iPhone 6 Rear Case Replacement

Remove all the internal components from an iPhone 6.

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INTRODUCTION

Use this guide to strip and replace the rear case of your iPhone 6.

TOOLS:
- Standoff Screwdriver for iPhones (1)
- P2 Pentalobe Screwdriver iPhone (1)
- iSclack (1)
- iFixit Opening Tools (1)
- Suction Handle (1)
- Tweezers (1)
- Phillips #000 Screwdriver (1)
- Spudger (1)
- SIM Card Eject Tool (1)

PARTS:
- iPhone 6 OEM Rear Case (1)
- iPhone 6 Blank Rear Case (1)
- iPhone 6/6s/7 Battery Adhesive Strips (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-long Pentalobe screws next to the Lightning connector.
Step 2 — iSclack Opening Procedure

The next three steps demonstrate using the iSclack, a great tool for safely opening the iPhone 6 that we recommend for anyone doing more than one repair. **If you aren't using the iSclack, skip down three steps for an alternate method.**

- 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.
- Close the handle on the iSclack, opening the suction-cup jaws.
Step 3

- Place the bottom of your iPhone in between the suction cups.
- Position the iSclack's upper suction cup against the display, just above (but not covering) 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.
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 just enough to separate the pieces, but not enough to damage the display cables.

- Peel the two suction cups off your iPhone.

- **Skip the next three steps and continue on to Step 8.**
Step 5 — Manual Opening Procedure

- If you don't have an iSclack, 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 pressed securely onto the screen to get a tight seal.

If the screen is completely shattered to the point that a suction cup will not stick, use clear packing tape or similar to cover the screen. Sometimes you can even pull up using just the tape without using the suction cup.
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.

  **ℹ️ There are several clips holding 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 — Opening up the phone

- Open the iPhone by swinging the home button end of the front panel assembly away from the rear case, using the top of the phone as a hinge.
  
  ▪ Several clips along the top edge of the front panel form a partial hinge.

  ▪ 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 9

- 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.
  
  In a pinch, an unopened canned beverage works well for this.
  
- Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.

Step 10 — Removing the battery connector bracket screws

- Remove the following Phillips screws from the battery connector bracket:
  
  - One 2.2 mm screw
  
  - One 3.2 mm screw

  During your repair, keep track of each screw and make sure it goes back exactly where it came from to avoid damaging your phone.
Step 11

- Remove the metal battery connector bracket from the iPhone.

Step 12 — Disconnecting the battery connector

- Use a plastic 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 — Removing the front panel assembly cable bracket screws

- Remove the following five Phillips screws securing the front panel assembly cable bracket:
  - Three 1.2 mm screws
  - One 1.7 mm screw
  - One 3.1 mm screw

⚠ Incorrect placement of these screws during reassembly will cause permanent damage to your iPhone's 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.

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

**Step 16**

- Use a spudger or a fingernail to disconnect the home button cable connector.
Step 17

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

- Use a spudger or a fingernail to disconnect the display data cable connector.

💡 When reassembling your phone, the display data cable may pop off its 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

- Use the flat end of a spudger to 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 — Separating front panel assembly and rear case

- Remove the front panel assembly from the rear case.
Step 20 — SIM Card

- Insert a SIM card eject tool or a paperclip into the small hole in the SIM card tray.
- Press to eject the tray.
  
  This may require a significant amount of force.

Step 21

- Remove the SIM card tray assembly from the iPhone.

  When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.
Step 22 — Logic Board

- Use the flat end of a spudger to disconnect the Lightning connector assembly cable and fold it out of the way of the speaker.

Step 23

- Use the point of a spudger to lift the antenna cable connector up off of its socket on the logic board.
Step 24

- Remove the following Phillips screws from the upper cable bracket:
  - One 2.9 mm screw
  - One 2.2 mm screw

Step 25

- Remove the upper cable bracket from the iPhone.
Step 26

⚠️ When disconnecting the following connectors, only pry up on the connector, **not the socket** on the logic board or you risk permanent damage.

- Use the flat end of a spudger to lift the power button and flash assembly cable connector up off of its socket.
- Lift the volume control cable connector up out of its socket on the logic board.

Step 27

- Remove the following four Phillips screws from the Wi-Fi antenna:
  - One 1.5 mm screw
  - One 1.4 mm screw
  - Two 2.1 mm screws
Step 28

- Remove the Wi-Fi antenna from the iPhone.

ℹ️ Be careful not to touch any metal to metal contact points with your bare fingers—use tweezers or gloves. Finger oils may disrupt conductivity. If you do touch any of these components, clean them with a degreaser like windex or isopropyl alcohol before reassembly.

Step 29

- Remove the two 1.6 mm Phillips screws from the grounding bracket.
Step 30

- Remove the grounding bracket from the iPhone.

Step 31

- Remove the following Phillips screws securing the angled logic board bracket.
  - One 2.6 mm screw
  - One 1.3 mm screw, located horizontally in the upper sidewall of the iPhone.
Step 32

- Remove the angled logic board bracket.

Step 33

- Remove the single 1.2 mm Phillips screw securing the antenna interconnect cable to the logic board.
Step 34

- Use the point of a spudger to fold the antenna interconnect cable up out of the way of the logic board.

Step 35

- Use the flat end of a spudger to lift the camera cable connector straight up out of its socket on the logic board.

⚠️ Be sure to only pry on the connector **not** the socket itself or you can cause permanent damage to the logic board.

- Fold the camera cable up out of the way of the logic board.
Step 36

- Remove the following screws securing the logic board to the rear case:
  - Two 1.9 mm Phillips screws
  - One 2.3 mm standoff screw

ℹ️ Standoff screws are best removed using an [iPhone Standoff Screwdriver Bit](https://www.iFixit.com) and [driver handle](https://www.iFixit.com).

⚠️ In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.
Step 37

- Use the flat end of a spudger to lift the battery connector end of the logic board up slightly, just enough to grab with your fingers.

  Insert the spudger near the metal shields below the SIM card tray to avoid damaging any chips or sockets.

Step 38

- Lift the battery connector end of the logic board and pull it up and out of the rear case.

  Be careful not to snag the logic board on any cables.
Step 39 — Power Button Cable Assembly

- Peel back the first battery adhesive tab from the bottom right edge of the battery.

⚠️ Use your fingers or blunt tweezers, and be extra careful when working near the battery—puncturing a lithium-ion battery can release dangerous chemicals and cause a fire.
Step 40

- Gently pull the battery adhesive tab away from the battery, toward the bottom of the iPhone.
- Try not to pull against the battery or the lower components, or you may rip the adhesive strip.
- Continue pulling, allowing the strip to slowly slip out from between the battery and the rear case. When you feel increased resistance from the strip, stop pulling and continue with the next step.

⚠️ If the battery adhesive tabs break off at any point during the removal process, use your fingers or blunt tweezers to retrieve the remaining length of adhesive, and continue pulling.

⚠️ If one of the adhesive strips breaks under the battery during this procedure, and cannot be retrieved, remove the remaining strip, and then proceed to Step 44.
Step 41

- When you feel increased resistance from the adhesive strip, pull it gently around the lower right corner of the battery.

- Continue pulling the adhesive tab upward and away from the right edge of the battery, allowing it to slowly slide out from between the battery and the rear case, until the strip comes free from the iPhone.

⚠️ Don't allow the adhesive strip to snag on the battery connector, or it may tear or break off.
Step 42

- Peel back the second battery adhesive tab from the bottom left edge of the battery.

- Again, gently pull the battery adhesive tab upward and away from the battery, allowing the adhesive strip to slowly slide out from between the battery and the rear case.

- Continue pulling the adhesive tab until you feel increased resistance, and then stop.
Step 43

- When you feel increased resistance from the adhesive strip, pull it gently around the lower left corner of the battery.

⚠️ Don't allow the adhesive strip to snag on the corner of the battery, or it may tear or break off.

- Continue pulling the adhesive tab upward and away from the left edge of the battery, allowing it to slowly slide out from between the battery and the rear case, until the strip comes free from the iPhone.

- If you removed both adhesive strips successfully, **skip the next two steps and continue on Step 46.**

- If either of the adhesive strips broke off underneath the battery and could not be retrieved, **continue with the next step below.**
**Step 44**

- If any of the adhesive strips broke off and the battery remains stuck to the rear case, [prepare an iOpener](https://www.iFixit.com) or use a hair dryer to heat the rear case directly behind the battery.

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**Step 45**

- Insert a plastic card under the logic board edge of the battery.

⚠️ Be careful to keep the card as flat as possible to avoid bending the battery, which may damage it and cause it to release dangerous chemicals.

- Press the card in at several points if necessary to break up the adhesive behind the battery.
Step 46

- After peeling or prying out all adhesive, remove the battery from the iPhone.

- When reinstalling the battery, refer to this guide to replace your battery's adhesive strips.

Step 47

- Remove any tape covering the upper left rear-facing camera screw.
Step 48

- Remove the following Phillips #00 screws from the rear-facing camera bracket:
  - One 1.5 mm screw
  - One 2.1 mm screw

Step 49

- Remove the rear-facing camera bracket.
Step 50

- Carefully remove the antenna interconnect cable from the rear case.

Step 51

- Remove the rear-facing camera from the iPhone.
Step 52

- Remove the single 1.2 mm Phillips #00 screw securing the flash bracket.

Step 53

- Remove the flash bracket from the rear case.
Step 54

- Remove the two 2.2 mm Phillips #00 screws from the power button bracket.

Step 55

- Use the point of a spudger to gently push the flash and microphone modules up out of their respective holes in the rear case.

If you encounter significant adhesive, use tweezers to peel the components up from the rear case.
Step 56

- Begin to peel the flash/microphone/power button assembly cable up from the rear case starting from the connector end.

- Continue to peel the cable up, being particularly careful of the narrow component ends of the cable.

- Remove the flash/microphone/power button assembly cable from the phone.

Step 57 — Power Button

- Grip the power button by the metal bar to pull it free from the rear case.

- The power button is held to the case with an adhesive gasket, pull carefully to prevent ripping the membrane.
Step 58 — Rear Case

- Remove the following Phillips #00 screws from the volume control cable brackets:
  - Two 2.3 mm screws
  - One 1.8 mm screw

Step 59

- Pull the hold switch and volume control button brackets away from the rear case to allow access to the button covers.
**Step 60**

- Begin to peel the volume control button cable up from the rear case starting from the connector end.
- Be gentle when peeling the thin portions of the cable up from the case.
- Remove the volume control button cable from the rear case.

**Step 61**

- Pull the volume control buttons by the metal bar to remove them from the rear case.
- The buttons are held to the case with an adhesive gasket, pull carefully to prevent ripping the membrane.
Step 62

- Remove the following four Phillips #00 screws securing the speaker:
  - Two 2.9 mm screws
  - Two 2.3 mm screws

Step 63

- Use the point of a spudger to push the antenna interconnect cable clip off of the speaker housing.
Step 64

Pull the speaker up and out of the rear case.

Step 65

Remove the two 1.6 mm Phillips #00 screws securing the vibrator to the rear case.
Step 66

- Remove the vibrator from the iPhone.

Step 67

- Remove the two 3.1 mm Phillips #00 screws securing the Lightning port retaining bracket.
Step 68

- Remove the Lightning port retaining bracket.

Step 69

- Remove the single 3.6 mm Phillips #00 shoulder screw from the microphone brace.
Step 70

- Remove the microphone brace from the iPhone.

Step 71

- Remove the six remaining Phillips #00 screws from the Lightning connector cable assembly:
  - Two 3.1 mm shoulder screws
  - Two 1.7 mm screws
  - Two 1.5 mm screws
Step 72

- Use the flat end of a spudger to begin peeling the Lightning connector cable assembly up from the rear case.

Step 73

- Carefully pull the Lightning connector cable assembly up slightly to free it from the vibrator and speaker screw posts.
Step 74

- Use the flat end of a spudger to lift under the Lightning connector portion of the cable assembly to free more adhesive.

Step 75

- Use the point of a spudger to push the microphone portion of the Lightning cable assembly out of its recess in the rear case.
Step 76

- Gently run the point of a spudger under the cable assembly between the Lightning connector and the headphone jack to free it from the last of the adhesive.

Step 77

- Use the tip of a spudger to help guide the headphone jack out of its recess in the rear case.
- Remove the Lightning connector cable assembly from the iPhone.
Step 78

- Remove the single 1.7 mm Phillips #00 screw securing the SIM eject lever.

Step 79

- Remove the SIM eject lever from the rear case.

Before reassembling, carefully check your replacement rear case and make sure it contains all the same parts as your original rear case. Transfer any remaining parts before you continue.
To reassemble your device, follow these instructions in reverse order.