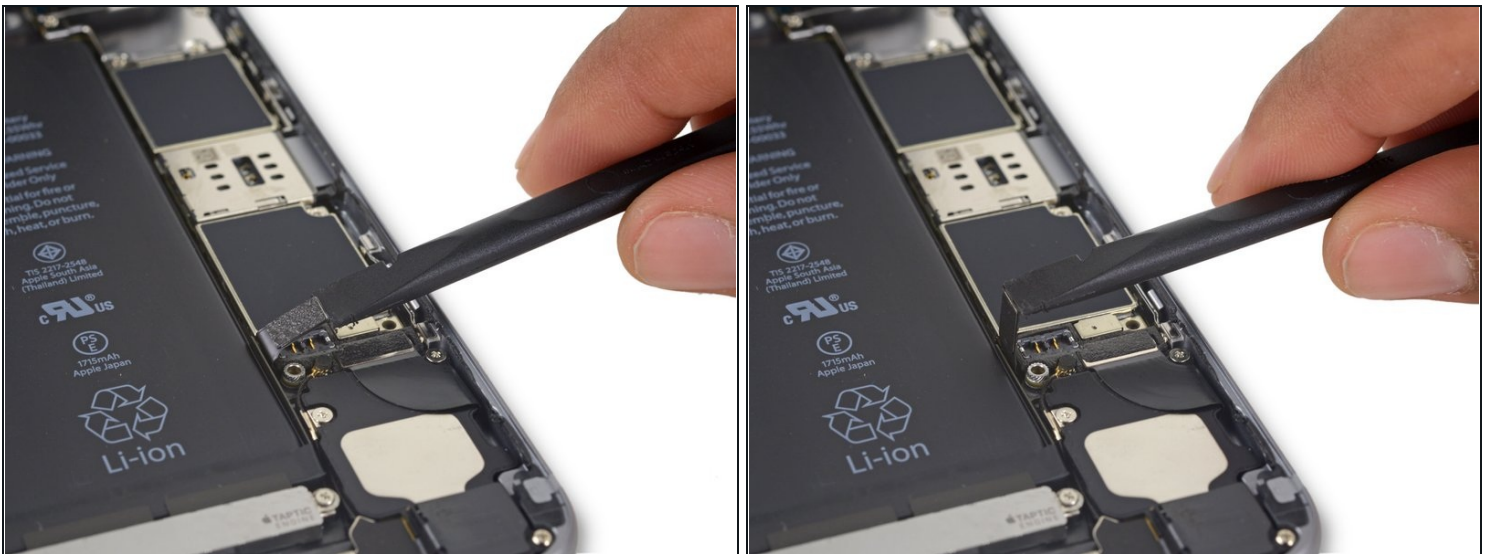
- Remove the battery connector bracket from the iPhone.

Step 19



- Use the point of a spudger to disconnect the battery connector by prying it straight up from the logic board.

Step 20



- Push the battery connector away from the logic board until it stays separated from its socket, so as to avoid any accidental connection to the battery while you work.

Step 21 — Unfasten the display cable bracket



- Remove the following four Phillips screws securing the display cable bracket:
 - Three 1.2 mm screws
 - One 2.8 mm screw

Step 22



- Remove the display cable bracket.

Step 23



- Use a spudger or a clean fingernail to disconnect the front camera flex cable by prying it straight up from its socket on the logic board.

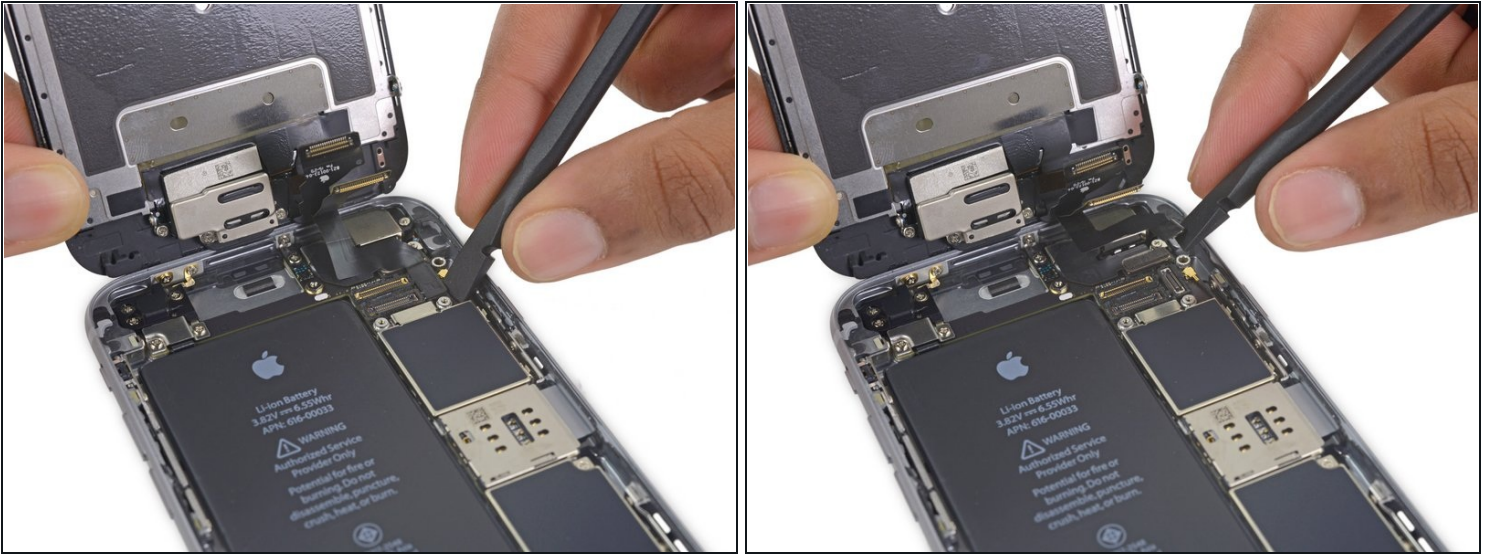
Step 24



- Disconnect the digitizer cable by prying it straight up from its socket on the logic board.

⚠ When reconnecting the digitizer cable, **do not press the center of the connector**. Press one end of the connector, then press the opposite end. Pressing in the center of the connector can bend the component and cause digitizer damage.

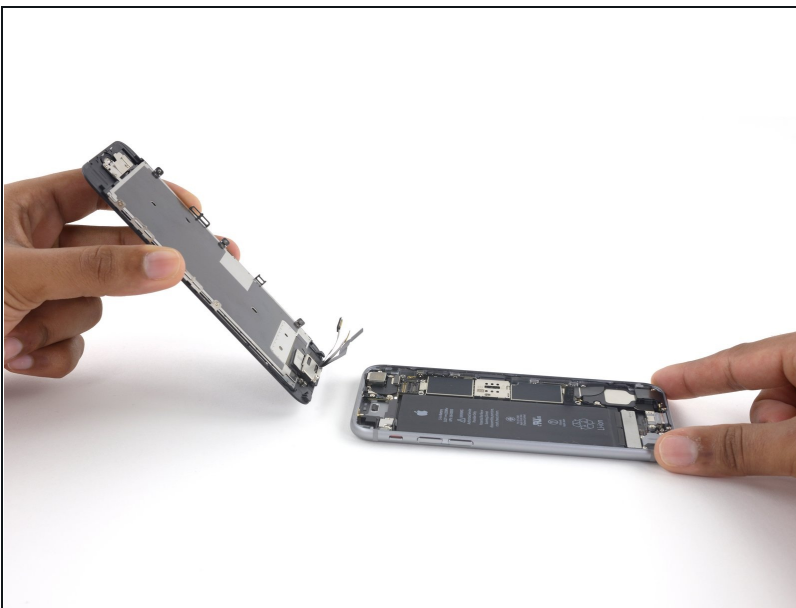
Step 25



⚠ Make sure the battery is disconnected before you disconnect or reconnect the cable in this step.

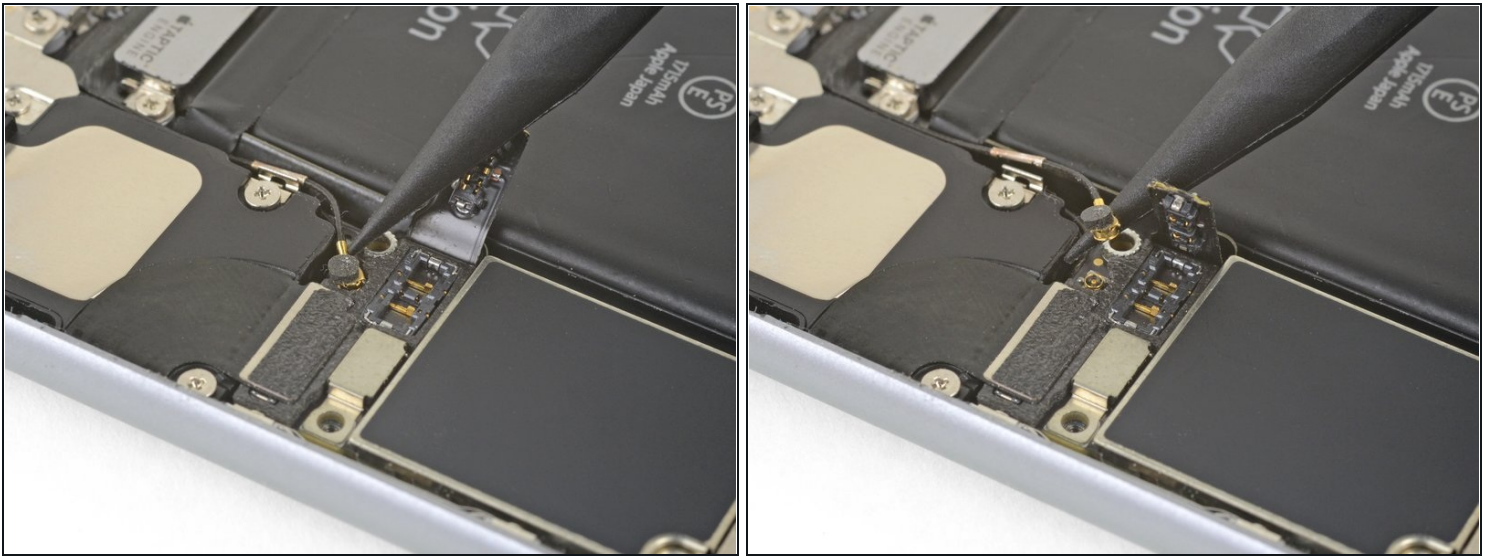
- Disconnect the display cable by prying it straight up from its socket on the logic board.

Step 26



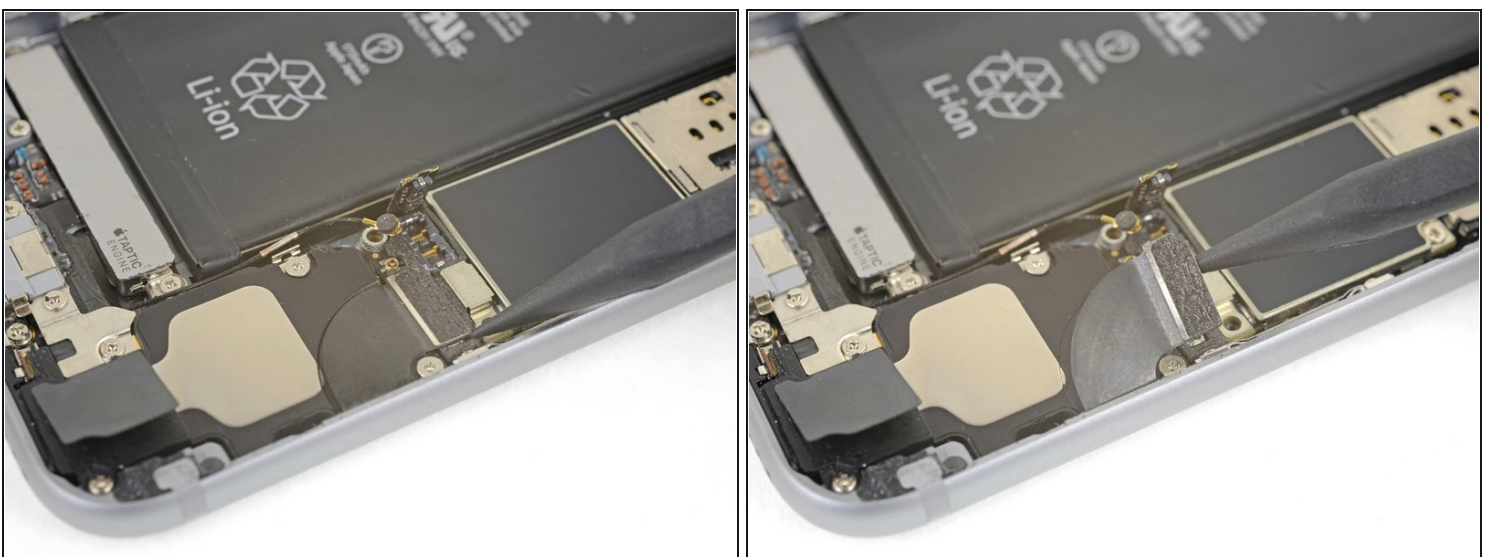
- Remove the display assembly.
- ✦ During reassembly, pause here if you wish to [replace the adhesive around the edges of the display](#).

Step 27 — Speaker



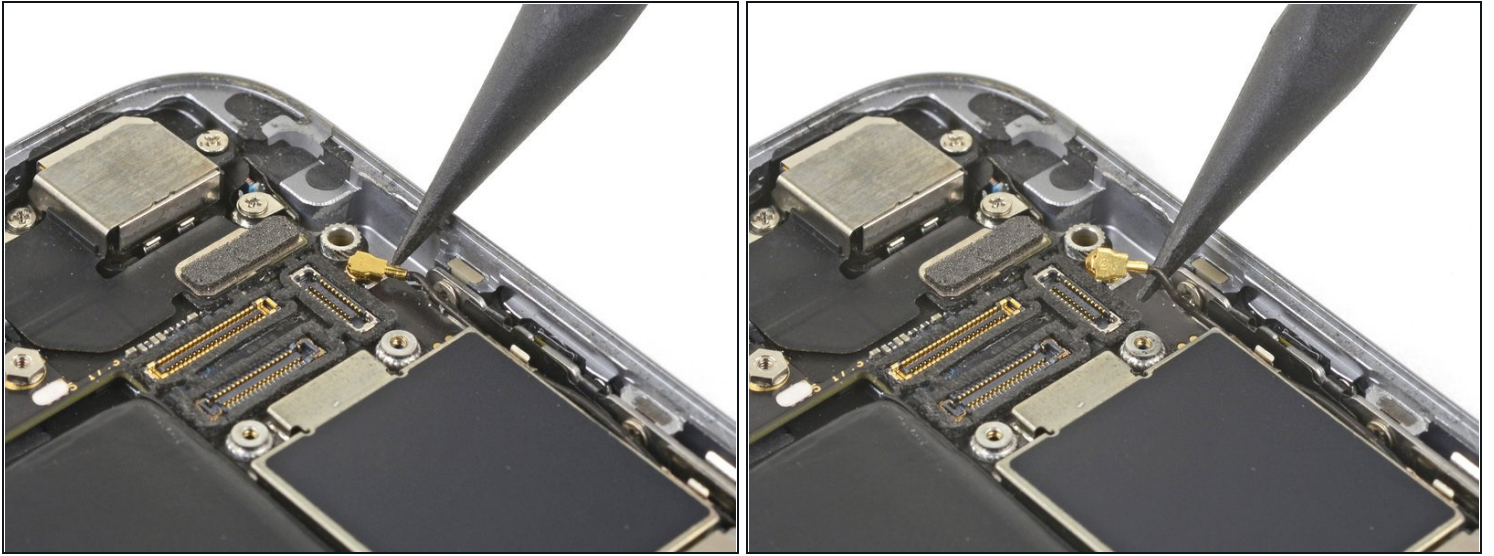
- Use the point of a spudger to lift and disconnect the antenna cable from the bottom end of the logic board.
- ☑ To reconnect antenna cables like these to the socket, carefully align the connector to the socket, then use the flat end of a spudger to press down. It should click in place. If not, check for alignment. Do not use excessive force.

Step 28



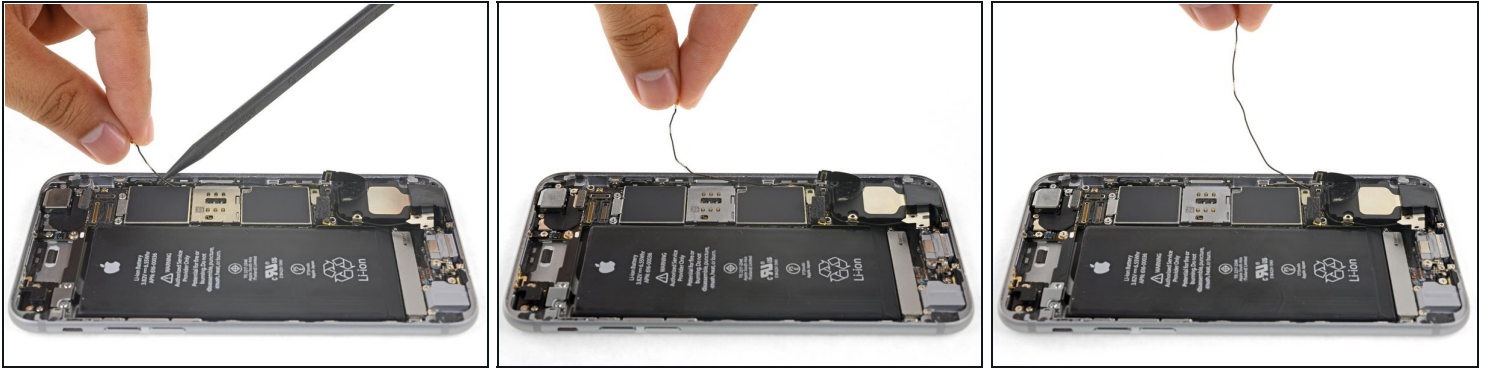
- Use the point of a spudger to lift up and disconnect the Lightning connector ribbon cable from its socket on the logic board.

Step 29



- ① If you are following this guide to replace the Lightning connector, you can choose to keep the antenna cable connected and skip this step and the next one. Be very careful not to strain the delicate antenna cable when you move the loudspeaker around.
- Use the point of a spudger to lift and disconnect the antenna cable from its socket near the top of the logic board.

Step 30



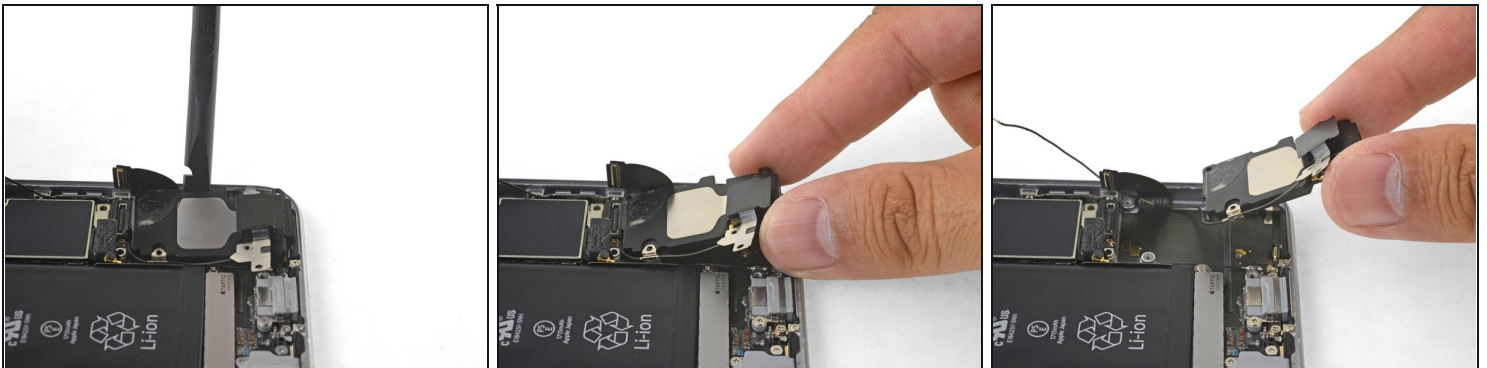
- Carefully lift the antenna cable and de-route it from the edge of the phone. Use the point of a spudger to help lift the cable to free it from the retaining clips.
 - ⓘ If the cable does not have enough room to lift up, loosen [this Phillips screw](#) securing the logic board so that the board can give more wiggle room.
 - ☑ Be sure to re-tighten this screw during re-installation.
- ☑ During re-installation, be sure to route the antenna cable [underneath the logic board corner](#).
- ☑ During re-installation, you can also re-insert the SIM card tray after re-routing the antenna cable.
 - ⚠ If you feel any resistance, **stop** and make sure that the tray isn't snagging the antenna cable.

Step 31



- Remove the following Phillips screws securing the speaker to the rear case:
 - Two 2.6 mm screws
 - One 2.3 mm screw
 - ⓘ This screw may be covered by some tape.
 - One 2.3 mm screw
 - ⓘ This screw is different from the prior one. Be sure not to mix the two together.
 - One 3.0 mm screw

Step 32



- Insert the flat end of a spudger between the long edge of the speaker module and the case wall.
- Pry gently to loosen the speaker module.
- Once the module is loose, lift and remove the speaker module from the phone.

Step 33 — Lightning Connector Assembly



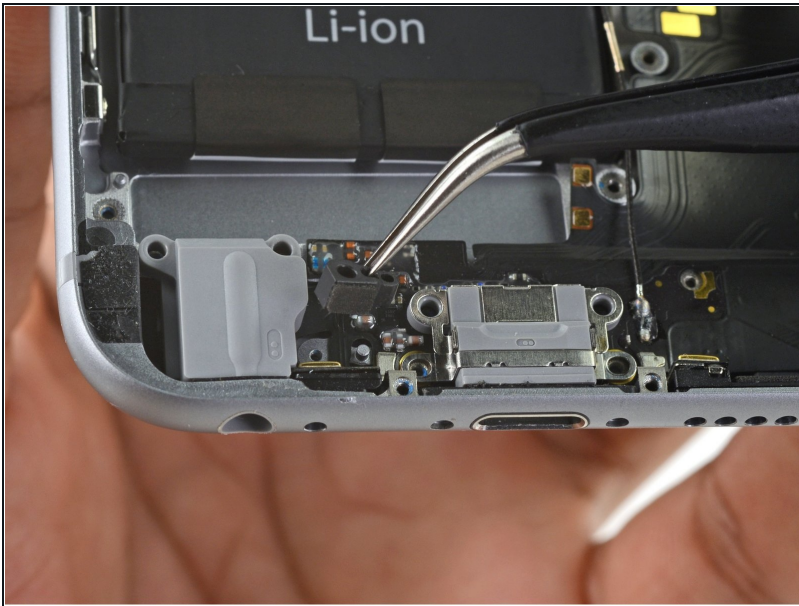
- Remove the two 1.5 mm Phillips screws securing the Taptic Engine to the rear case.
- Remove the Taptic Engine.

Step 34



- Remove the following eight Phillips screws:
 - Two 2.9 mm screws over the headphone jack
 - One 3.7 mm screw over the headphone jack bracket
 - Two 1.4 mm screws on the edge of the iPhone
 - Two 1.9 mm screws on either side of the Lightning connector
 - One 3.0 mm screw to the left of the connector

Step 35



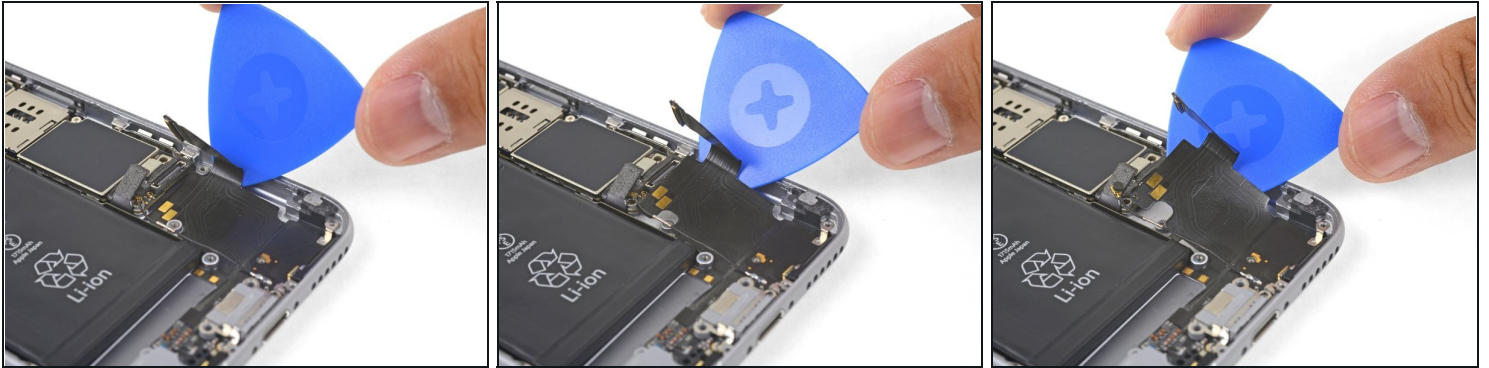
- Remove the plastic microphone bracket.

Step 36



- [Heat an iOpener](#) and apply it to the back of the phone near the bottom edge for one minute.

Step 37



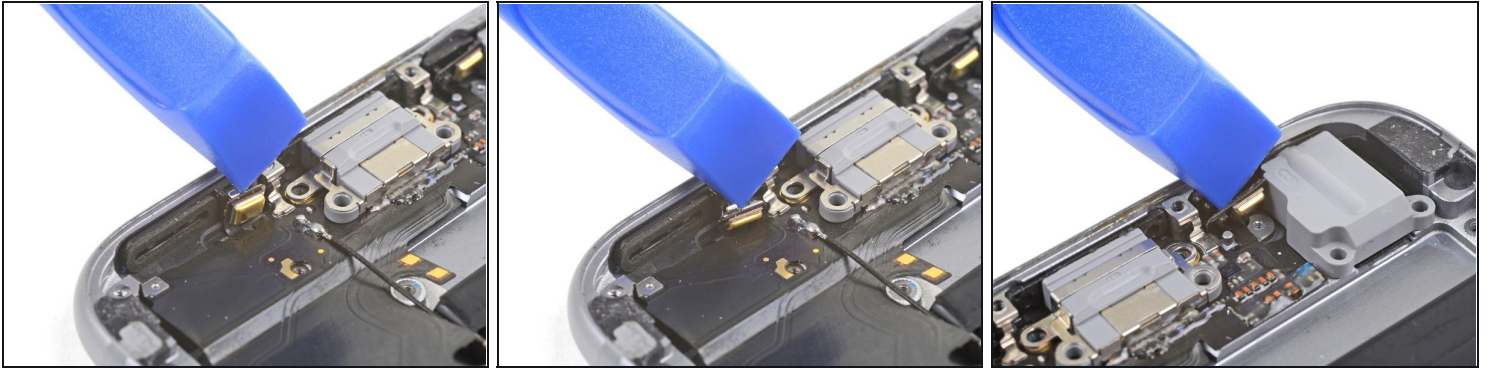
- Insert a plastic opening pick between the edge of the rear case and the Lightning connector flex cable.
- Press the pick underneath the flex cable to break up the adhesive holding it in place.

Step 38



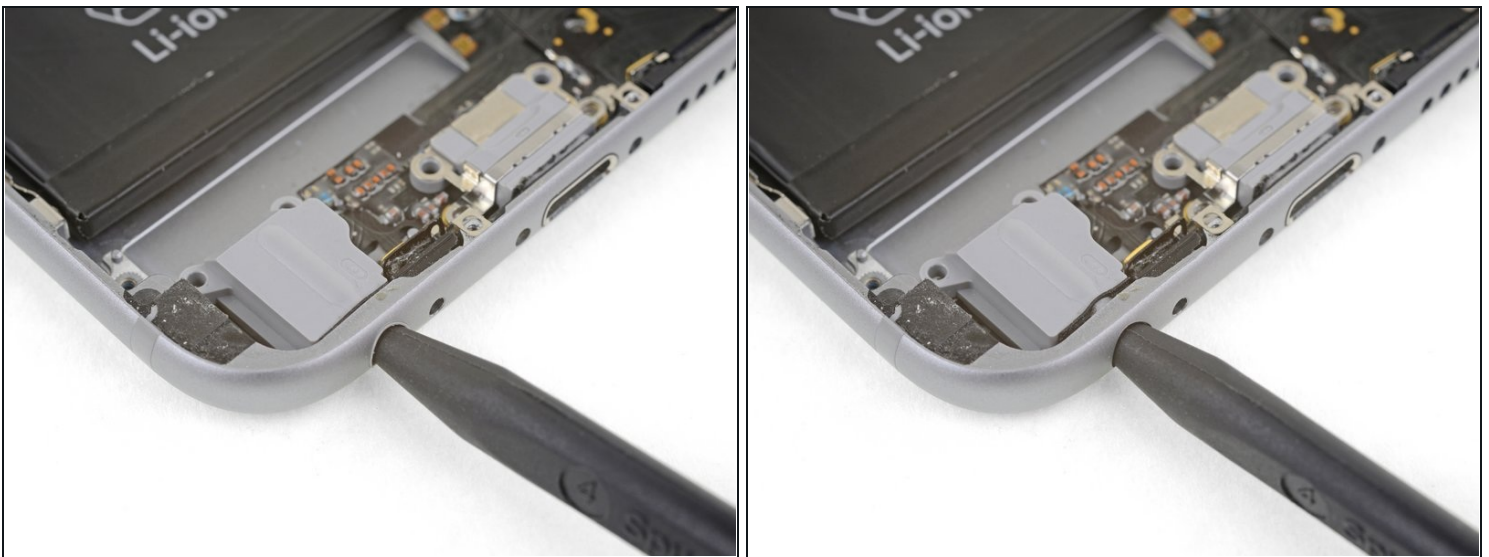
- Insert the flat end of a spudger between the Lightning connector assembly and rear case to break up the remaining adhesive.

Step 39



- Use an opening tool to separate the microphones from the bottom edge of the rear case.

Step 40



- Insert the point of a spudger into the headphone jack and push to loosen the jack from the rear case.

Step 41



- Remove the Lightning connector assembly.
- ☑ If your replacement part does not come with a gasket, use [tweezers](#) to remove it from the old part and transfer it onto the replacement part.
- ☑ Before installing or replacing the Lightning connector assembly, use a plastic tool to scour any bits of adhesive residue from the rear case behind the cable.

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 installing.

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 [iPhone 6s Answers community](#) for troubleshooting help.