



# iPhone 6 Plus LCD and Digitizer Replacement

Replace the LCD and digitizer (A.K.A. front panel) in your iPhone 6 Plus.

Written By: Walter Galan



## INTRODUCTION

For an easier repair, use our [fix kit](#) and follow [this shorter guide](#) to replace your iPhone's entire screen.

For more advanced fixers, this guide will help you replace *only* the iPhone's LCD and digitizer assembly (a.k.a. the bare "front panel"). This requires you to transfer several components from your original screen to the new one before installing it—including the front-facing camera, earpiece speaker, LCD shield plate, and home button assembly.

For all screen/display repairs, it's important to transfer the original home button onto the new display in order for Touch ID (fingerprint scanning) to function.

[video: <https://www.youtube.com/watch?v=-uGY9cmERZY>]

### TOOLS:

- P2 Pentalobe Screwdriver iPhone (1)
- iSclack (1)
- Suction Handle (1)
- iFixit Opening Tools (1)
- Tweezers (1)
- iOpener (1)
- Phillips #000 Screwdriver (1)

### PARTS:

- iPhone 6 Plus LCD and Digitizer (1)
- iPhone 6 Plus Front Panel Assembly Cable Bracket (1)
- iPhone 6 Plus LCD Shield Plate with Sticker and Home Cable (1)
- iPhone 6 Plus LCD Shield Plate (1)
- iPhone 6 Plus LCD Shield Plate Sticker (1)
- iPhone 6 Plus Home Button Link Cable (1)

## Step 1 — 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 3.6 mm P2 Pentalobe screws next to the Lightning connector.

## Step 2 — Taping Over The Display



- If your display glass is cracked, keep further breakage contained and prevent bodily harm during your repair by taping over the glass.
- Lay overlapping strips of clear packing tape over the iPhone'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.

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

- If the broken glass makes it difficult to get a suction cup to stick in the next few steps, try folding a strong piece of tape (such as duct tape) into a handle and lifting the display with that instead.

## Step 3 — iSclack Opening Procedure



**i** The next two steps demonstrate using the [iSclack](#), a great tool for safely opening the iPhone 6 Plus that we recommend for anyone doing more than one repair. **If you aren't using the iSclack, skip down two steps.**

- If the plastic depth gauge is attached at the center of the iSclack, remove it now—it's not needed for larger phones like the iPhone 6 Plus.
- Close the handle on the iSclack, opening the suction cup jaws.
- Place the bottom of your iPhone in between the suction cups.

**i** Position the iSclack's upper suction cup against the display, near the home button.

- Open the handles to close the jaws of the iSclack. Center the suction cups and press them firmly onto the top and bottom of the iPhone.

**i** If your display or back glass is badly cracked, [covering it with a layer of clear packing tape](#) may help the suction cups adhere. The iSclack also includes two pieces of tape for this purpose.

## Step 4



- Hold onto your iPhone securely and close the handle of the iSclack to separate the suction cups, pulling the front panel up from the rear case.
- The iSclack is designed to safely open your iPhone enough to separate the pieces, but not enough to damage any of the display cables.
- Peel the two suction cups off your iPhone.
- **Skip the next three steps and continue on to Step 7.**

## Step 5 — Front Panel Assembly



- If you don't have an iSlack, use a single suction cup to lift the front panel:
- Press a suction cup onto the screen, just above the home button.

● **i** Be sure the cup is pressed securely onto the screen to get a tight seal.

● **i** 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 6



- While holding the iPhone down with one hand, pull up on the suction cup to slightly separate the front panel assembly from the rear case.
- **⚠** Take your time and apply firm, constant force. The display assembly is a much tighter fit than most devices.
- Using a plastic opening tool, begin to gently pry the rear case down, away from the display assembly, while continuing to pull up with the suction cup.
- **ⓘ** There are several clips attaching the front panel assembly to the rear case, so you may need to use a combination of the suction cup and plastic opening tool to free the front panel assembly.

## Step 7



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

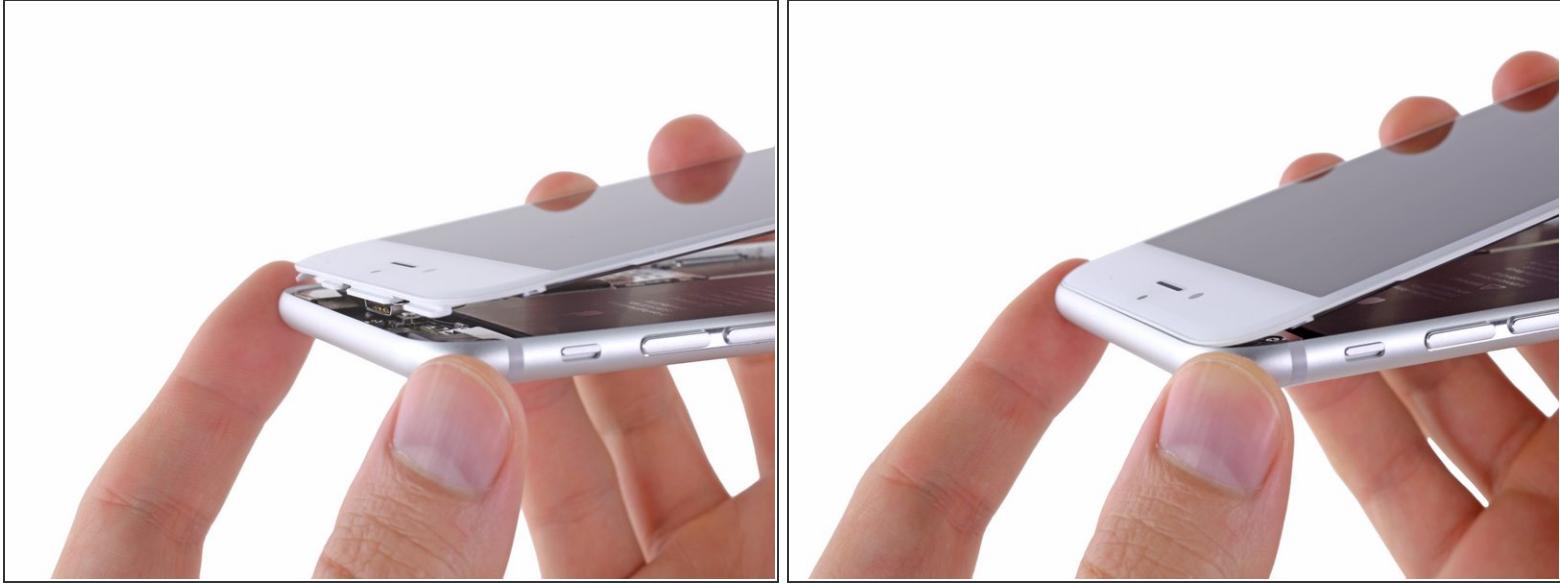
## Step 8



- Pull the home button end of the front panel 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.

**(i)** In a pinch, you can use an unopened canned beverage to hold the display.

## Step 9



- ⓘ Several clips along the top edge of the front panel form a partial hinge, allowing the front panel assembly to swing open like a book.
- ⚡ During reassembly, align the clips just below the top edge of the rear case. Then, slide the front panel upward until its top edge is flush with that of the rear case.

## Step 10



- Remove the following Phillips screws from the battery connector bracket:
  - One 2.3 mm screw
  - One 3.1 mm screw

## Step 11



- Remove the metal battery connector bracket from the iPhone.

## Step 12



- Use a clean fingernail or the edge of an opening tool to gently pry the battery connector up from its socket on the logic board.

**⚠** Take care to **only** pry up on the battery connector, and not the socket on the logic board. If you pry up on the logic board socket, you may break the connector entirely.

## Step 13



- Remove the following Phillips screws securing the front panel assembly cable bracket:
  - Three 1.2 mm screws
  - One 1.5 mm screw
  - One 2.9 mm screw

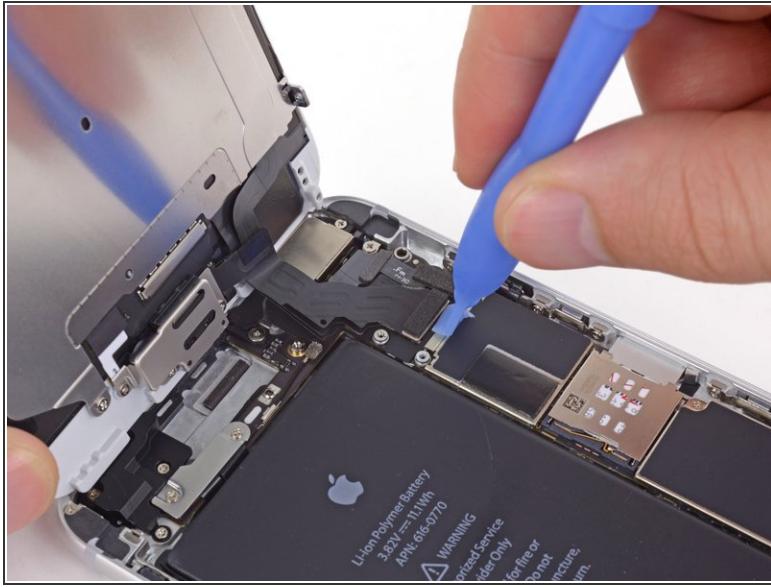
**⚠ Do not attempt to insert longer screws into the red marked screw holes. Doing so may result in irreparable damage to the logic board.**

## Step 14



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

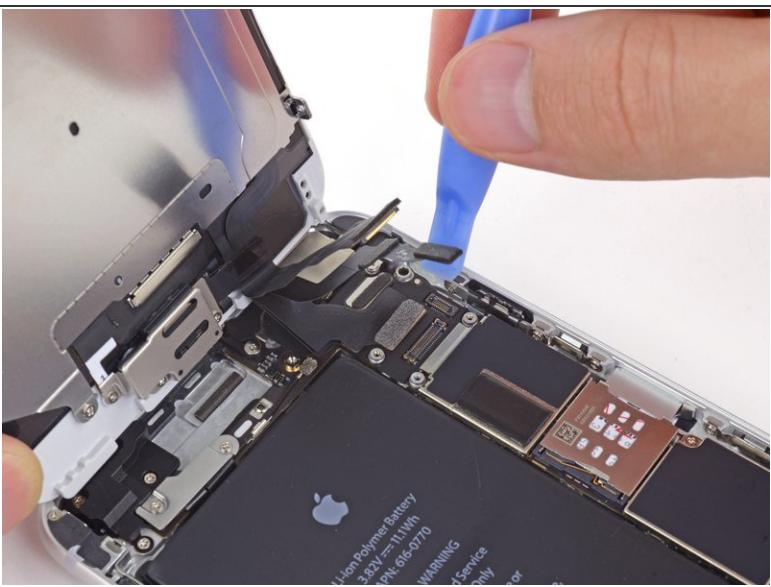
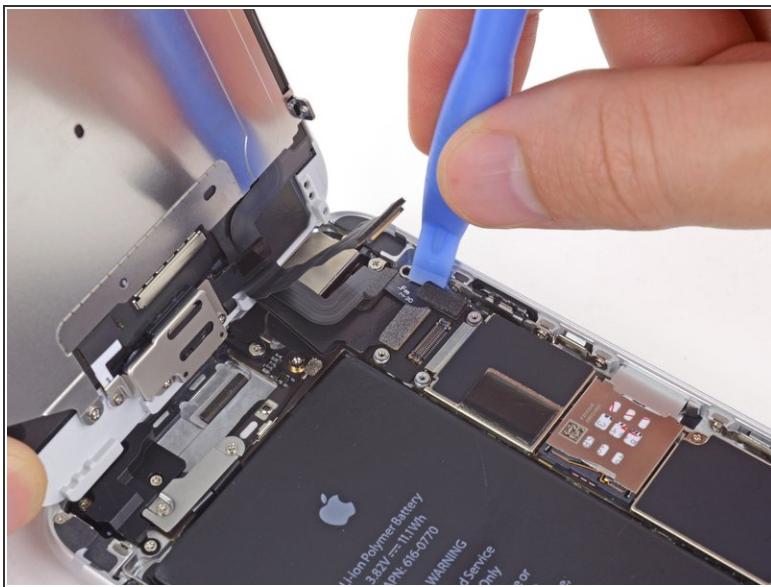
## Step 15



⚠ In the next four steps, take care to pry up **only** on the cable connectors, and not on their sockets on the logic board.

- While still supporting the front panel, use a fingernail or the edge of an opening tool to disconnect the front-facing camera and earpiece speaker connector.

## Step 16



- Disconnect the home button cable connector.

This document was generated on 2020-04-19 04:37:51 AM (MST).

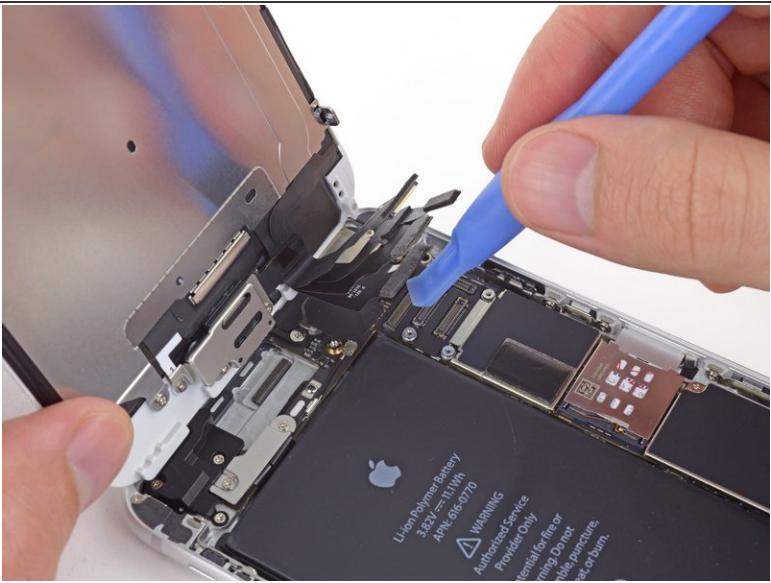
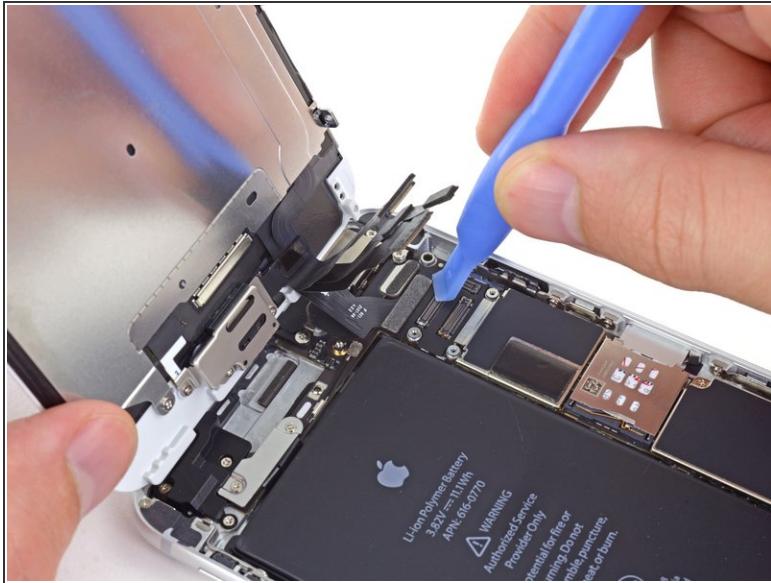
## Step 17



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

- Use a plastic opening tool to disconnect the display data cable connector.
- When reassembling your phone, the display data 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 connector](#).

## Step 18



- Finally, disconnect the digitizer cable connector.

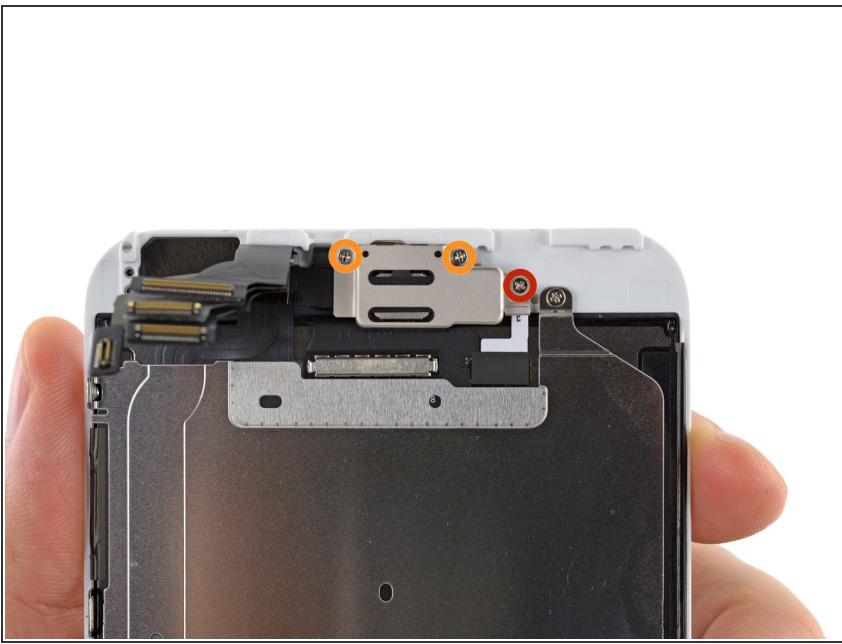
- ★ When reconnecting the digitizer cable, **do not press the center of the connector**. Press one end of the connector, then press the opposite end. Pressing in the center of the connector can bend the component and cause digitizer damage.

## Step 19



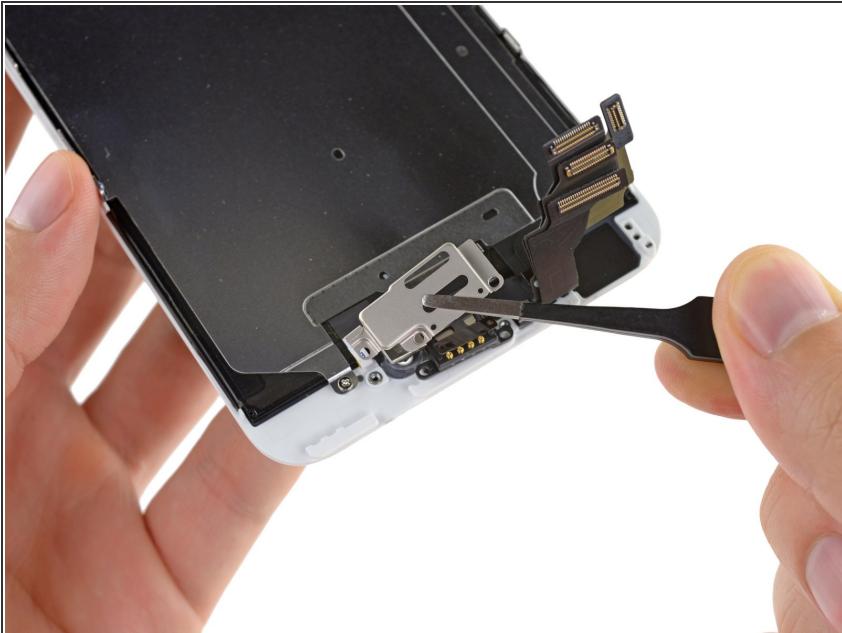
- Remove the front panel assembly from the rear case.

## Step 20 — Earpiece Speaker



- Remove the following Phillips screws securing the upper component bracket:
  - One 1.5 mm screw
  - Two 2.3 mm screws

## Step 21



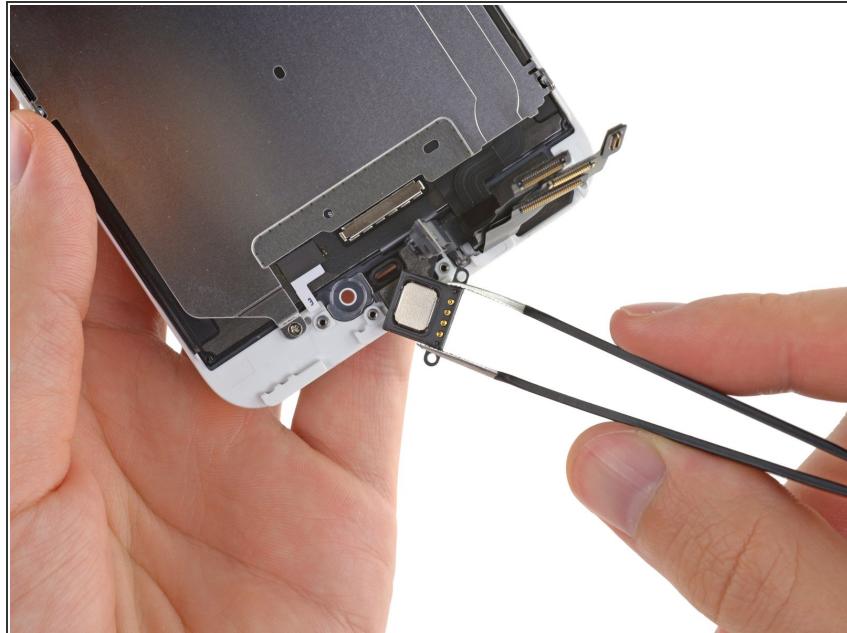
- Lift and remove the earpiece bracket from the display assembly.

## Step 22



- Use a the flat end of a spudger to pry up the front-facing camera and display cables, and gently push them aside.

## Step 23



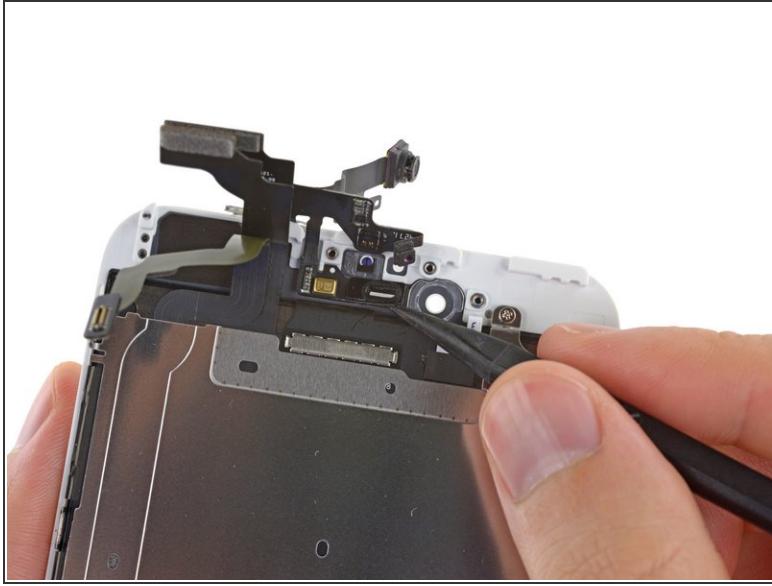
- Use a pair of tweezers to firmly grasp and remove the earpiece speaker from the display assembly.

## Step 24 — Front Facing Camera and Sensor Assembly



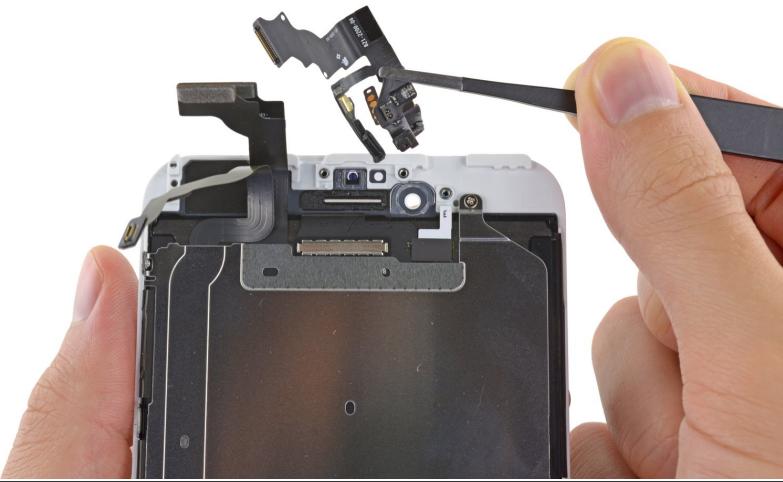
- Use the tip of a spudger to gently pry up the sensor cable assembly from its recess in the display assembly.  
*(i)* The cable is held in place with a mild adhesive.

## Step 25



- Pry the microphone portion of the front-facing camera and sensor cables from the display assembly.

## Step 26



- Remove the front-facing camera and sensor cable assembly off the display assembly.

☞ Replacement assemblies may or may not come with the [speaker mesh](#) already attached. If it's missing, save your old one and reuse it. You can separate it with some heat from a hair dryer and gentle prying or pulling with tweezers.

## Step 27 — Home Button Assembly



- Remove the two 1.8 mm Phillips screws securing the home button bracket to the front panel.

## Step 28



- Remove the home button bracket from the front panel assembly.

## Step 29



- Use the tip of a spudger to disconnect the home button connector from its socket on the home button cable.

## Step 30



- Carefully wedge the tip of a spudger underneath the home button connector cable.
- Gently move the spudger across to separate the home button connector cable from the adhesive securing it to the front panel assembly.



If the cable doesn't separate easily, apply heat using an [iOpener](#) or hair dryer to soften the adhesive, and try again. Be careful not to damage the cable.

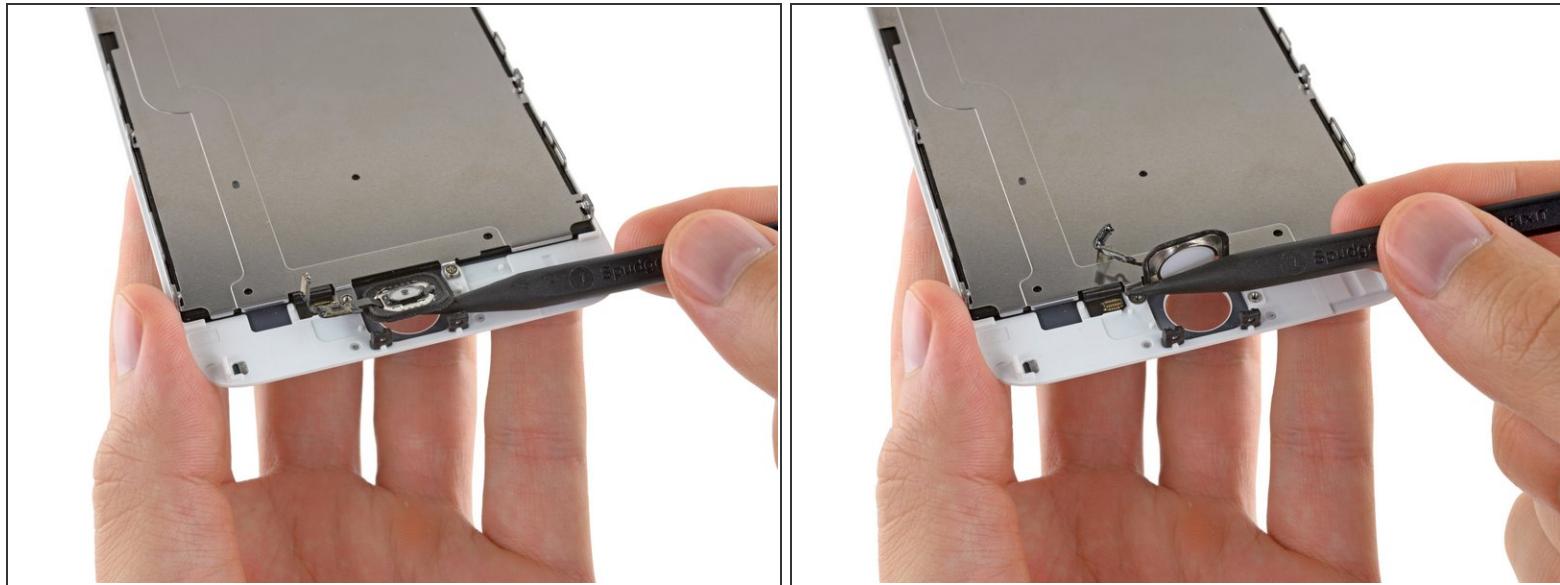
## Step 31



⚠ The rubber gasket surrounding the home button is very thin and tears easily.

- Apply mild heat (with an [iOpener](#), heat gun, or hair dryer) to soften the adhesive securing the home button gasket.
- Using your fingertip, gently press up on the home button from the front side of the display assembly. Use firm, constant pressure to slowly separate the home button's rubber gasket from the front panel.

## Step 32



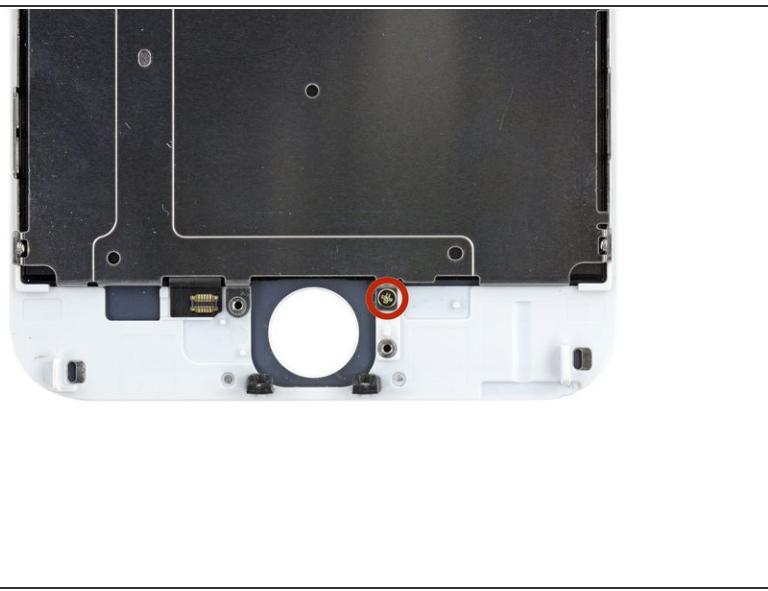
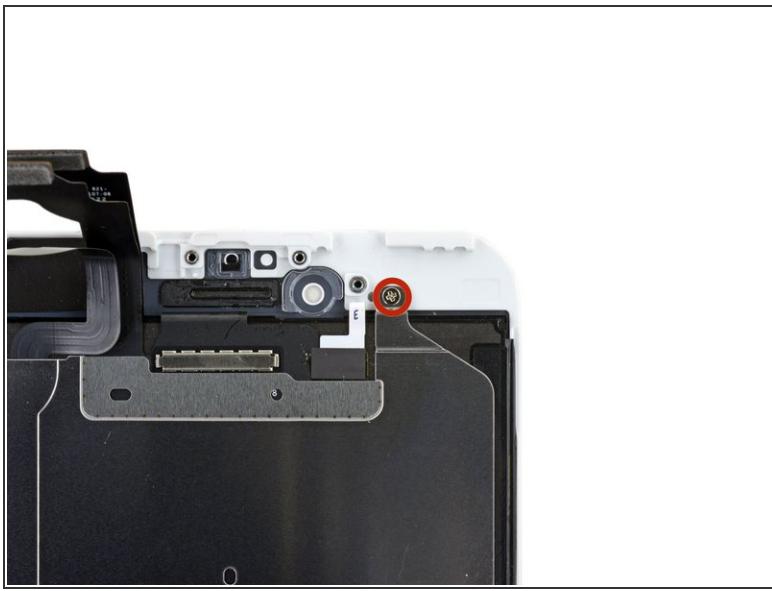
- Carefully use the tip of a spudger to finish separating the home button from the front panel.

## Step 33



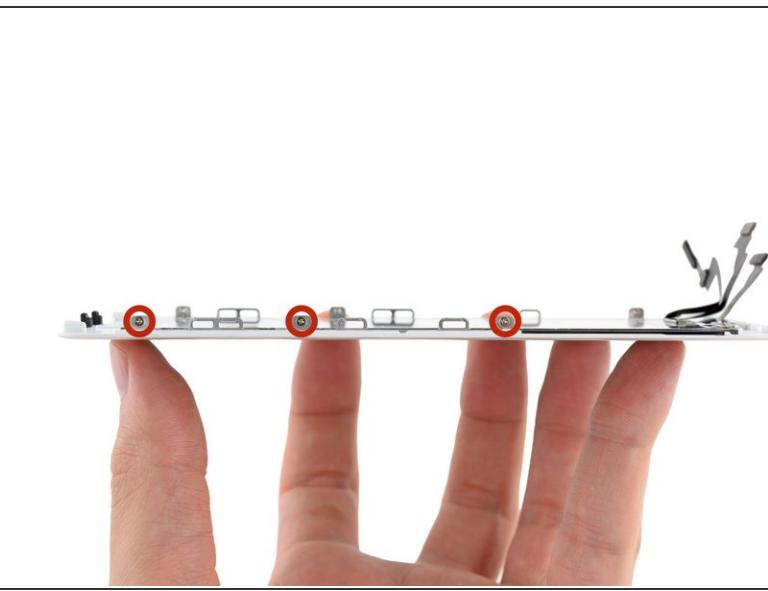
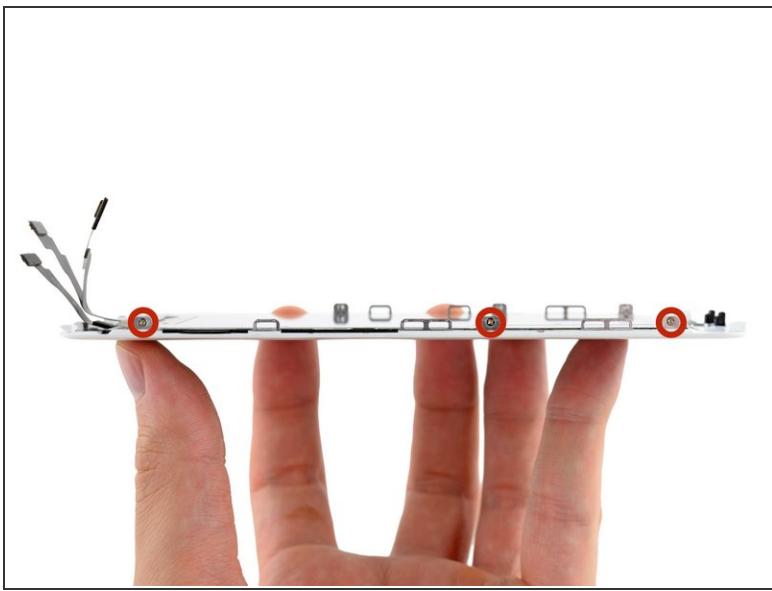
- Lift and remove the home button assembly off the front panel assembly.

## Step 34 — LCD and Digitizer



- Remove the two 1.7 mm Phillips screws (one on top and one on bottom) securing the LCD shield plate to the display assembly.

## Step 35



- Remove three 1.3 mm Phillips screws from each side of the LCD shield plate (six total).

## Step 36



*(i)* The next step requires peeling one end of the home button cable (highlighted in red in the second picture) that is affixed to the back of the display assembly with strong adhesive. We highly recommend [using an iOpener](#) to heat the bottom of the display assembly, directly on top of the home button.

## Step 37



- Carefully lift—but do **not** remove—the LCD shield plate by lifting the end nearest the earpiece speaker a few millimeters from the display assembly.
- Gently lift the other end (nearest the home button) to peel the home button cable off the display assembly.

**⚠** Be extremely cautious as you peel the home button cable. It is a fragile cable. If you feel more than slight resistance, we recommend reheating and reusing the iOpener to soften the adhesive.

- Remove the LCD shield plate off the display assembly.
- Display assembly remains.

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