

AirPods Battery Replacement

Since the original AirPods came out all the way...

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INTRODUCTION

Since the original AirPods came out all the way back in late 2016, many of their batteries have died out and can't hold the same amount of charge as they did 7 years ago. This guide aims to solve that issue, but repairing AirPods batteries is very challenging. To take you through the grueling process, many contributors at iFixit compiled this guide to help you complete the repair. Let us begin!

TOOLS:

Heat Gun (1)
Soldering Flux (1)
Soldering Workstation (1)
Tweezers (1)

PARTS:

AirPods 1st and 2nd Gen Batteries (1)

Step 1 — Battery







• This is the first part of the process of replacing the battery with the damaged airpods, mainly to see the internal structural details close-up, to prepare for the complete disassembly below.







 This part is to disassemble the details of the charging contact parts at the bottom of the battery.

Step 3







Continue below

Step 4







This part is to try to remove the battery after heating

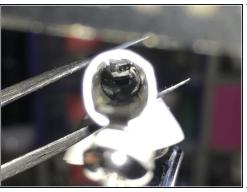


• It can be seen that when the first attempt to practice disassembling the battery, the signal antenna components have been pulled out, resulting in damage to the antenna components.

Step 6



Here you can see that the negative pole of the battery is connected from the top to the bottom
of the charge, and the inside of the antenna part is glued to the battery.







 Close-up of the original parts of the airpods after the disassembly of the battery, for the complete disassembly of the bottom to make reference

Step 8







 Well, start the official airpods battery replacement and disassembly. After heating, use a scalpel to slide open the bottom charging microphone unit.



 After taking out, pay attention to the internal measurement microphone cable, don't break it, gently open it and drop it into the debonding agent.

Step 10



 At the same time, the fuel for the Zippo lighter is prepared for the next foaming dissolution, and then the inner glue is cleaned.



 Prepare the required disassembly and soldering tools, fix the airpods, add a small amount of solder for faster heat conduction, and more convenient to remove the bottom battery cable at the bottom.

Step 12

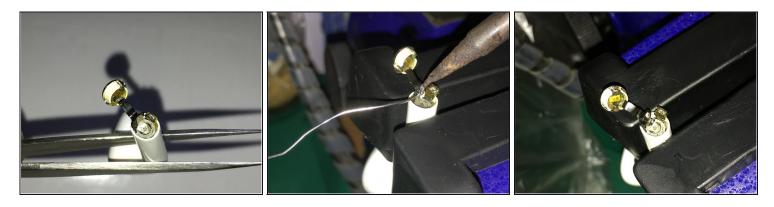


• The following is a close-up of the part after removing the negative pole of the battery.



 Change direction, continue to tilt the lower cable, and solder the battery positive with a soldering iron.

Step 14



Close-up of battery under positive electrode



 Use a syringe to inject the glue around the outside of the battery, waiting for the rubber foam to soften

Step 16



• Use a pair of tweezers to shake the antenna on the outside of the battery to the left and right, then drop the debonding agent, and finally insert a thin plastic piece into the middle of the battery and the inside of the antenna, up and down, to loosen the battery and the antenna.



• Finally, heat the upper part around the outer casing of the earphone with a heat gun to soften the filling rubber on the inside. After heating, drip the sol and Zippo again. Finally, use the hook and pliers to slowly pull the battery out.

Step 18



 Finally finally the battery is perfectly removed, you can see the bottom of the charging and microphone parts cable and antenna cable in the airpods



 Be prepared to replace the battery removed from the previously damaged airpods, and prepare the sticker on the back of the adhesive to cut the appropriate size.

Step 20



• Insert the cut piece of paper into the middle of the battery cable and the antenna cable to facilitate the battery insertion and to reduce friction.







 Then use the damaged battery core that was removed before, press the loaded battery down, and finally solder the positive electrode of the battery. Be careful not to solder for a long time, and solder it quickly, otherwise it will damage the battery.

Step 22







• Finally, the negative electrode of the battery is welded and stabilized with B-7000 glue, but to be more stable, it is recommended to use ab glue or epoxy glue.

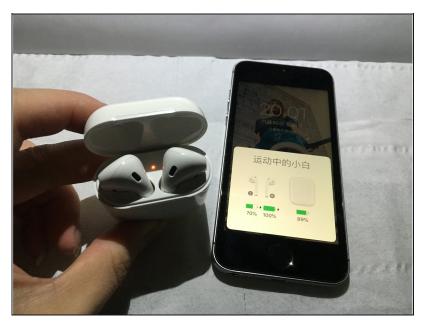






 Fix the glued airpods with the fixing clips, wait for the glue to solidify, or increase the temperature to accelerate the glue fixed line.

Step 24



 Install and test charging, played some music, checked Bluetooth signal connection is stable, and finally verified that it can be used for at least three hours.

Since the first generation AirPods have been used for a long time, the left ear airpods headphones can only be heard for less than half an hour. The right ear airpods have been replaced because they have been lost during the period, so now the left and right sides of the headphones are too far away. The use time is shortened, resulting in the impact of normal use, just to find a bad left earpod earphones, after testing the battery part and battery life is intact, so there are the following ideas and attempts to disassemble the airpods battery, Finally succeeded, share the tutorial for everyone to try, I hope to help friends who need it in itixit