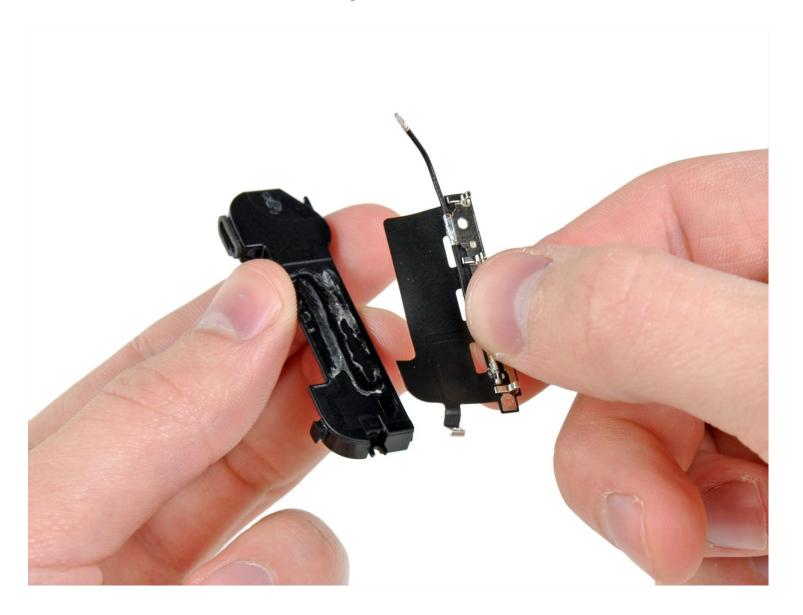


# iPhone 4 Verizon Cellular Antenna Replacement

Use this guide to replace the cellular antenna...

Written By: Andrew Bookholt



#### **INTRODUCTION**

Use this guide to replace the cellular antenna normally adhered to the speaker enclosure.

#### TOOLS:

P2 Pentalobe Screwdriver iPhone (1) Phillips #000 Screwdriver (1) iFixit Opening Tool (1)

#### PARTS:

iPhone 4 Cellular Antenna (CDMA Verizon) (1)

#### Step 1 — Rear Panel



- ⚠ 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.



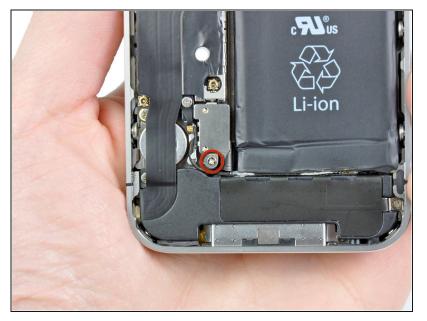


- Push the rear panel toward the top edge of the iPhone.
- (i) The panel will move about 2 mm.



- Pinch the rear panel with your fingers, and lift it away from the iPhone. Alternatively, use a Small Suction Cup.
- ⚠ 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).



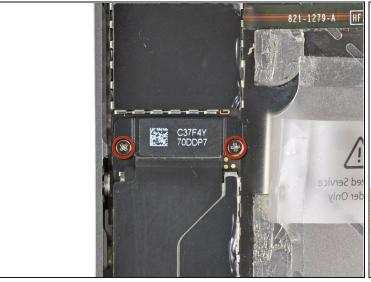
- Use the edge of a plastic opening tool to gently pry the battery connector up from its socket on the logic board.
- A Be very careful to only pry up on the battery connector and not the socket on the logic board. If you pry up on the logic board socket, you may break it entirely.
- Remove the metal clip covering the antenna connector.





- Pull up on the exposed clear plastic tab to peel the battery off the adhesive securing it to the iPhone.
- (i) If the tab breaks before the battery is freed, apply a few drops of high concentration (over 90%) 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.
  - A 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.
- (i) 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 — Speaker Enclosure Assembly**



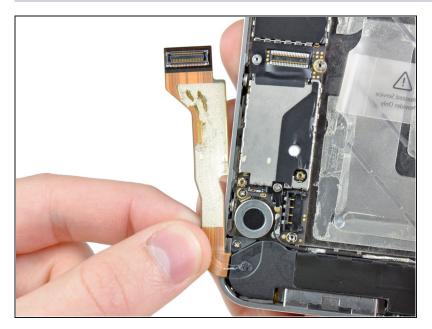


- Remove the two 1.8 mm Phillips screws securing the dock connector cable cover to the logic board.
- Remove the metal dock connector cable cover.

### Step 8

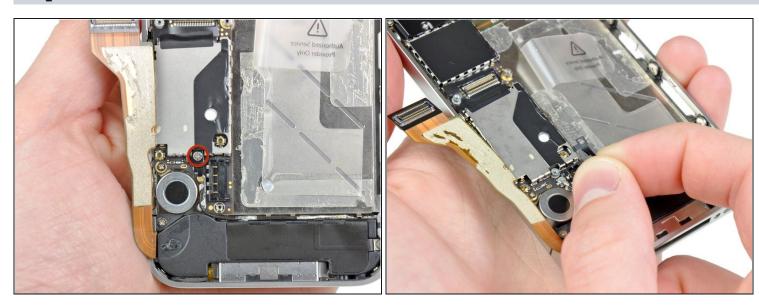


 Use the edge of a plastic opening tool to pry the dock cable up from its socket on the logic board.



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

### Step 10



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

⚠ When reinstalling the pressure contact, be sure to clean it with a degreaser such as windex or isopropyl alcohol. The oils on your fingers have the potential to create wireless interference.



- Use the edge of a plastic opening tool to pry the Wi-Fi antenna cable up from its socket on the logic board.
- De-route the Wi-Fi antenna cable out from under the metal fingers attached to the logic board.

### Step 12



• Remove the two 2.4 mm Phillips screws securing the speaker enclosure assembly to the outer case.



 Remove the small black spacer that was under the Phillips screw near the vibrator.





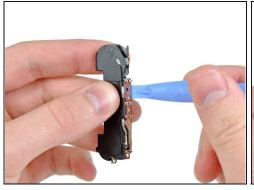


- Use a plastic opening tool to lift the speaker enclosure assembly out of the case, being sure not to damage the EMI fingers on the attached Wi-Fi antenna.
- Remove the speaker enclosure assembly.
- Before reinstalling the speaker enclosure assembly's screws, be sure the Wi-Fi grounding fingers are installed below the lip in the iPhone's metal case as seen in the third picture.
- ⚠ Before reassembly, be sure to clean all metal-to-metal contact points between the grounding fingers of the Wi-Fi antenna and the case of the iPhone with a de-greaser such as windex or isopropyl alcohol. The oils on your fingers have the potential to cause wireless interference issues.

### Step 15 — Cellular Antenna



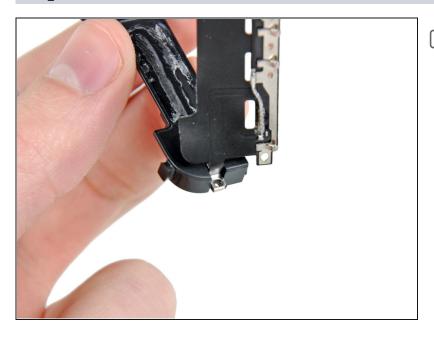
 Remove the two 1.6 mm
 Phillips screws securing the cellular antenna to the speaker enclosure.







- Starting near the cellular antenna cable, use the edge of a plastic opening tool to peel the antenna off the speaker enclosure.
- Continue peeling the cellular antenna off the speaker enclosure, being careful not to rip the gold bracket attached to one of its edges.
- Remove the cellular antenna.



When installing a new cellular antenna, be sure to slide the gold bracket over the ear molded into the speaker enclosure before sticking the antenna down.

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