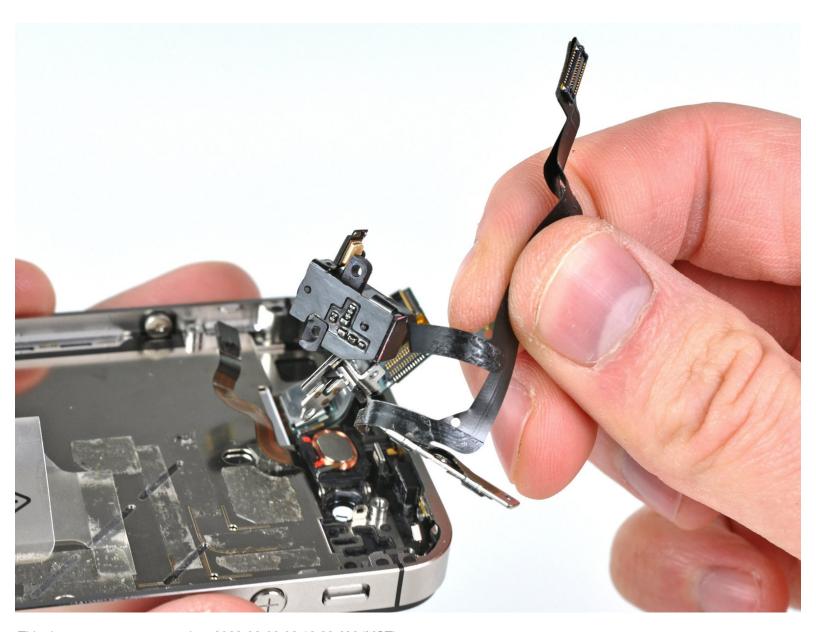


iPhone 4 Verizon Headphone Jack Cable Replacement

Replace a broken headphone jack cable that contains the upper microphone as well as the electronic portions of the volume buttons and silent switch on your Verizon iPhone 4.

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INTRODUCTION

Use this guide to replace the headphone jack cable which also contains the upper microphone and electronic portions of the volume buttons and silent switch.



TOOLS:

- Standoff Screwdriver for iPhones (1)
- P2 Pentalobe Screwdriver iPhone (1)
- Phillips #000 Screwdriver (1)
- iFixit Opening Tool (1)



PARTS:

 iPhone 4 Headphone Jack and Volume Control Cable (CDMA/Verizon) (1)

Step 1 — Rear Panel



- A 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.
- Your phone's rear cover may have two #000 Phillips screws or Apple's 5-Point "Pentalobe" screws. Check which screws you have, and ensure you also have the correct screwdriver in order to remove them.
- Remove the two 3.6 mm Pentalobe or Phillips #000 screws next to the dock connector.





- Push the rear panel toward the top edge of the iPhone.
- (i) The panel will move about 2 mm.



- Pinch the rear panel with your fingers, and lift it away from the iPhone. Alternatively, use a Small Suction Cup.
- A Be careful not to damage the plastic clips attached to the rear panel.

Step 4 — Battery



 Remove the single 1.5 mm Phillips screw securing the battery connector to the logic board (if present).



- Use the edge of a plastic opening tool to gently pry the battery connector up from its socket on the logic board.
- Be very careful 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 it entirely.
- Remove the metal clip covering the antenna connector.

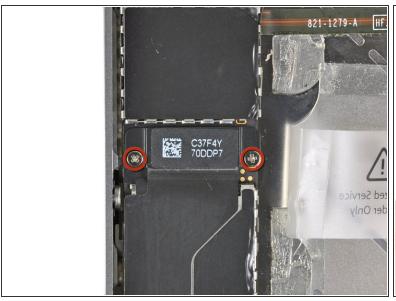


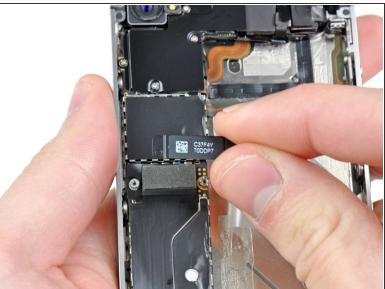


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- Pull up on the exposed clear plastic tab to peel the battery off the adhesive securing it to the iPhone.
- isopropyl alcohol under the edge of the battery. Wait about one minute for the alcohol solution to weaken the adhesive. Carefully slide a spudger under the battery tab to release the adhesive.
 - Prying in other places may cause damage. Don't try to forcefully lever the battery out. If needed, apply a few more drops of alcohol to further weaken the adhesive. Never deform or puncture the battery with your pry tool.
 - If there's any alcohol solution remaining in the phone, carefully wipe it off or allow it to air dry before installing your new battery.
- Remove the battery.
- if your replacement battery came in a plastic sleeve, remove it before installation by pulling it away from the the ribbon cable.
- Before reassembly, clean metal-to-metal contact points with a de-greaser such as windex. The oils from your fingers have the potential to cause wireless interference issues.
- Perform a <u>hard reset</u> after reassembly. This can prevent several issues and simplify troubleshooting.

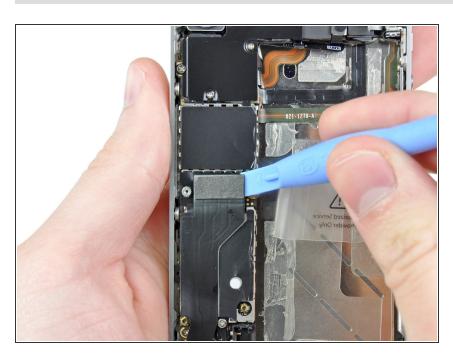
Step 7 — Dock Connector Cable



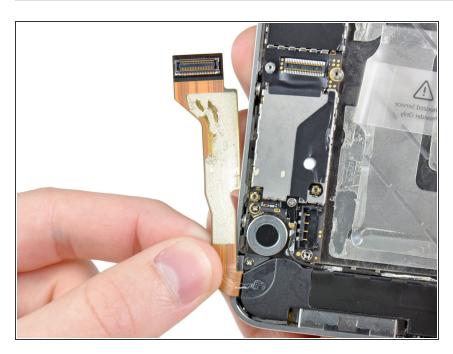


- Remove the two 1.8 mm Phillips screws securing the dock connector cable to the logic board.
- Remove the thin metal dock connector cable cover.

Step 8



 Use the edge of a plastic opening tool to pry the dock cable up from its socket on the logic board.

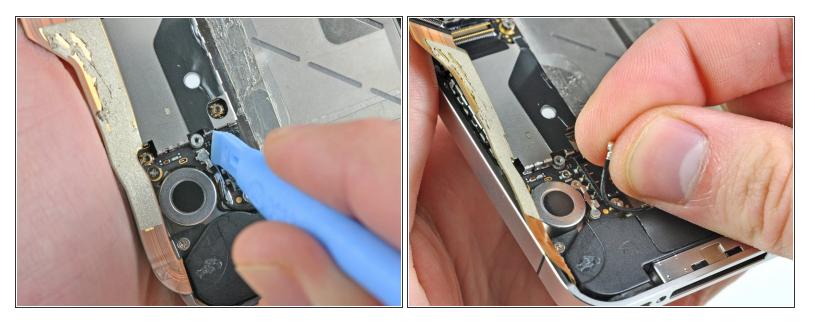


 Peel the dock connector cable off the adhesive securing it to the logic board and the side of the speaker enclosure.



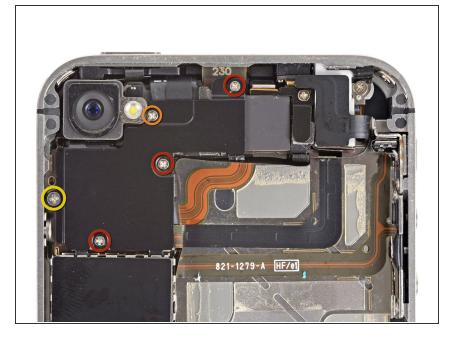


- Remove the 1.6 mm Phillips screw securing the pressure contact to the logic board near the vibrator.
- Remove the pressure contact.

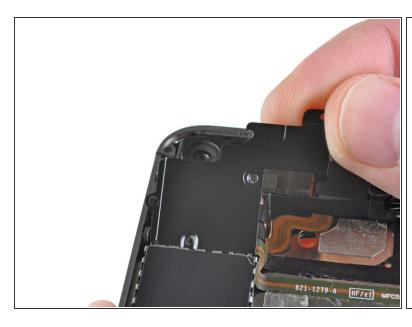


- Use the edge of a plastic opening tool to pry the cellular antenna cable up from its socket on the logic board.
- De-route the cellular antenna cable out from under the metal fingers attached to the logic board.
- Mhen reconnecting the antenna wire be VERY certain that the round connector at the end of the wire is centered on its mating half on the motherboard before applying pressure. Failure to do so will likely destroy both halves of the connector.

Step 12 — Rear Camera



- Remove the following five screws:
 - Three 1.3 mm Phillips screws
 - One 1.5 mm Phillips screw
 - One 2.4 mm Phillips screw



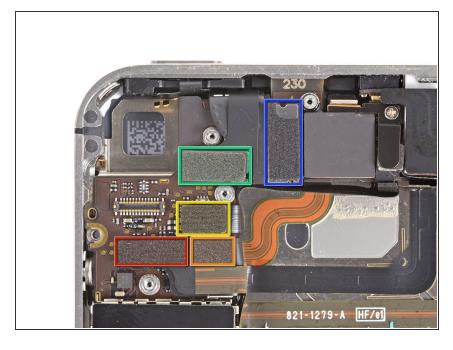


- Lift the cable cover from its edge nearest the top of the iPhone.
- Pull the cable cover tabs out of their slots cut into the EMI shield on the logic board and remove it from the iPhone.

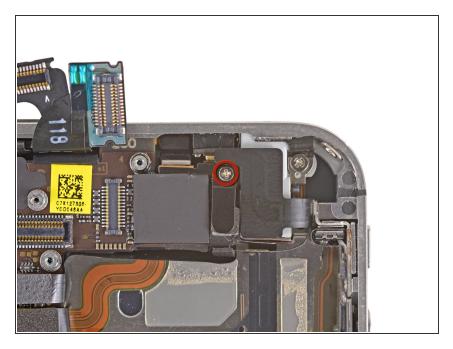


- Use the edge of a plastic opening tool to pry the rear camera connector up from its socket on the logic board.
- A Be careful not to break any components off the surrounding area on the logic board as you pry upwards.
- Remove the rear camera from the iPhone.
- A Be careful not to scratch the back of the display assembly after the removal of the rear facing camera.

Step 15 — Logic Board

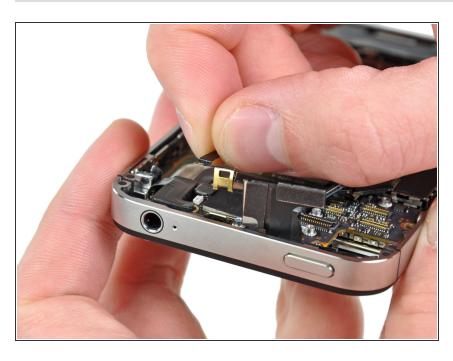


- Disconnect the five cables near the top of the logic board in the following order:
 - Headphone jack/volume button cable
 - Power button cable
 - Front facing camera cable
 - Digitizer cable
 - Display data cable
- To disconnect the cables, use the edge of a plastic opening tool to gently lift their connectors up and out of the sockets on the logic board.
- Be careful not to break any of the small and delicate surface mount components as you disconnect the cables.

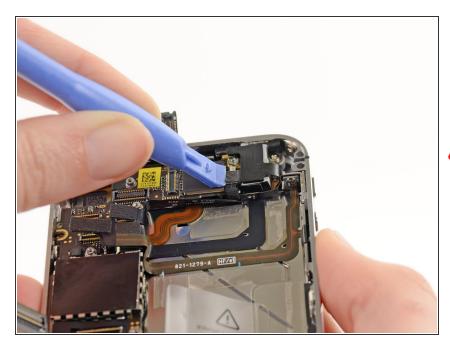


 Remove the 1.5 mm Phillips #000 screw near the headphone jack.

Step 17

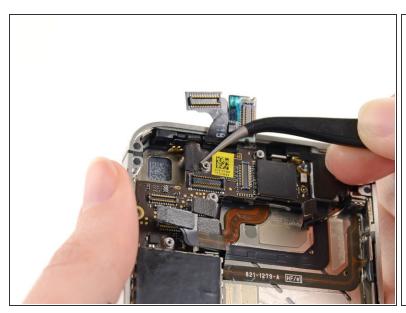


 Lift the small grounding clip up off the logic board and remove it from the iPhone.



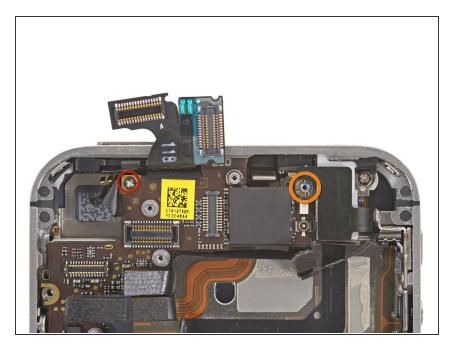
- Use the edge of a plastic opening tool to disconnect the Wi-Fi antenna cable connector from the logic board.
- When reconnecting the wifi ribbon connector to the mother board be VERY certain that the round connector at the end of the ribbon cable is centered on its mating half on the motherboard before applying pressure. Failure to do so will likely destroy both halves of the connection.

Step 19

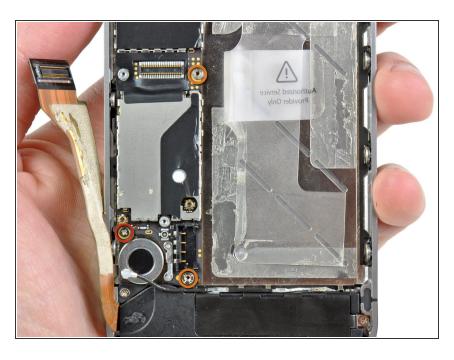




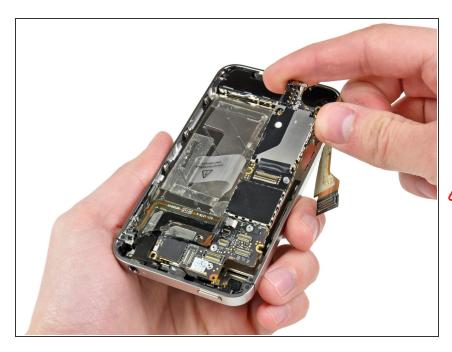
(i) If present, remove the piece of tape covering a Phillips screw near the power button.



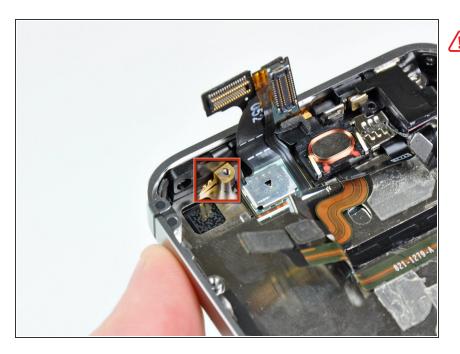
- Remove the 2.5 mm Phillips #000 screw securing the logic board near the power button.
- Remove the 4.8 mm standoff screw near the headphone jack.
 - i Standoff screws are best removed using a standoff screwdriver or bit.
 - In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.



- Remove the 3.4 mm Phillips screw near the vibrator motor.
- Remove the two 3.6 mm standoff screws along the side of the logic board nearest the battery opening.

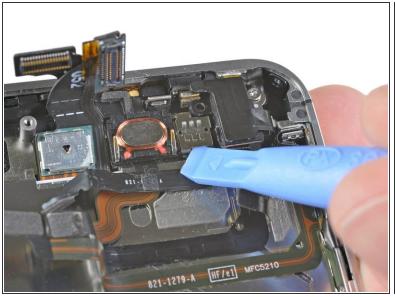


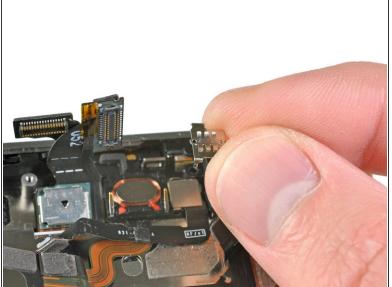
- Carefully lift the logic board from the end closest to the speaker enclosure and slide it away from the top edge of the iPhone.
- Remove the logic board.
- Before reassembly, be sure to clean all metal-to-metal contact points on the logic board (**not** the mating halves of connectors) with a degreaser such as windex or isopropyl alcohol. The oils on your fingers have the potential to cause grounding issues.
- There's a small rectangular rubber pad at the top of the logic board that prevents the display cables from chafing against the edge of the board. If it comes loose during your repair, make sure to position it correctly when reinstalling your logic board.



Be sure not to lose the small grounding finger for the rear facing camera near the power button.

Step 24 — Front Facing Camera



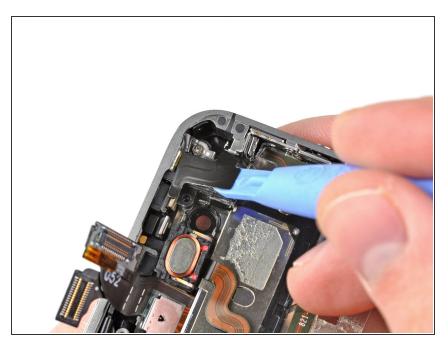


- Use the edge of a plastic opening tool to carefully pry the metal front facing camera retainer away from the case of your iPhone.
- Remove the front facing camera retainer.

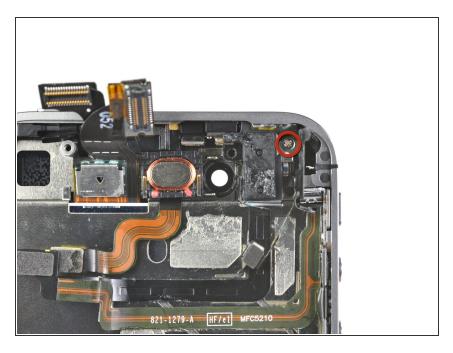


Remove the front facing camera.

Step 26 — Upper Antenna



 Use the edge of a plastic opening tool to peel the upper antenna off the headphone jack.

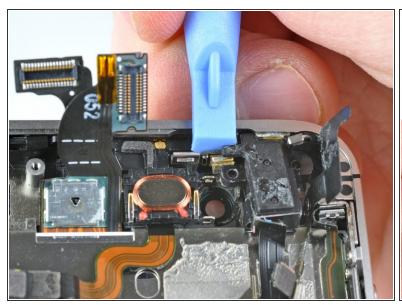


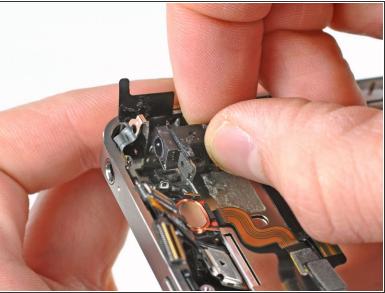
 Remove the 2.4 mm Phillips screw next to the headphone jack.

Step 28



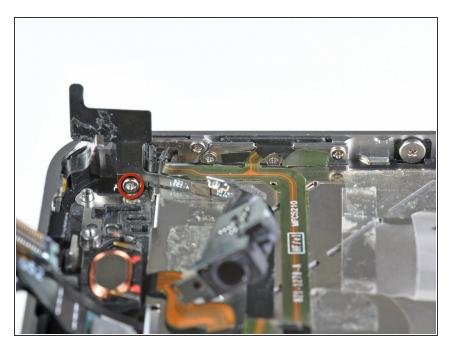
 Use the edge of a plastic opening tool to gently move the top antenna contact away from the headphone jack.



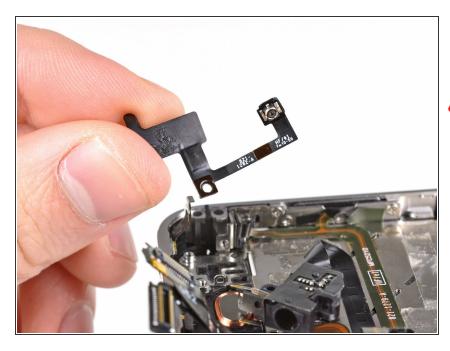


- Use the edge of a plastic opening tool to peel the top microphone away from the outer case.
- Pull the body of the headphone jack away from the top edge of the iPhone.

Step 30

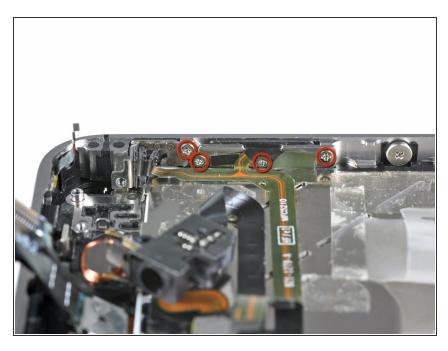


 Remove the 2.5 mm Phillips screw securing the upper antenna to the outer case.



- Remove the upper antenna from the iPhone.
- Before reassembly, be sure to clean the metal-to-metal contact point on the upper antenna (**not** the mating halves of its connector) with a degreaser such as windex or isopropyl alcohol. The oils on your fingers have the potential to cause wireless interference issues.

Step 32 — Headphone Jack Cable

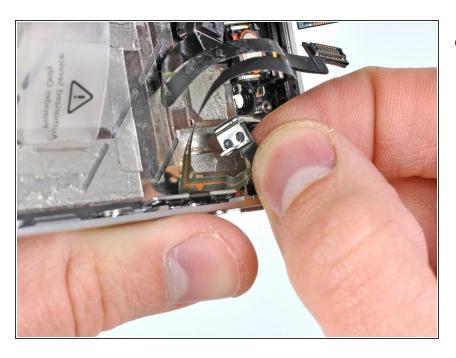


 Remove the four 1.6 mm Phillips screws securing the volume button and silent switch brackets to the outer case.

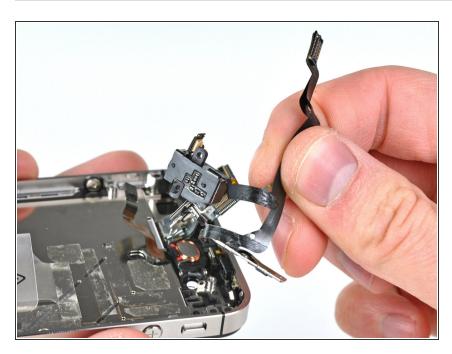


 Carefully peel the headphone jack/volume button cables off the adhesive securing them to the rear case.

Step 34



 Gently pull the silent switch bracket away from the outer case and peel its small ribbon cable off the inside of the iPhone.

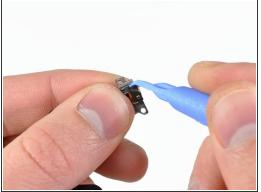


 Remove the headphone jack cable from the iPhone.

Step 36







- If you are replacing the headphone jack cable, use the edge of a plastic opening tool to remove the steel brackets for the volume buttons and the silent switch.
- Transfer these steel brackets to the new headphone jack cable.

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