

iPhone 6s Plus Taptic Engine Replacement

Follow this guide to replace the Taptic Engine...

Written By: Dante Mazzanti



INTRODUCTION

Follow this guide to replace the Taptic Engine in your iPhone 6s Plus. The Taptic Engine is the iPhone's vibrating and haptic feedback motor. If your phone isn't vibrating or produces a rattling sound when it does, replacing the Taptic Engine can remedy your issues.

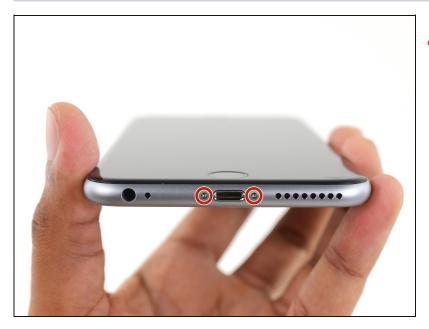
🖌 TOOLS:

Anti-Clamp (1) P2 Pentalobe Screwdriver iPhone (1) Suction Handle (1) Spudger (1) Tweezers (1) Phillips #000 Screwdriver (1) iFixit Opening Tool (1) iOpener (1)

🌣 PARTS:

iPhone 6s Plus Vibrator (1) iPhone 6s Plus Display Assembly Adhesive (1)

Step 1 — 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 2 — 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 4 — 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 9



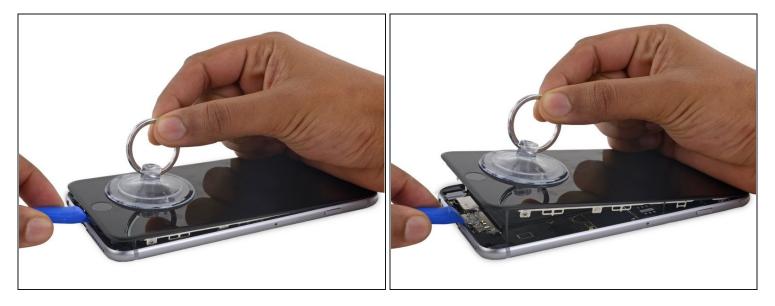
• While firmly pulling up on the suction cup, slide the edge of the spudger under the bottom left corner of the display.



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

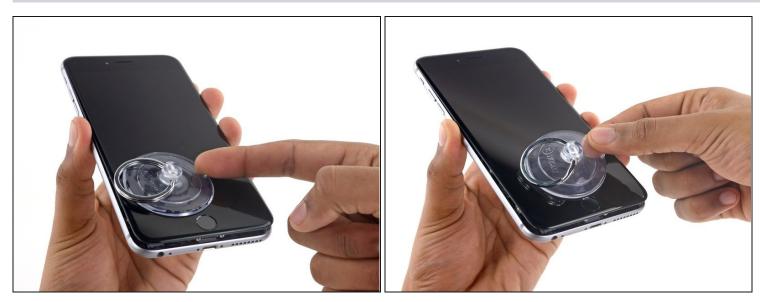


- Insert the flat tip of the spudger under the right edge of the display.
- Slide the spudger up the right side.



- 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 13



• 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 15 — 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 16



• 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 18



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

Step 19 — Taptic Engine

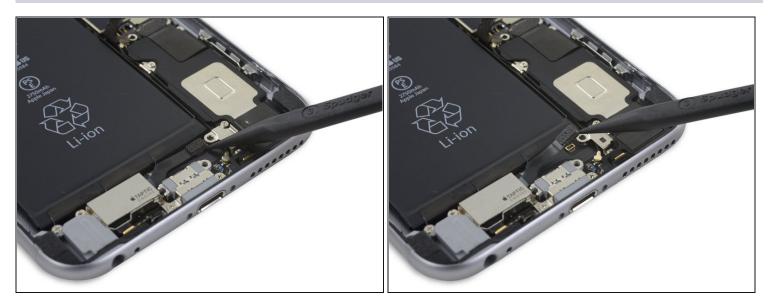


- Remove the following Phillips screws over the Taptic Engine cable bracket:
 - Two 3.5 mm screws
 - One 2.7 mm screw

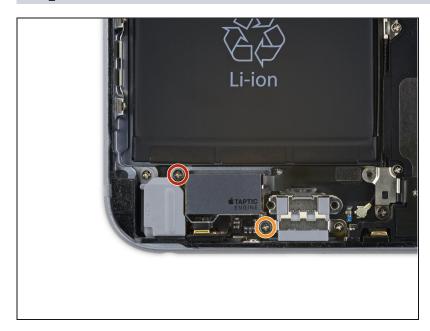
Step 20



• Remove the Taptic Engine cable bracket.



• Disconnect the Taptic Engine's flex cable from the socket on the Lightning Connector flex cable.



- Remove the following two Phillips screws:
 - One 3.1 mm screw
 - One 2.1 mm screw



• Remove the Taptic Engine.

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