



iPhone 5s Lightning Connector 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, use this guide to replace a nonfunctioning Lightning connector assembly, including headphone jack, cellular antenna, and microphone.

You can also use this guide for reference when replacing the following parts:

- Headphone Jack Interconnect Cable
- Microphone Gasket

The video below includes a few extra steps, including removal of the logic board. Follow the guide steps below it for the updated, shorter procedure.

[video: <https://www.youtube.com/watch?v=BsRD9cq2U8A>]



TOOLS:

[Clampy - Anti-Clamp](#) (1)
[P2 Pentalobe Screwdriver iPhone](#) (1)
[iFixit Opening Tool](#) (1)
[Suction Handle](#) (1)
[Spudger](#) (1)
[Phillips #000 Screwdriver](#) (1)
[Tweezers](#) (1)
[B-7000 Adhesive](#) (1)



PARTS:

[iPhone 5s Lightning Connector and Headphone Jack](#) (1)
[iPhone 5s Headphone Jack Interconnect Cable](#) (1)
[iPhone 5s Microphone Gasket](#) (1)

Step 1 — Removing the Pentalobe screws



⚠ Before you proceed, discharge your iPhone 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 3.9 mm Pentalobe screws from either side of Lightning connector.

Step 2 — Taping the display glass



- 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 iPhone's display until the whole face is covered.
 - ⓘ This will keep glass shards contained and provide structural integrity when prying and lifting the display.

⚠ Wear safety glasses to protect your eyes from any glass shaken free during the repair.

Step 3 — Display separation prevention



- ① In the following steps you will be pulling the display up out of the phone body. The display is composed of a glass screen and a plastic bezel with metal clips.
- Regardless of the tool you use, **you need to be sure you pull up the entire display.**
- If the glass begins to separate from the plastic, as shown in the first image, slide a plastic opening tool between the plastic frame and the metal phone body to pry the metal clips out of the case.
- ★ If you are reassembling a phone with a separated display bezel, you may want to place a thin strip of adhesive between the plastic bezel and the glass to keep the phone closed.

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](#).
- 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 the surface of your iPhone is too slippery for the Anti-Clamp to hold onto, you can [use the included tape pad](#) 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.
 - ⓘ 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.
 - ⓘ 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 two steps.**

Step 6 — Manual Opening Procedure



- If you don't have an Anti-Clamp, use a single suction cup to lift the front panel:
- Press a suction cup onto the screen, just above the home button.
- ⓘ Be sure the cup is completely on the screen to get a tight seal.

Step 7 — Start lifting the front panel assembly



⚠ The front panel is attached with clips, and there are several ribbon cables connecting it to the rest of the phone. Your goal here is to release the clips and **open the phone only enough to disconnect the cables**. Go slowly and carefully to avoid damage.

- ⓘ Make sure the suction cup is firmly attached to the front panel assembly near the home button.
- While holding the iPhone down with one hand, pull up on the suction cup to slightly separate the home button end of the front panel from the rear case.
- With a plastic opening tool, gently pry the edges of the rear case down, away from the front panel assembly, while you pull up with the suction cup.

⚠ Take your time and apply firm, constant force. The front panel assembly is a much tighter fit than on most other devices.

Step 8



⚠ Do not try to completely remove the front panel assembly from the rear case, as there are several delicate ribbon cables connecting them.

- Pull the plastic nub to release the vacuum seal on the suction cup.
- Remove the suction cup from the screen.

Step 9 — Removing the Touch ID cable bracket



- Open the phone just enough to reveal the metal bracket covering the home button cable.
- ⚠ Do not open the phone too far or you risk damaging the home button cable, or the socket it plugs into. **Keep the cable loose—if it is stretched out, that's too far.**
- Only the phone's original home button assembly will be capable of using the Touch ID functionality. **If you rip the cable, installing a new home button will only restore ordinary home button functions, not the Touch ID features.**
- Use the tip of a spudger to push the bracket free and remove it with [tweezers](#).
- ① The next two steps apply to reassembly. Skip them and continue to Step 12 until reassembly.

Step 10



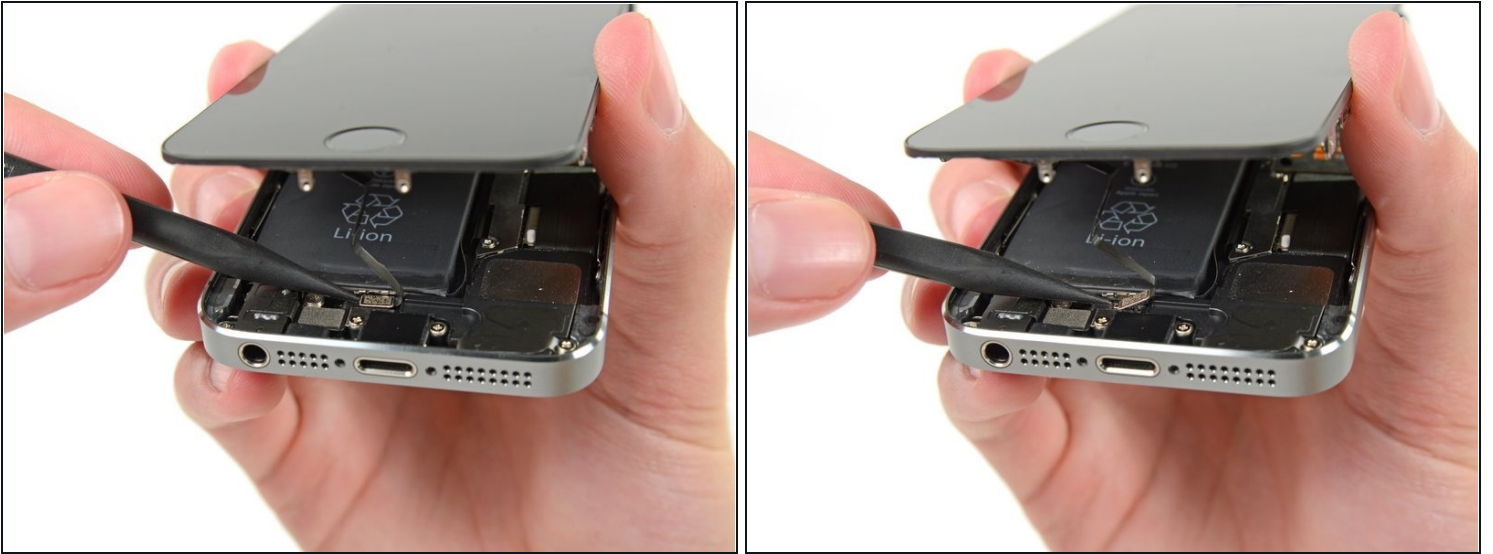
- ★ During reassembly, you will need to reinstall the Touch ID cable bracket. The top of the bracket needs to slide between the battery and Touch ID cable connector, in front of the metal tab. The bottom must latch down over the connector.
- ★ Slide the top of the bracket over the Touch ID cable connector from left to right.
- ① Alternatively, lay the bracket directly over the connector. The edge with the "leg" will prop the bracket up at a slight angle, and the opposite edge must be between the cable connector and the metal tab near the battery. With the edge of a spudger flat against the bracket, apply gentle downward pressure to snap in the back and front clasps.

Step 11



- ★ During reassembly, use the flat end of a spudger to snap the front portion of the Touch ID cable bracket down over the cable connector.
- ⓘ If the bracket does not snap down flush, you may need to remove the bracket and slide it over the cable connector again for a better fit.

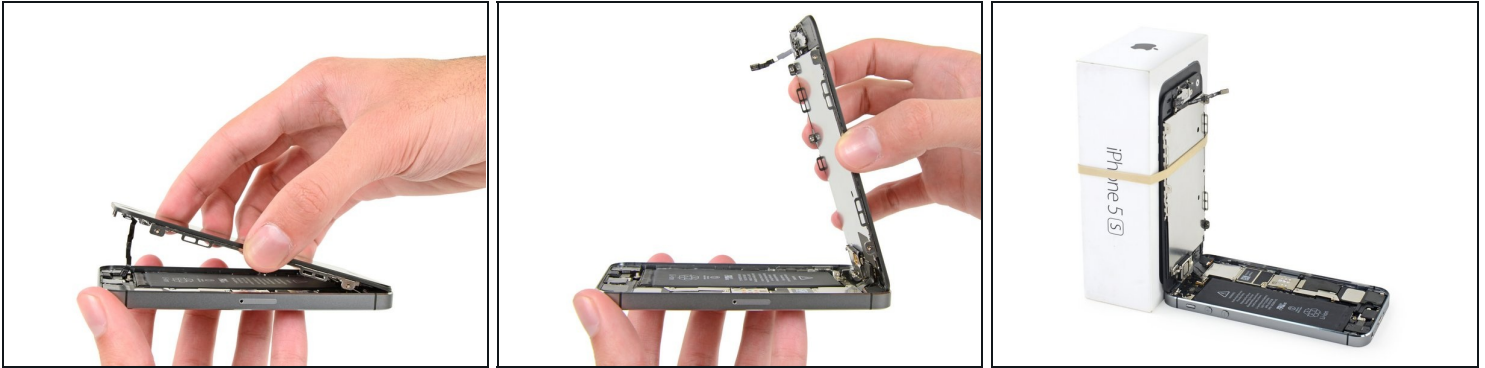
Step 12 — Disconnecting the home button cable connector



- Use the tip of a spudger to pry the home button cable connector up out of its socket.

⚠ Be sure you're separating the cable connector from its socket, and not prying the entire socket up. The socket is on its own glued-down cable that can be pried up if you aren't careful.

Step 13 — Opening up the phone



- Once the connector has been released, pull the home button end of the assembly away from the rear case, using the top of the phone 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.
- ⓘ In a pinch, you can use an unopened canned beverage to hold the display.

Step 14



- Remove the two 1.6 mm Phillips #000 screws securing the metal battery connector bracket to the logic board.

Step 15



- Remove the metal battery connector bracket from the iPhone.

Step 16



- Use the flat end of a spudger to gently pry the battery connector up from its socket on the logic board.

⚠ Be very careful to only pry up on the battery connector itself and not the socket on the logic board. If you pry up on the logic board socket or the board itself, you may destroy the socket or damage nearby components on the board.

Step 17



- Remove the following screws securing the front panel assembly cable bracket to the logic board:
 - One 1.7 mm Phillips #000 screw
 - One 1.2 mm Phillips #000 screw
 - One 1.3 mm Phillips #000 screw
 - One more 1.7 mm Phillips #000 screw
- ⓘ This 1.7 mm screw tends to not be attracted to a magnetized screwdriver. Take care not to lose it when removing.

⚠ It is especially important to keep track of your screws in this step for reassembly. Accidentally using the 1.3 mm screw or one of the 1.7 mm screws in the bottom right hole will result in significant damage to the logic board causing the phone to no longer boot properly.

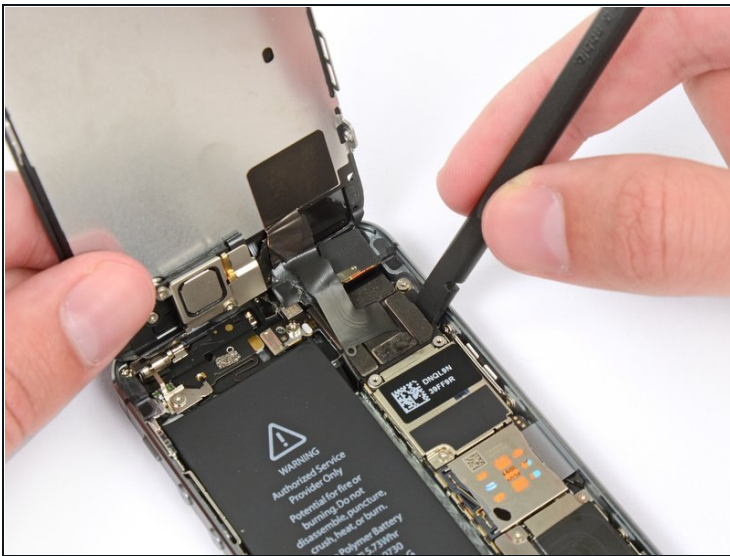
⚠ Be careful not to overtighten the screws, and don't force them. If they don't fit easily when you are securing them, they may be the wrong size.

Step 18



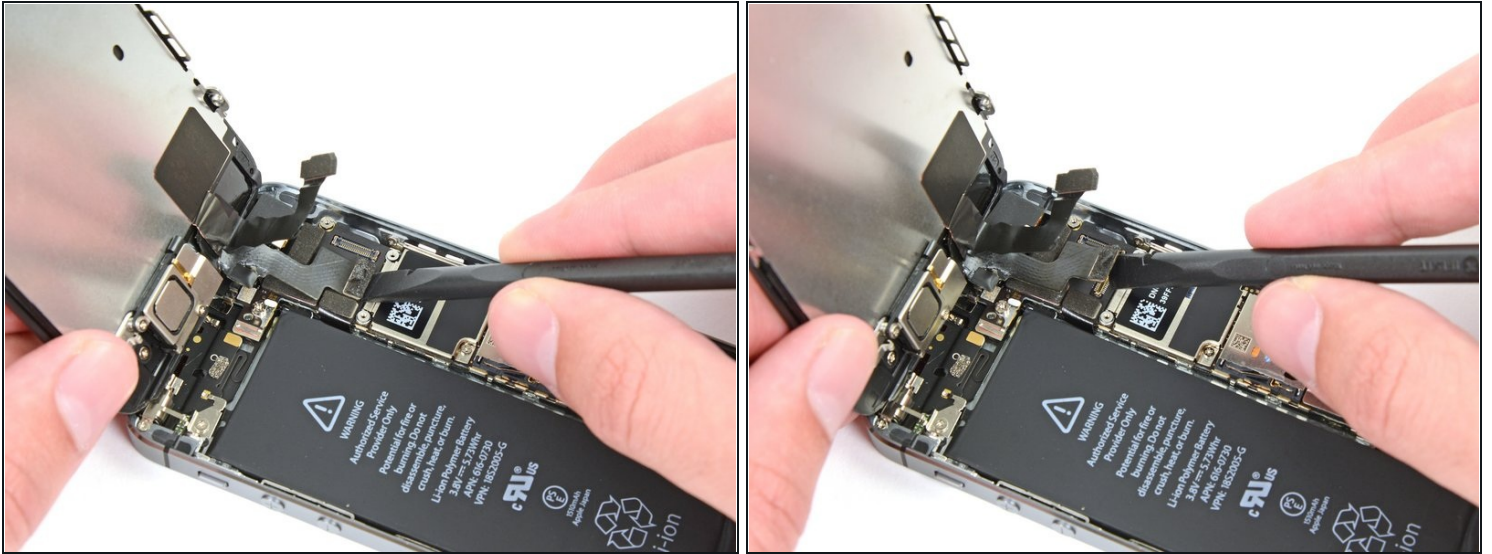
- Remove the front panel assembly cable bracket from the logic board.

Step 19



- Use a spudger or a fingernail to disconnect the front-facing camera and sensor cable.

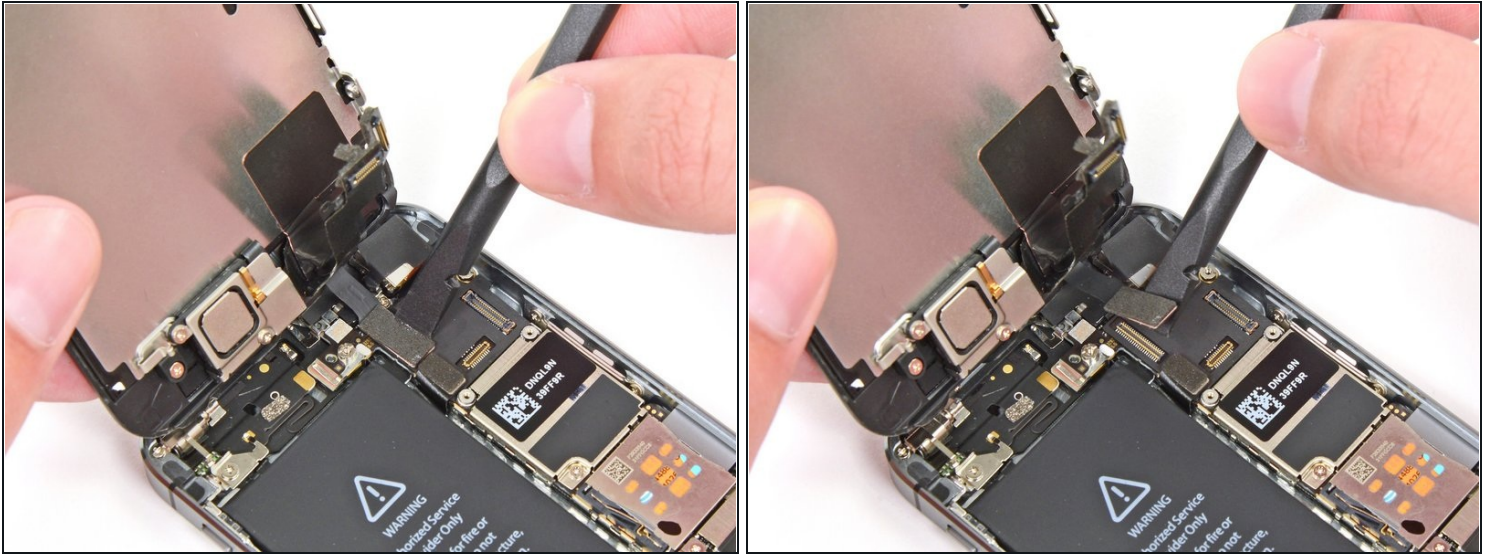
Step 20



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

- Disconnect the LCD cable connector.
- ☑ When reassembling your phone, the LCD cable may pop off the connector. This can result in white lines or a blank screen when powering your phone back on. If that happens, simply reconnect the cable and power cycle your phone. The best way to power cycle your phone is to disconnect and reconnect the battery.

Step 21



- Finally, disconnect the digitizer cable connector.

Step 22



- Remove the front panel assembly from the rear case.

Step 23 — Speaker



- Use the tip of a spudger to pry the antenna cable up from its socket on the logic board.
 - ☑ To [reconnect](#) the cable, use [tweezers](#) to position it directly over its socket, then push it straight down with the flat edge of your spudger.

Step 24



- Remove the following Phillips #000 screws:
 - One 2.9 mm screw
 - One 1.5 mm screw
 - One 3.6 mm screw

Step 25



- Use the point of a spudger to gently pry between the speaker and the rear case, lifting the speaker enough to grab with your fingers.

⚠ Do not attempt to pry the speaker entirely out of the case, you may break plastic tabs holding the speaker in place.

Step 26



- Swivel the speaker downwards and toward the left of the phone to free the upper tab from underneath the logic board.
- Slide the speaker up and to the right to free the left-hand tab from under the home button cable connector.
- Remove the speaker from the iPhone.

Step 27 — Lightning Connector



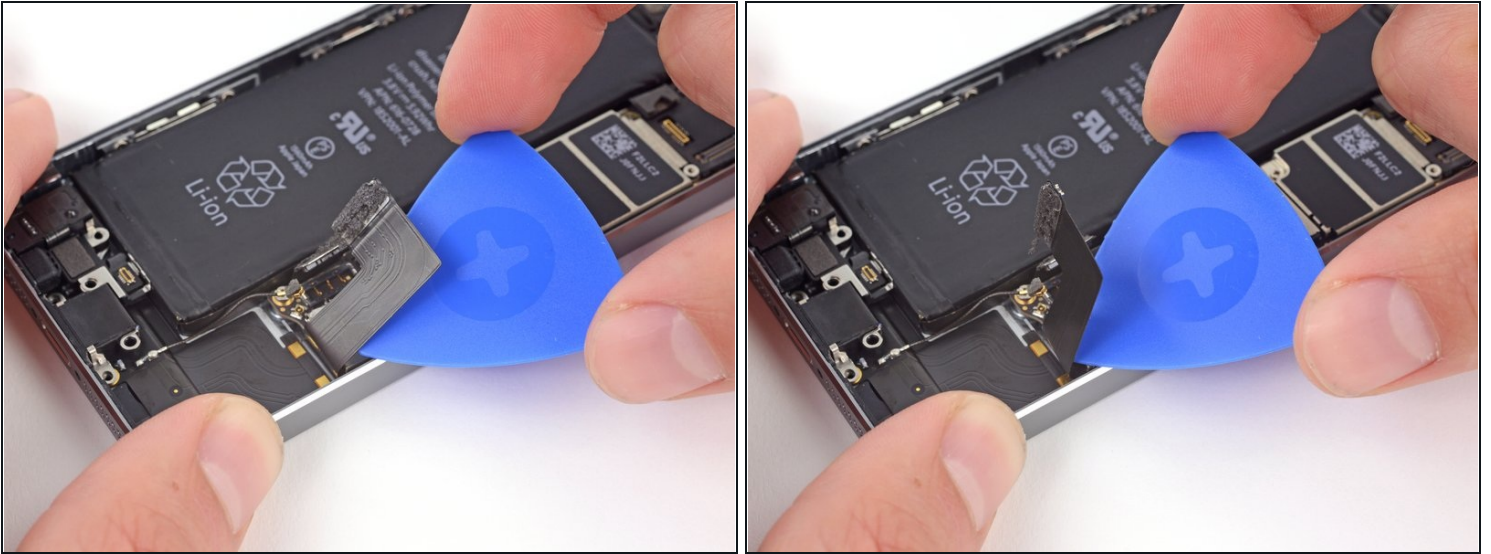
- Remove the following four Phillips #000 screws:
 - One 3.1 mm screw
 - One 2.9 mm screw
 - One 1.5 mm screw
 - One 3.4 mm screw

Step 28



- Use a spudger to pry the Lightning connector cable up from its socket on the logic board.

Step 29



ⓘ The Lightning connector data cable is held to the logic board and rear case with mild adhesive.

- Use an opening pick to slowly separate the cable from the logic board.

Step 30



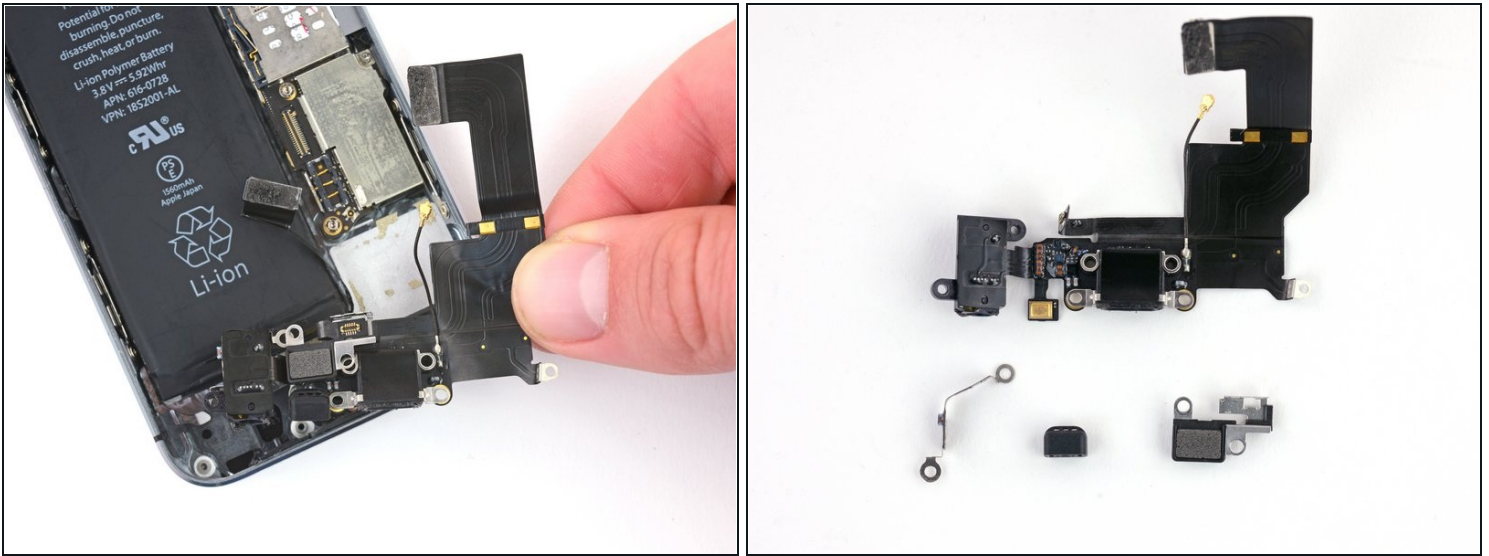
- Continue prying with the flat end of a spudger.

Step 31



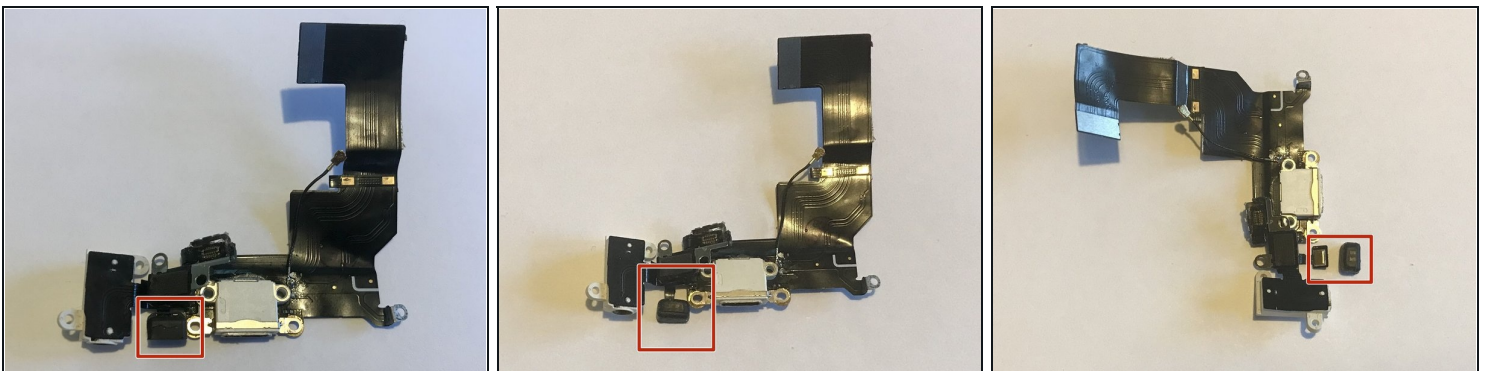
- Continue prying with an opening pick to separate the Lightning connector assembly from the rear case.
- Be sure to separate all parts of the assembly from the rear case, including the Lightning connector, headphone jack and home button cable socket.

Step 32



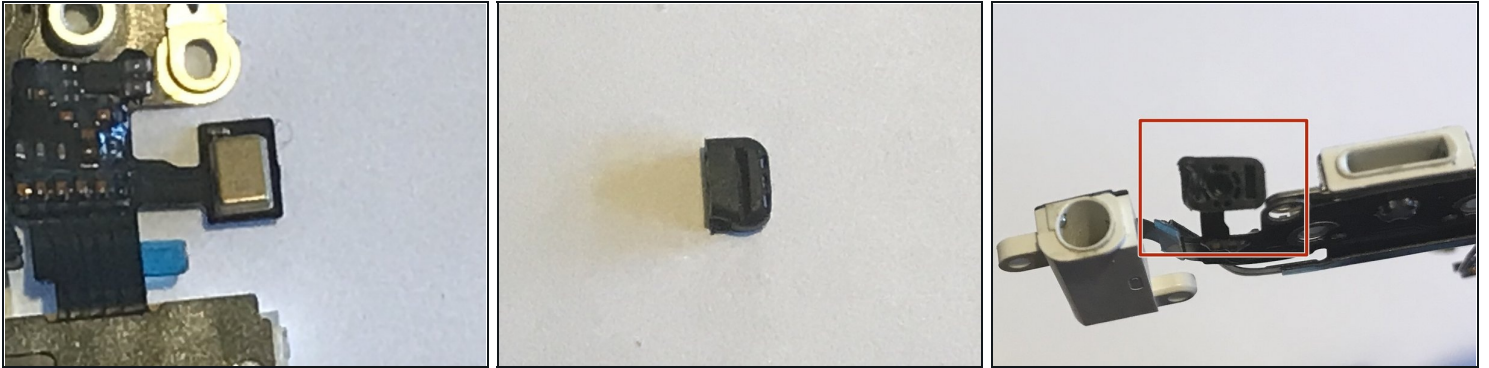
- Remove the Lightning connector assembly.
- ☑ Examine your replacement part, and your original cable carefully to be sure they match. Your replacement Lightning connector assembly may be missing certain components that need to be transferred from the original.
 - Components that commonly need to be transferred include a clip routed along the left and top edges of the headphone jack, the rubber microphone cover, and the bracket for the Touch ID cable connector. Refer to the following steps to transfer the rubber microphone cover and/or Touch ID cable connector.

Step 33 — Microphone cover



- Fold the microphone cable down to straighten it out.
- Pull the microphone cover off of the microphone with your fingers or [tweezers](#).

Step 34



- Remove any covering on the microphone (this one does not have a covering).
- Slide the slotted side (shown facing up) onto the microphone. It may help to hold the microphone cover steady by inserting tweezers into the hole on the bottom.
- Fold the microphone up so that it points out, as shown.

Step 35 — Touch ID cable connector



- Flip the Touch ID cable and connector over to the reverse side of the Lightning connector assembly, and peel the Touch ID cable off of the bracket.
- Thread the Touch ID cable on the replacement Lightning cable assembly into the bracket as shown. It is strongly recommended to affix the Touch ID cable to the bracket with mild adhesive, such as [B-7000](#).

Step 36



- ⓘ There are several spacers loosely placed on screw posts under the Lightning connector assembly. While not essential to phone function, you should replace these washers where you found them when reassembling the phone. Spacers may vary between devices, this unit has spacers as follows:
- One bracket
 - One C washer
 - Two small washers
 - If you are removing more components, take these pieces out and set them aside for safe keeping.

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