iPhone 7 Plus Home/Touch ID Sensor Replacement

Replace the solid-state home button in your iPhone 7 Plus.

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INTRODUCTION

Prerequisite only.

**Only Apple can do a home button swap.** If you replace yours using 3rd-party parts, it deactivates the button and turns on AssistiveTouch. Therefore, this procedure is only useful as part of a display assembly replacement, where the home/Touch ID sensor must be transferred from the old display to the new one.

Follow the steps in this guide to remove or transfer the home/Touch ID sensor assembly, including the gasket and cable, in your iPhone 7 Plus. To avoid accidentally straining or tearing the display cables, it's best to completely detach the display assembly before beginning repairs on the home/Touch ID sensor. But if you are comfortable doing so, you may skip the display assembly section of this guide and go straight to the home/Touch ID sensor section.

### TOOLS:
- P2 Pentalobe Screwdriver iPhone (1)
- iOpener (1)
- Suction Handle (1)
- iFixit Opening Picks set of 6 (1)
- Spudger (1)
- Tri-point Y000 Screwdriver Bit (1)
- Tweezers (1)

### PARTS:
- iPhone 7/7 Plus Home Button Bracket (1)
- iPhone 7/7 Plus Bottom Screws (1)
Step 1 — Pentalobe Screws

⚠️ Before you begin, 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 3.4 mm pentalobe screws at the bottom edge of the iPhone.

ℹ️ Opening the iPhone’s display will compromise its waterproof seals. Have replacement seals ready before you proceed past this step, or take care to avoid liquid exposure if you reassemble your iPhone without replacing the seals.
**Step 2 — iOpener Heating**

- We recommend that you clean your microwave before proceeding, as any nasty gunk on the bottom may end up stuck to the iOpener.
- Place the iOpener in the center of the microwave.
- For carousel microwaves: Make sure the plate spins freely. If your iOpener gets stuck, it may overheat and burn.
Step 3

- Heat the iOpener for **thirty seconds**.

- Throughout the repair procedure, as the iOpener cools, reheat it in the microwave for an additional thirty seconds at a time.

⚠️ Be careful not to overheat the iOpener during the repair. Overheating may cause the iOpener to burst.

⚠️ Never touch the iOpener if it appears swollen.

⚠️ If the iOpener is still too hot in the middle to touch, continue using it while waiting for it to cool down some more before reheating. A properly heated iOpener should stay warm for up to 10 minutes.
Step 4

- Remove the iOpener from the microwave, holding it by one of the two flat ends to avoid the hot center.

⚠️ The iOpener will be very hot, so be careful when handling it. Use an oven mitt if necessary.

Step 5 — Opening Procedure

ℹ️ Heating the lower edge of the iPhone will help soften the adhesive securing the display, making it easier to open.

- Use a hairdryer or prepare an iOpener and apply it to the lower edge of the iPhone for about a minute in order to soften up the adhesive underneath.
Step 6

- Apply a suction cup to the lower half of the front panel, just above the home button.

Be sure the suction cup does not overlap with the home button, as this will prevent a seal from forming between the suction cup and front glass.
Step 7

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

- Insert the flat end of a spudger into the gap.

  The watertight adhesive holding the display in place is very strong; creating this initial gap takes a significant amount of force. If you're having a hard time opening a gap, rock the screen up and down to weaken the adhesive until you can fit a spudger inside.

- While pulling up on the suction cup, twist the spudger to widen the opening between the screen and rear case.
Step 8

- Insert the flat end of the spudger between the front panel and the rear case at the lower left edge of the iPhone.

- Slide the spudger up the left edge of the phone starting at the lower edge and moving towards the volume control buttons and silent switch, breaking up the adhesive holding the display in place.

⚠️ Do not try to pry the top edge of the display away from the rear case, as it is held in place by plastic clips that may break.
Step 9

- Remove the spudger from the left side of the phone and insert the flat end into the bottom right corner.

- Slide the spudger up the right edge of the phone to the top corner, breaking up the adhesive holding the display in place.
Step 10

- Pull up on the suction cup to lift up the display and open the iPhone.

⚠️ *Do not raise the display more than 10°* as there are delicate ribbon cables along the right edge of the device connecting the display to the logic board.

Step 11

- Pull up on the small nub on the suction cup to remove it from the front panel.
Step 12

- Slide an opening pick underneath the display along the top edge of the phone to loosen the last of the adhesive.

Step 13

- Pull the display assembly slightly away from the top edge of the phone to disengage the clips holding it to the rear case.

- Open the iPhone by swinging the display up from the left side, like the back cover of a book.

⚠️ Don't try to fully separate the display yet, as several fragile ribbon cables still connect it to the iPhone's logic board.
Step 14 — Battery Disconnection

Remove the following four tri-point Y000 screws securing the lower display cable bracket to the logic board:

- Three 1.2 mm screws
- One 2.6 mm screw

Step 15

- Remove the lower display cable bracket.
Step 16

- Use the point of a spudger to lift the battery connector out of its socket on the logic board.

- Bend the connector cable up slightly to prevent it from making contact with the socket and providing power to the phone.

Step 17 — Display Assembly

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

- Use the flat end of a spudger or a fingernail to disconnect the two lower display connectors by prying them straight up from their sockets on the logic board.

- To re-attach press connectors, press down on one end until it clicks into place, then repeat on the other end. Do not press down on the middle. If the connector is even slightly misaligned, the connector can bend, causing permanent damage.

- If you have a blank screen, white lines on the display, or partial or complete lack of touch response after reassembling your phone, try disconnecting and carefully reconnecting both of these cables and make sure they are fully seated.
Step 18

- Remove the three tri-point Y000 screws securing the bracket over the front panel sensor assembly connector:
  - One 1.3 mm screw
  - Two 1.0 mm screws
- Remove the bracket.

Step 19

- Disconnect the front panel sensor assembly connector from its socket on the logic board.

  This press connector should also be reconnected one end at a time to minimize the risk of bending.
Step 20

- Remove the display assembly.

⚠️ During reassembly, pause here if you wish to replace the adhesive around the edges of the display.

Step 21 — Home/Touch ID Sensor

- Remove the four Y000 screws securing the bracket over the home/Touch ID sensor:
  - One 1.1 mm screw
  - Three 1.3 mm screws

⚠️ During reassembly, be careful not to overtighten these screws, or your home button may not work.
Step 22

- Remove the bracket that secures the home/Touch ID sensor.

Step 23

- Pry under the left edge of the home button cable connector to disconnect it from its socket.

⚠️ If the entire connector begins to flip up without separating, press down on the cable at the top edge of the connector with the flat of your spudger, while simultaneously prying up the left edge of the connector. Be very careful not to damage the cable or connector, or you will permanently disable the sensor.
Step 24

- Carefully pry up the underlying connector and move it out of the way of the home/Touch ID cable.

⚠️ It's very easy to damage your iPhone during this step. Work slowly and take care where you pry with your tool. If you damage the Touch ID hardware, it can only be replaced by Apple.

- If the connector doesn't pry up easily, use a hair dryer or iOpener to heat and soften the adhesive securing the connector, and then try again.

⚠️ Don't try to detach the connector completely—simply flip it up slightly so that the underlying home/Touch ID sensor cable can be removed.
Step 25

Heating the area around the home/Touch ID sensor will help soften the adhesive holding its delicate cable in place, making it easier to remove safely.

- Flip the display assembly over. Use a hairdryer or prepare an iOpener and apply it to the lower edge of the display for about 90 seconds in order to soften up the adhesive underneath.

Step 26

- Use an opening pick to gently separate the adhesive holding the home/Touch ID sensor cable to the back side of the display panel.
Step 27

- Remove the home/Touch ID sensor assembly by lifting it through the front side of the display.

- To reinstall, first feed the cable through the hole in the front of the display.

- Your replacement part may come with an extra Y000 screw already installed right of the Home Button. Remove the unnecessary screw so that you can reinstall the home button bracket.

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

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