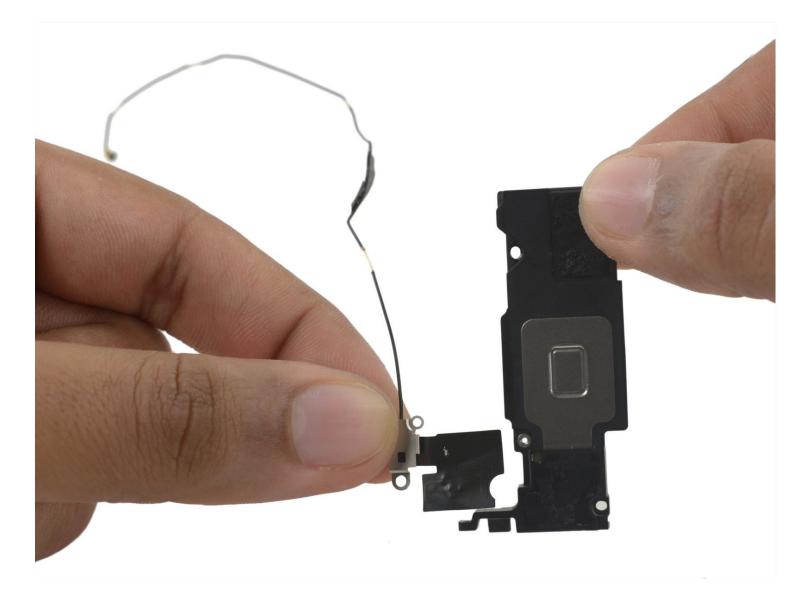


# iPhone 6s Plus Wi-Fi Diversity Antenna Replacement

Follow the steps in this guide to replace the...

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# **INTRODUCTION**

Follow the steps in this guide to replace the Wi-Fi diversity antenna in your iPhone 6s Plus.

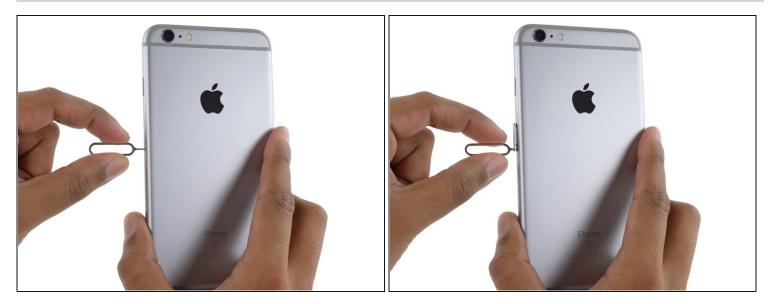
# 🖌 TOOLS:

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

# 🌣 PARTS:

iPhone 6s Plus Wi-Fi Diversity Antenna (1) iPhone 6s Plus Display Assembly Adhesive (1)

### Step 1 — SIM Tray

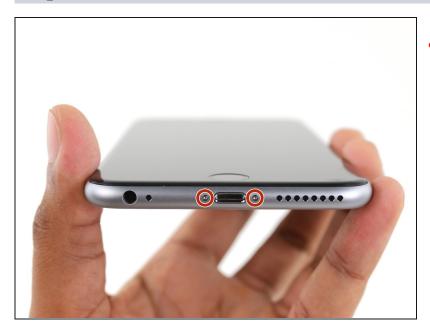


- Insert a SIM eject tool into the hole in the SIM tray.
- Press to eject the SIM tray.



- Remove the SIM tray.
- When reinserting the SIM tray, be sure to orient the tray such that the SIM eject hole is on the bottom.

#### **Step 3 — Pentalobe Screws**



- ▲ Before disassembling your iPhone, discharge the battery below 25%. A charged lithiumion battery can catch fire and/or explode if accidentally punctured.
- Power off your iPhone before beginning disassembly.
- Remove the two 3.4 mm Pentalobe screws on either side of the Lightning port.

### Step 4 — 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 three steps for an alternate method.** 

(i) For complete instructions on how to use the Anti-Clamp, <u>check out this guide</u>.

- 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.
- (i) If you find that the surface of your iPhone is too slippery for the Anti-Clamp to hold onto, you can <u>use tape</u> to create a grippier surface.



- Pull the blue handle forwards to lock the arms.
- Turn the handle clockwise 360 degrees or until the cups start to stretch.
  - (i) Make sure the suction cups <u>remain aligned with each other</u>. 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.

(i) 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 <u>Anti-</u> <u>Clamp</u>, follow the next three steps to use a suction handle.
- Apply mild heat to the lower edge of the iPhone using an <u>iOpener</u> or hair dryer for about a minute.
- (i) Heat softens the adhesive securing the display, making it easier to open.



- Opening the display on the 6s Plus 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.
  - (i) If your display is badly cracked, <u>covering it with a</u> <u>layer of clear packing tape</u> 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.



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.
- A 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.



- The safest place to pry from is the notch in the front panel above the headphone jack.
- While still maintaining pressure on the suction cup, insert the flat tip of a spudger into the gap, directly above the headphone jack.



• Twist the spudger to widen the gap between the front panel and the rear case.

# Step 11



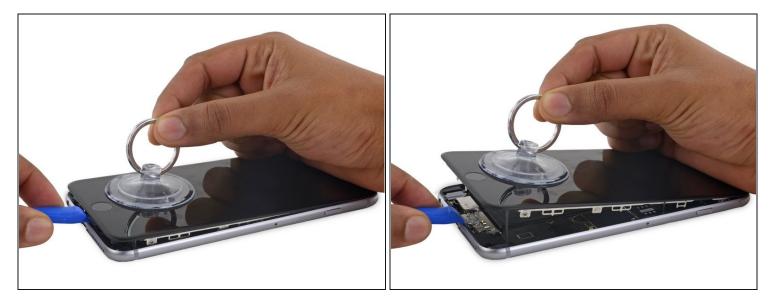
• While firmly pulling up on the suction cup, slide the edge of the spudger under the bottom left corner of the display.



• Slide the tip of the spudger up the left side of the phone, between the front panel and the rear case.

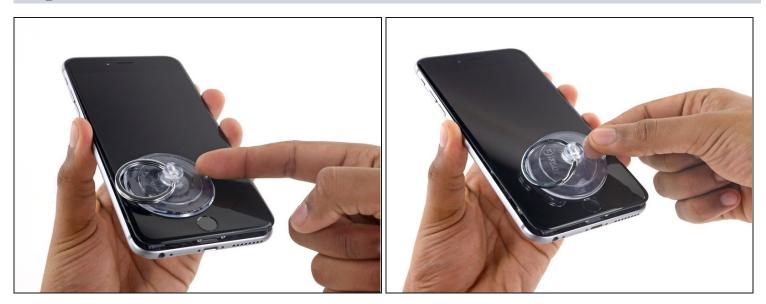


- Insert the flat tip of the spudger under the right edge of the display.
- Slide the spudger up the right side.



- Use a plastic opening tool to hold down the rear case while pulling up the suction cup to open the phone.
- ⚠ Do **not** remove the display completely, or you will damage the data cables connecting the display near the top edge of the iPhone.

# Step 15



• Pull up on the small nub on the suction cup to remove it from the display.



- 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.
  - ⚠ Don't open the display more than 90°—it is still connected to the top of the phone by the display, digitizer, and front camera cables which can tear easily.
  - Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.
- i In a pinch, you can use an unopened canned beverage to support the display.

# Step 17 — Battery Connector



- Remove two Phillips screws securing the battery connector bracket to the logic board, of the following lengths:
  - One 2.9 mm screw
  - One 2.3 mm screw
- Throughout this guide, <u>keep</u> <u>careful track of your screws</u> so that each one goes back where it came from during reassembly. Installing a screw in the wrong place can cause permanent damage.

# Step 18



• Remove the battery connector bracket.



• Use a spudger or a clean fingernail to disconnect the battery connector by prying it straight up off the logic board.

# Step 20



• Bend the connector back to ensure it doesn't make contact and power the iPhone on while you're working on it.

# Step 21 — Display Assembly



- Remove the following Phillips screws:
  - Three 1.3 mm screws
  - One 1.6 mm screw
  - One 3.0 mm screw
    - During reassembly, it's critical to place this 3.0 mm screw in the top-right corner of the bracket. Placing it anywhere else may damage the logic board.

# Step 22



• Remove the display cable bracket.

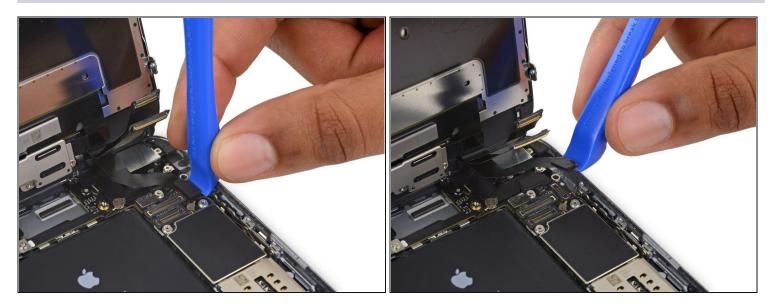


A Be careful to only pry up on the connector itself and not the socket on the logic board.

• Use a plastic opening tool to disconnect the front-facing camera and sensor cable connector.



- Use a plastic opening tool to 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.



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

• Disconnect the home button/fingerprint sensor cable by prying it straight up from its socket on the logic board.



- Remove the display assembly.
- During reassembly, pause here if you wish to <u>replace the adhesive around the edges of</u> <u>the display</u>.

# Step 27 — Speaker

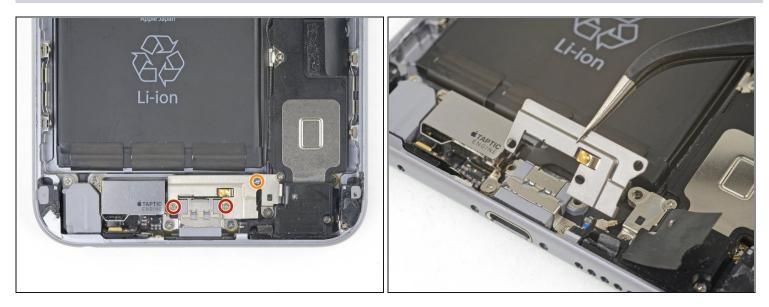


• Use the point of a spudger to pry up and disconnect the antenna cable from the bottom of the logic board.

# Step 28



• Use the point of a spudger to pry up and disconnect the Lightning connector cable from the logic board.

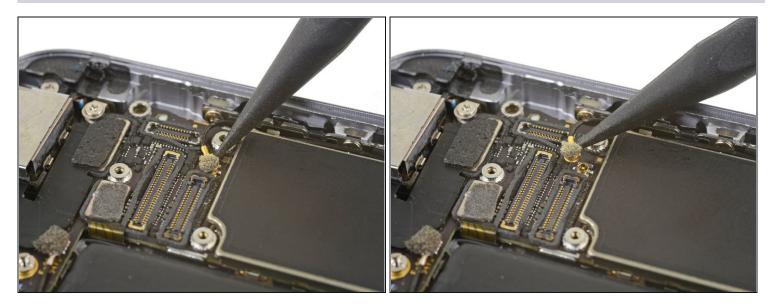


- Remove the three Phillips screws securing the Lightning connector bracket:
  - Two 3.5 mm screws
  - One 2.7 mm screw
- Remove the bracket.

# Step 30



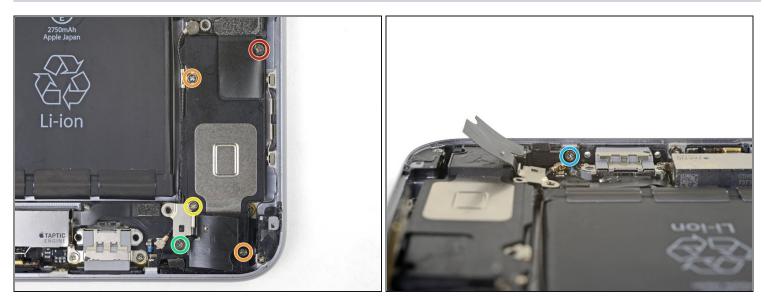
• Use the point of a spudger to pry up and disconnect the antenna cable from the Lightning connector assembly.



• Use the point of a spudger to pry up and disconnect the antenna cable from the top of the logic board.



- 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 free it from the retaining clips.
  - (i) If the cable does not have enough room to lift up, loosen <u>this Phillips screw</u> securing the logic board so that the board can give more wiggle room.
    - 🗷 Be sure to re-tighten this screw during re-installation.
  - (i) If the cable snags near the SIM reader, it's likely caught on the SIM tray ejection mechanism. Use the point of a spudger to slide the plastic rod out of the way.
- During re-installation, be sure to route the antenna cable <u>underneath the logic board</u> <u>corner</u>.
- During reassembly, 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.

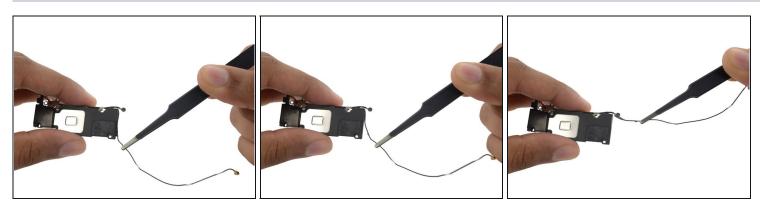


- Remove the six Phillips screws securing the speaker to the rear case:
  - One 2.5 mm screw
  - Two 2.7 mm screws
- One 1.5 mm screw
- One 1.7 mm screw
- One 2.6 mm screw securing the speaker to the bottom edge of the rear case.

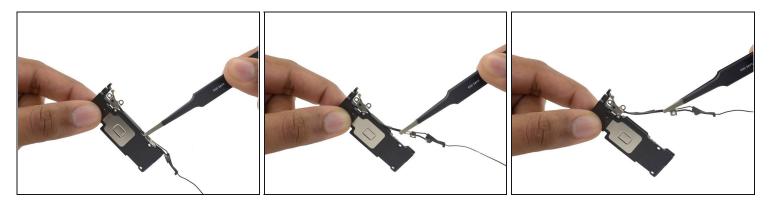


- Insert the flat end of a spudger between the long edge of the speaker module and the case wall.
- Pry gently to loosen the speaker module.
- Once the module is loose, lift and remove the speaker module and the attached antenna cable from the phone.

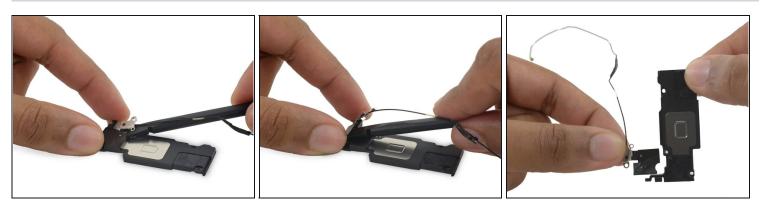
### Step 35 — Wi-Fi Diversity Antenna



• Use a pair of tweezers to begin peeling the antenna cables off of the speaker.



- Continue peeling the antenna cables off the long side of the speaker
- (i) At this point, the clip holding the antenna cables may fall off the speaker. If it does, be sure to keep track of it for reassembly.



- Use the flat end of a spudger to pry the Wi-Fi diversity antenna off the speaker.
- Remove the antenna.

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 <u>R2 or e-Stewards certified recycler</u>.

Repair didn't go as planned? Check out our <u>iPhone 6s Plus Answers community</u> for troubleshooting help.