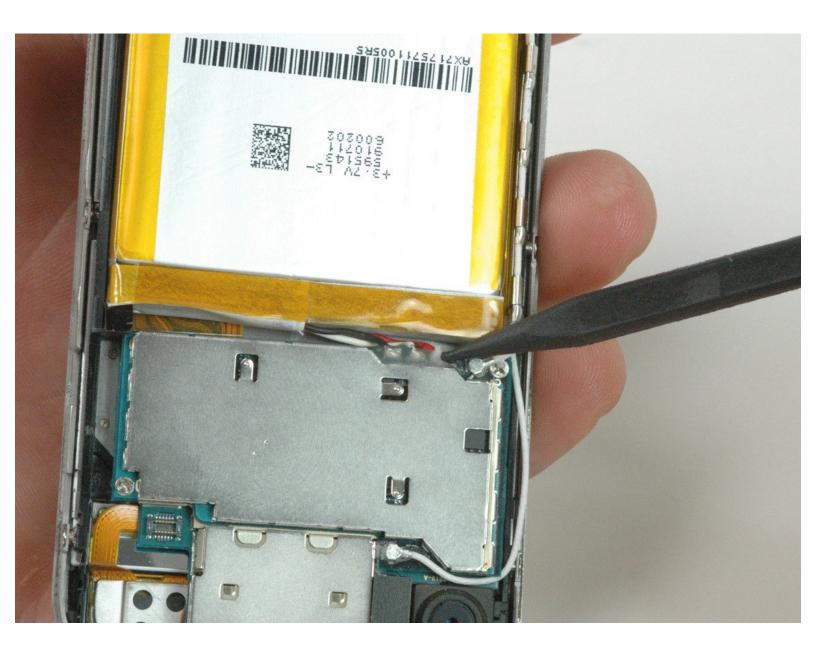


iPhone 1st Generation Battery Replacement

Written By: iRobot



INTRODUCTION

Battery not lasting long? Swap it out (requires soldering).



TOOLS:

- Probe and Pick Set (1)
- Desoldering Braid (1)
- SIM Card Eject Tool (1)
- Metal Spudger (1)
- Phillips #00 Screwdriver (1)
- iFixit Opening Tools (1)
- Solder (1)
- Soldering Iron (1)
- Spudger (1)



PARTS:

• iPhone Gen 1 Replacement Battery (1)

Step 1 — SIM Card



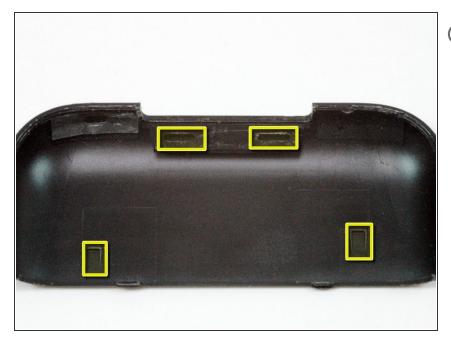
- Insert a SIM card eject tool or paper clip into the hole next to the headphone jack.
- Press down on the paper clip until the SIM card tray pops out.

Step 2

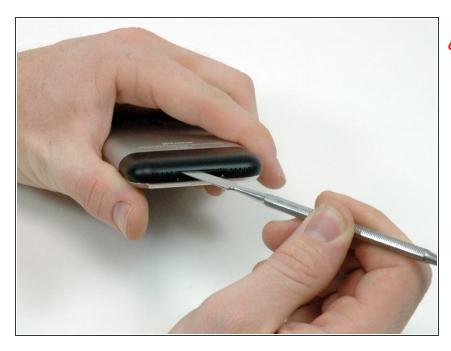


 Grasp the SIM card tray and slide it out of the iPhone.

Step 3 — Antenna Cover



This image shows the two tabs and two catches located on the underside of the antenna cover. The two tabs at the top of the image must be pushed towards the black cover to release them.



- ⚠ Be sure to slide the metal spudger between the dock connector and the antenna cover, and not into the dock connector itself.
- Insert a metal spudger into the slot between the dock connector and the antenna cover. Gently pry up near the two tabs to create a small gap between the antenna cover and the silver front bezel.



- Insert an iPod opening tool in the gap between the antenna cover and the front bezel. The wedge of the tool should be pointing towards the antenna cover. Slide the tool around the corner and up until you reach the metal backing.
- Repeat the same procedure on the other side of the dock connector.

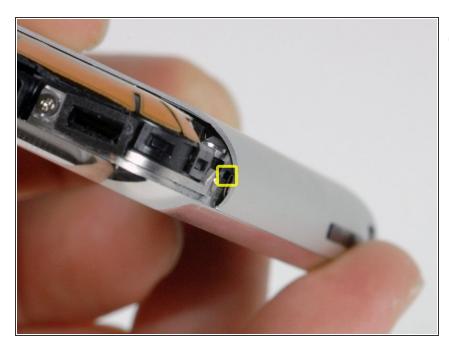


 Grasp the antenna cover on either side and slide it up and away from the iPhone. This requires some force. If it does not come free, ensure that the antenna cover is lifted up enough to free the catches.

Step 7 — Case



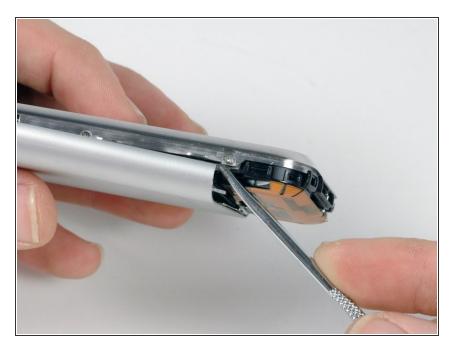
 Remove the three Phillips #00 screws securing the rear panel to the iPhone.



- (i) Getting the iPhone open is a challenging feat, so don't get discouraged. Take a deep breath and make sure you have plenty of time to get the job done.
- The small square hole is the location to insert the dental pick in the next step.

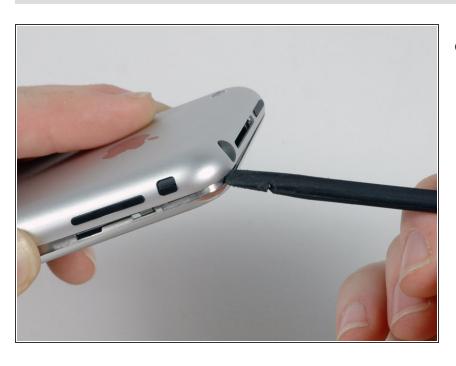


- Start removing the rear panel on the side with the buttons.
- Slide the dental pick completely into the square hole. You may need to wiggle the tool and apply a good amount of force to get it to go all the way.



 Pry up the rear panel by pulling the dental pick counterclockwise in a quick motion. Apply force perpendicular to the plane of the display assembly. You may be afraid to go fast, but going slowly is more likely to bend the case.

Step 11



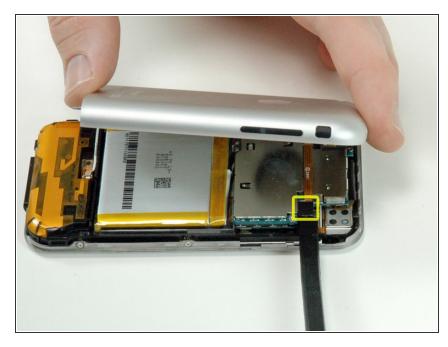
 Use a spudger to free the rear panel from the iPhone along the corner and top.



 Repeat the same procedure on the other side of the iPhone. Slide the dental pick completely into the square hole. You may need to wiggle the tool and apply a good amount of force to get it to go all the way.

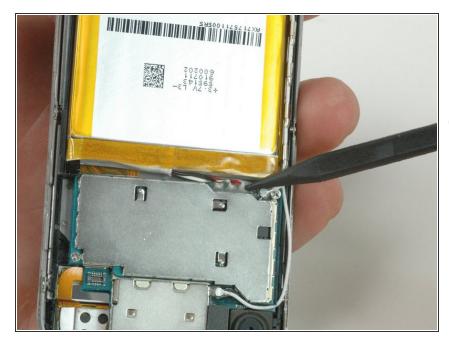


- Pry up the rear panel by pulling the dental pick clockwise in a quick motion. Apply force perpendicular to the plane of the display assembly. You may be afraid to go fast, but going slowly is more likely to bend the case.
- The rear panel is still attached to the iPhone by the headphone jack cable, so don't entirely remove the rear panel from the iPhone just yet.



- Make sure the phone is off before disconnecting the headphone jack cable.
- Use a spudger to disconnect the headphone jack cable from the logic board.

Step 15 — Battery

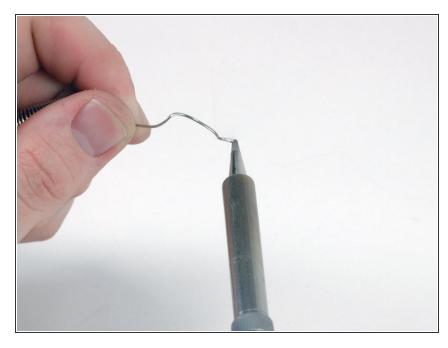


- Use the tip of a spudger to remove the cloudy white glue covering the battery contacts.
- To reduce the risk of shorting the red battery lead to the metal shield, you can first remove the glue from the black and white battery leads. After desoldering the black and white leads, then remove the glue and desolder the red lead.

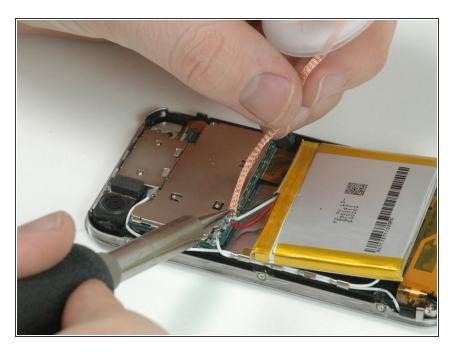


- Working from the edge opposite the battery connectors, insert a spudger between the battery and the plastic frame and pry up. The battery is attached to the casing with an adhesive, but should slowly come free.
 - if the battery isn't coming free, apply a few drops of high concentration (over 90%) isopropyl alcohol under the edge of the battery.
 - Wait about one minute for the alcohol solution to weaken the adhesive.
 - Use the flat end of a spudger to gently lift the battery.
 - Don't try to forcefully lever the battery out. If needed, apply a few more drops of alcohol to further weaken the adhesive.

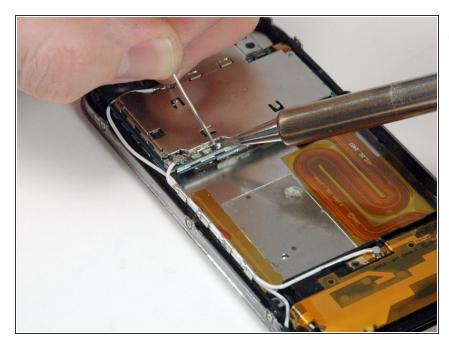
 Never deform or puncture the battery with your pry tool.
 - If there's any alcohol solution remaining in the phone, carefully wipe it off or allow it to air dry before continuing.



- If you have never soldered before, we have a guide that makes it easy to learn. We suggest brushing up before proceeding.
- We're now ready to begin the soldering process. You'll need a soldering iron, solder, and desoldering wick. You should be able to find these items at a Radio Shack if you don't already have them.
 - Clean the solding iron by melting a small amount of solder directly onto the soldering iron's tip and then wiping the tip of the soldering iron on a damp sponge.

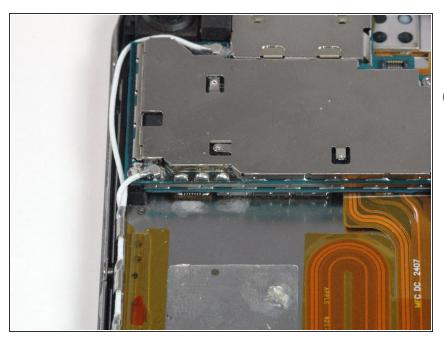


- Place the desoldering wick on top of the existing solder ball.
- Place the soldering iron on top of wick above the existing solder ball.
- Hold the soldering iron in place until the solder melts into the wick.
- Repeat the same procedure on the remaining two connectors.
- Lift the old battery out of the iPhone. Be sure that all the solder has been removed before pulling the wires away from the board. The wires should come free with little to no resistance.



- We recommend that you clean the exposed surface of the board with a soft cloth or sponge and a small amount of rubbing alcohol.
 - Melt a small solder bead directly onto the metal connector on the board by placing the soldering iron onto the metal connector and then pressing solder against the tip and the board.
- Once a small amount of solder has melted onto the board, lift the solder away first and then the soldering iron.

Step 20



The solder bead should look like a small dome or hemisphere. If it is flat or jagged, simply place the soldering iron back on the solder to re-melt it and then pull the soldering iron away. It may require a little more solder if this does not work.



- (i) Attach the red lead first, followed by the white lead, and finish with the black lead.
- Place the wire from the new battery onto the new solder bead.
- Press the tip of the soldering iron onto the solder bead until it melts.
- Slide the wire lead into the liquid solder until it is in the center of the bead, then remove the soldering iron.
- Continue with the other two connections the same way, taking special care not to solder two of the connectors together.

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