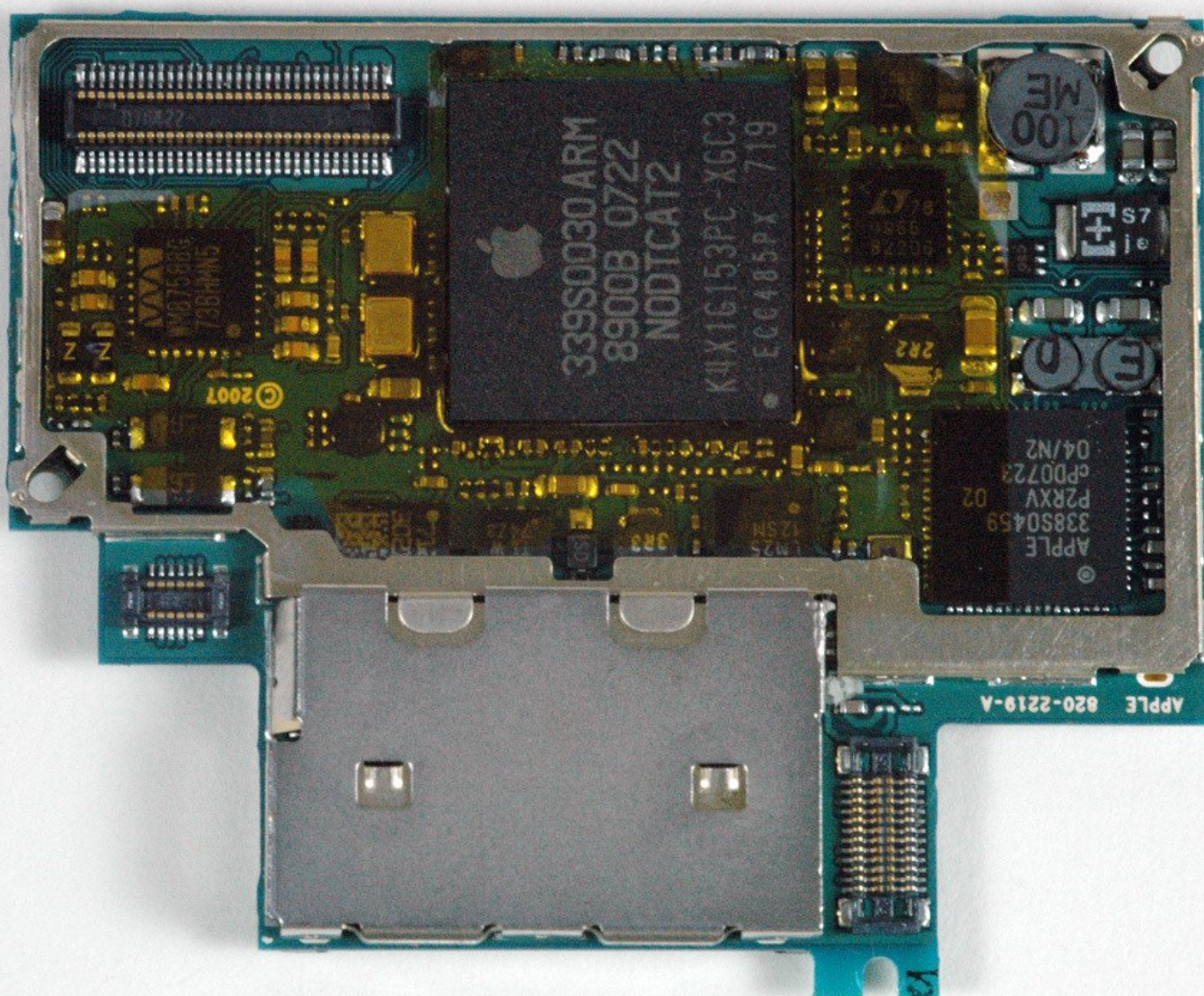




iPhone 1st Generation Logic Board Replacement

Written By: iRobot



INTRODUCTION

The motherboard of your iPhone controls everything except the "phone" part of the iPhone.



TOOLS:

- [Paper Clip](#) (1)
- [Probe and Pick Set](#) (1)
- [SIM Card Eject Tool](#) (1)
- [Metal Spudger](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Spudger](#) (1)



PARTS:

- [iPhone Gen 1 4 GB Logic Board](#) (1)
- [iPhone Gen 1 8 GB Logic Board](#) (1)
- [iPhone Gen 1 16 GB Logic Board](#) (1)

Step 1 — SIM Card



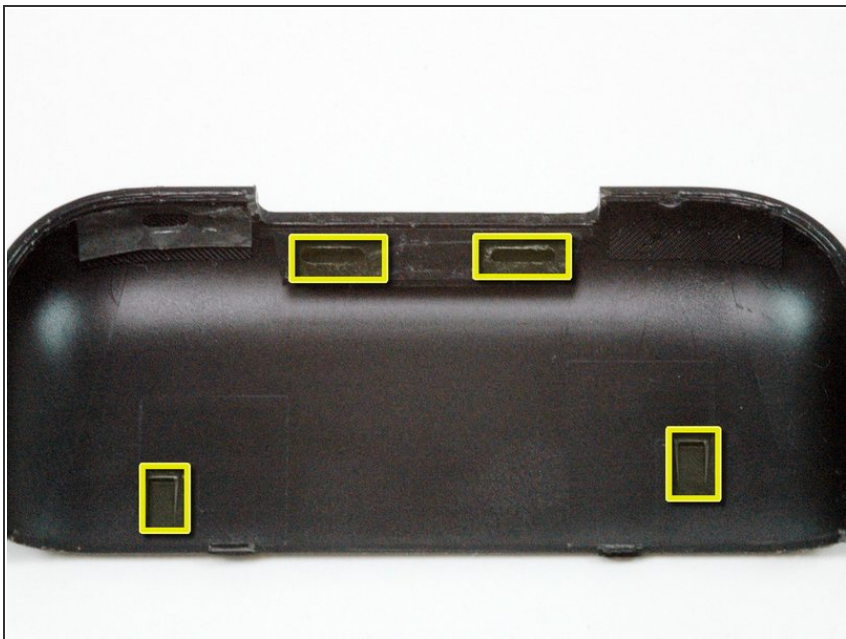
- Insert a SIM card eject tool or paper clip into the hole next to the headphone jack.
- Press down on the paper clip until the SIM card tray pops out.

Step 2



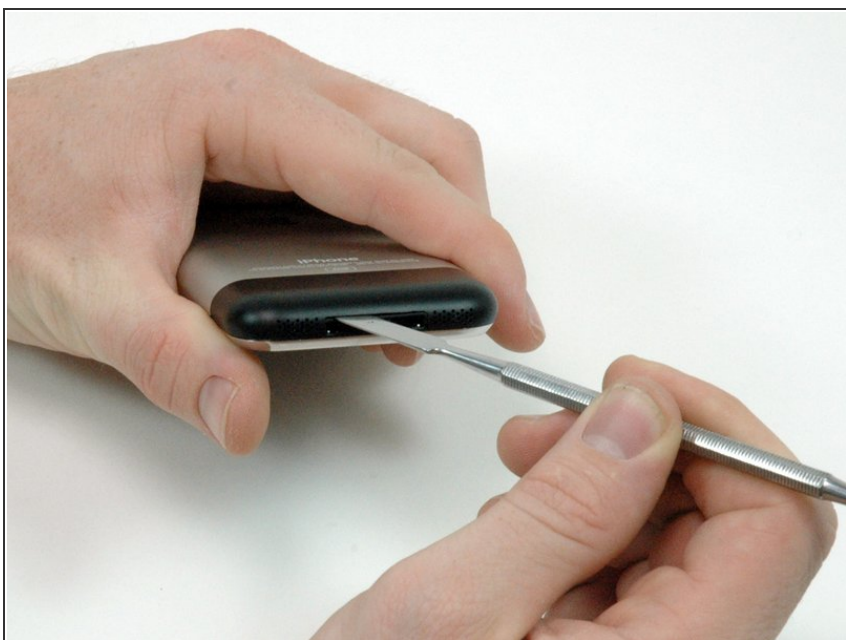
- Grasp the SIM card tray and slide it out of the iPhone.

Step 3 — Antenna Cover



- i** 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.

Step 4



- !** 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.

Step 5



- 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.

Step 6



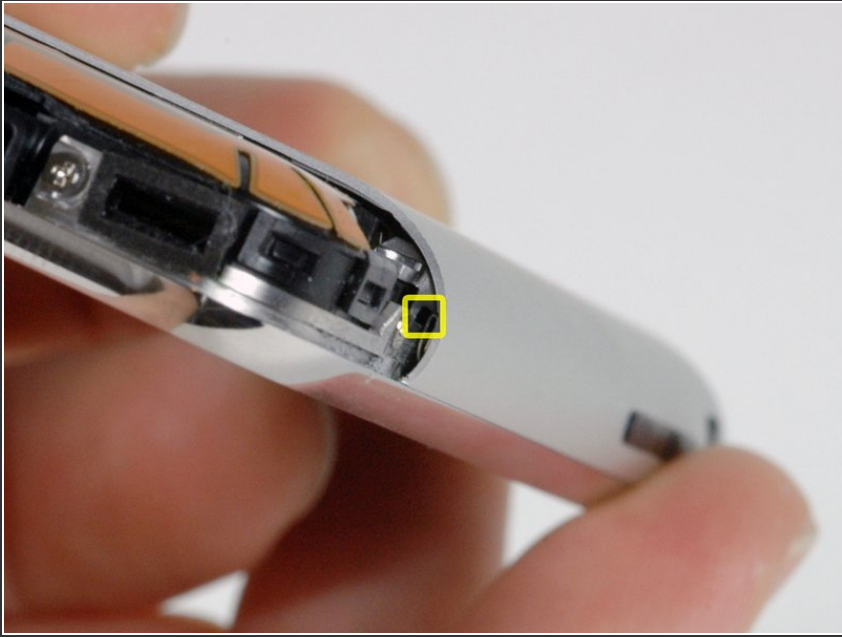
- Grasp the antenna cover on either side and slide it up and away from the iPhone. This requires some force. If it does not come free, ensure that the antenna cover is lifted up enough to free the catches.

Step 7 — Case



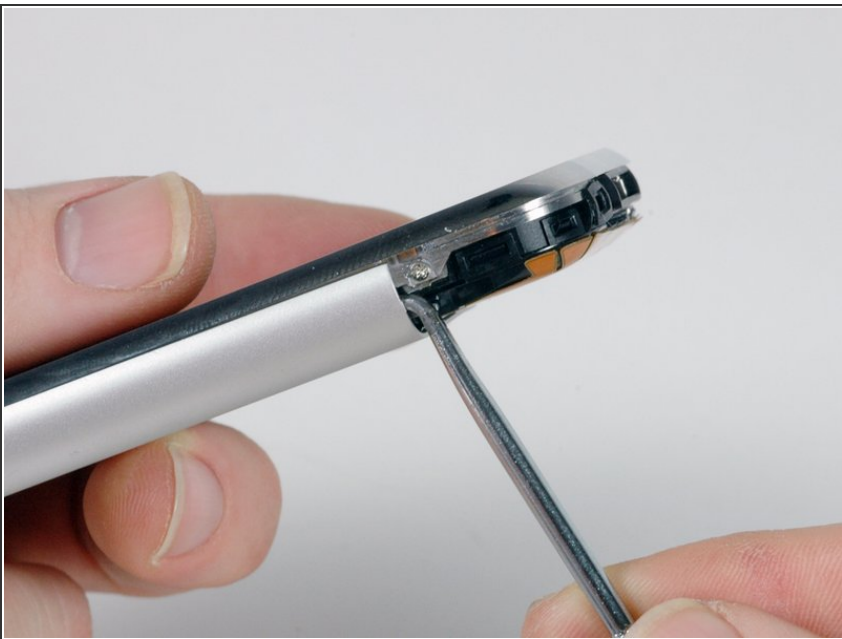
- Remove the three Phillips #00 screws securing the rear panel to the iPhone.

Step 8



- ⓘ 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.

Step 9



- 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.

Step 10



- 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



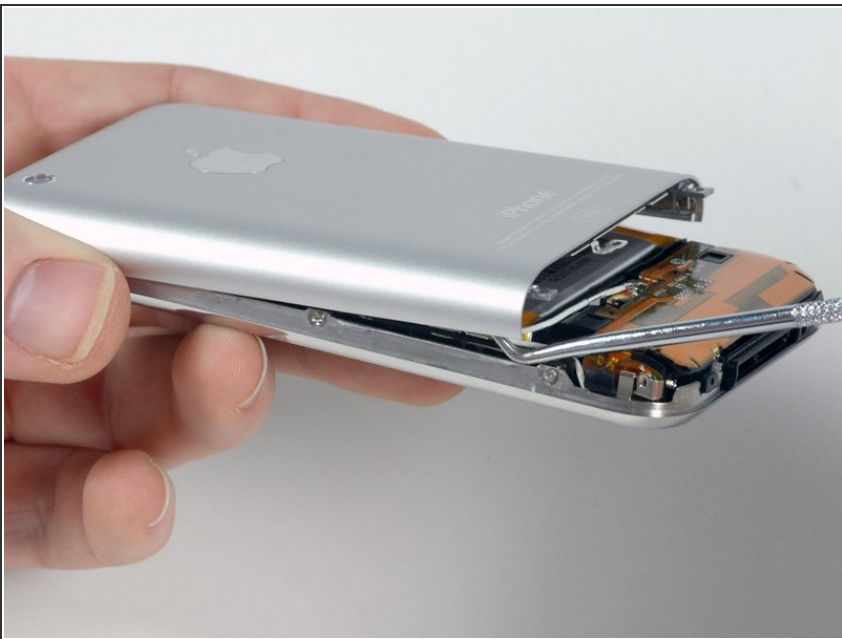
- Use a spudger to free the rear panel from the iPhone along the corner and top.

Step 12



- 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.

Step 13



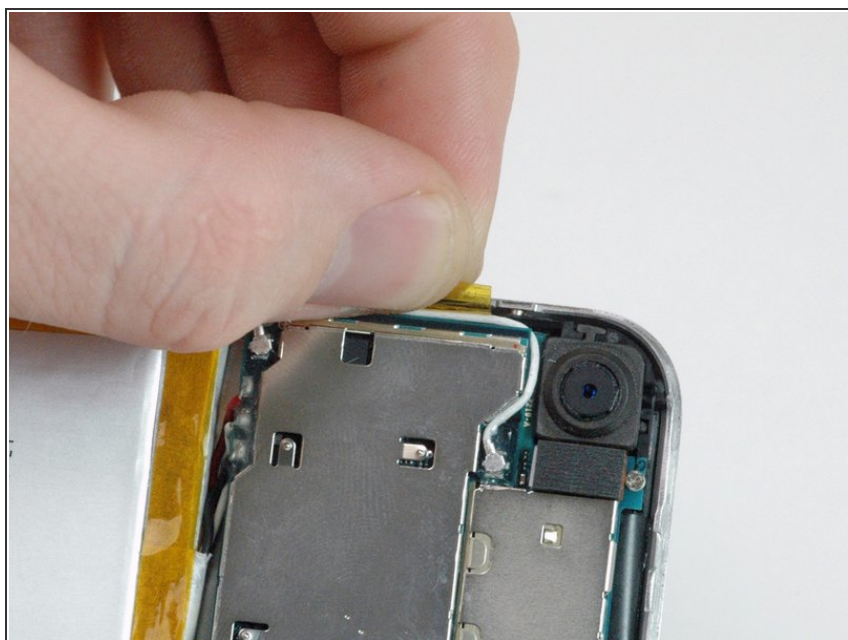
- Pry up the rear panel by pulling the dental pick clockwise in a quick motion. Apply force perpendicular to the plane of the display assembly. You may be afraid to go fast, but going slowly is more likely to bend the case.
- The rear panel is still attached to the iPhone by the headphone jack cable,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

Step 14



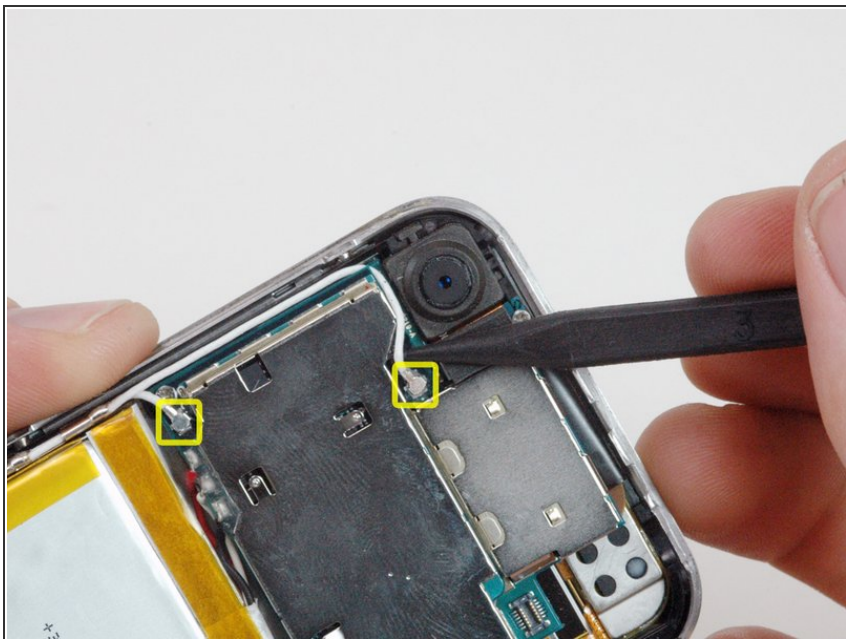
- **i** Make sure the phone is off before disconnecting the headphone jack cable.
- Use a spudger to disconnect the headphone jack cable from the logic board.

Step 15 — Communications Board



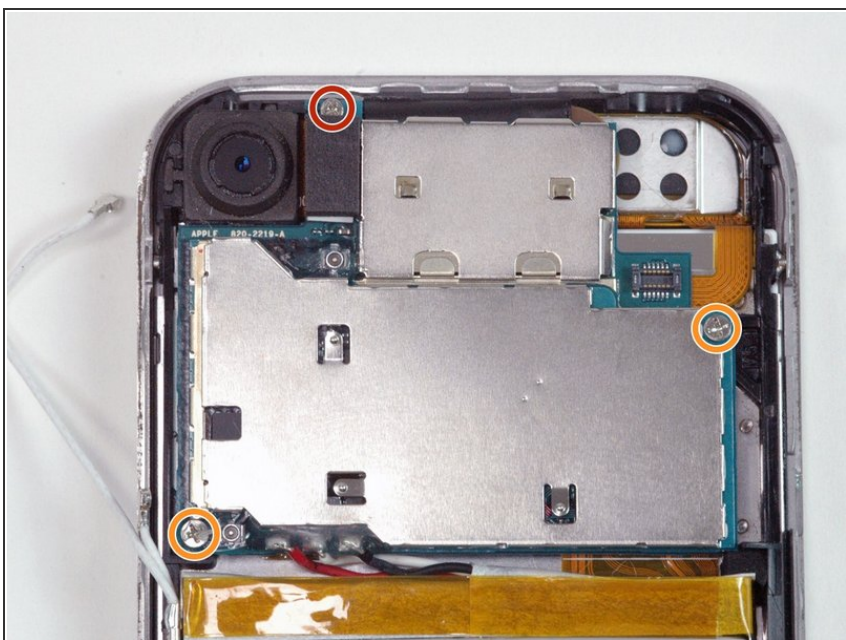
- Peel up the orange tape securing the white antenna cable to the side of the iPhone.

Step 16



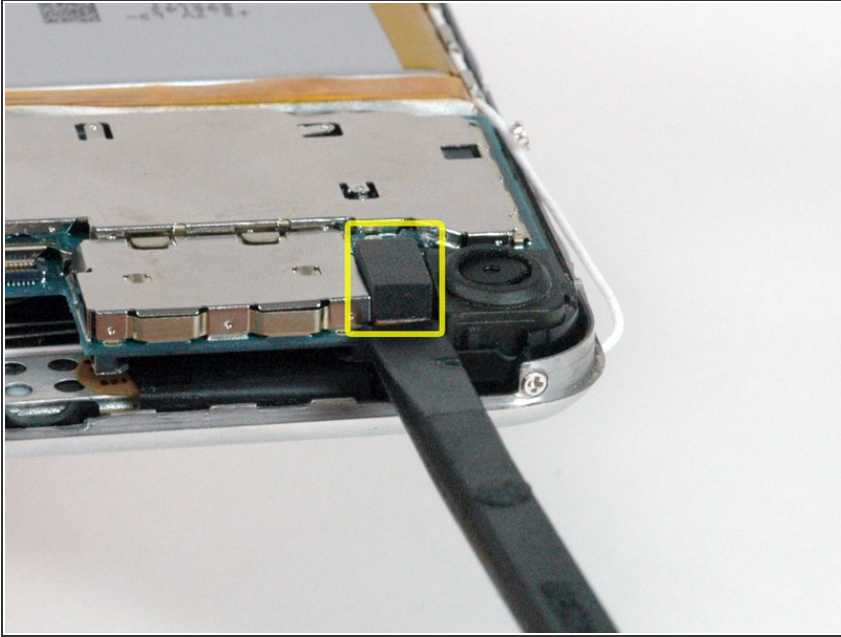
- Use a spudger to disconnect the two antenna cables from the communications board. Apple used a small dab of glue on these connections, which may make removing the antenna connections harder.

Step 17



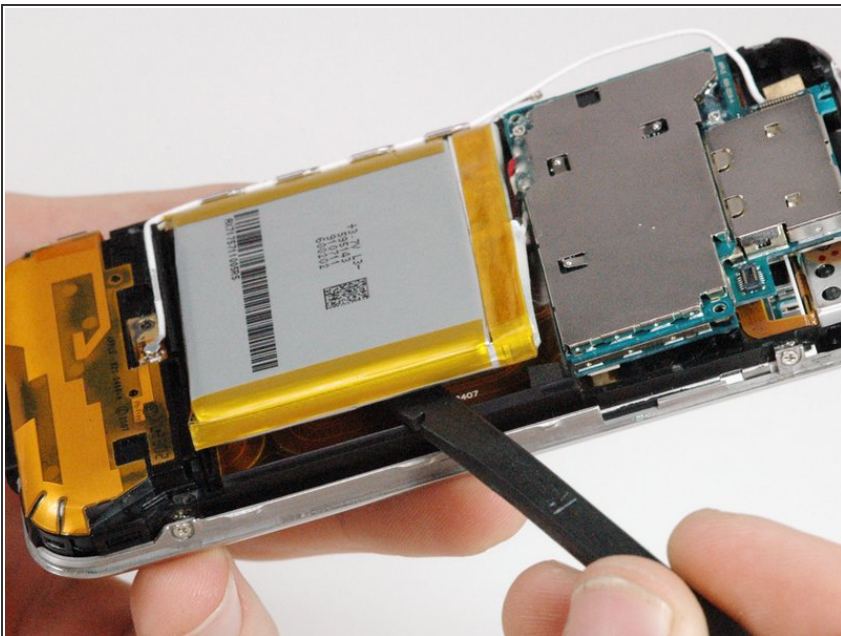
- Remove the following 3 screws:
 - One Phillips #00 screw securing the logic board to the iPhone near the camera.
 - Two Phillips #00 screws, one on either corner of the logic board.

Step 18



- Use a spudger to disconnect the camera connector.
- Lift the camera out of the iPhone.

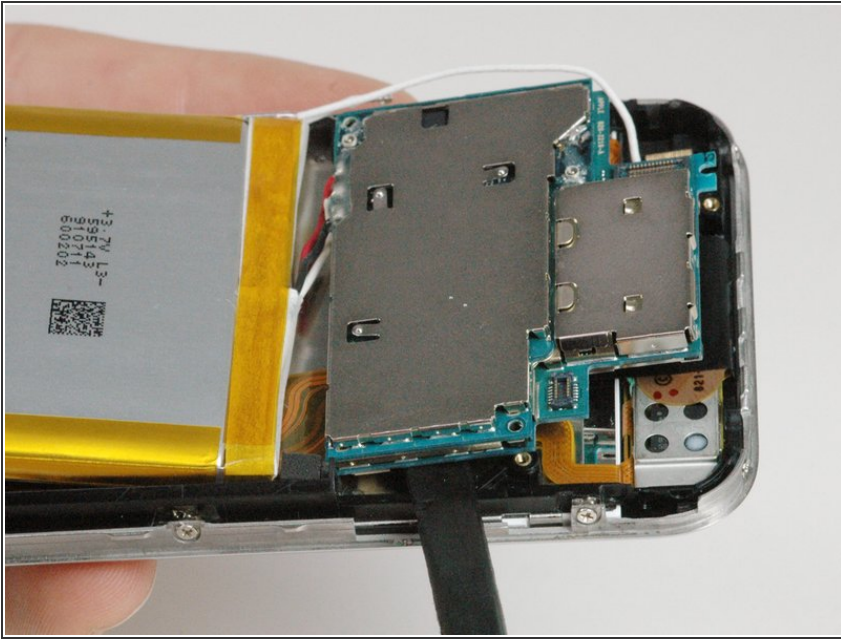
Step 19



- Working from the edge opposite the battery connectors, insert a spudger between the battery and the plastic frame and pry up on the battery. It is attached to the casing with an adhesive, but should slowly come free.

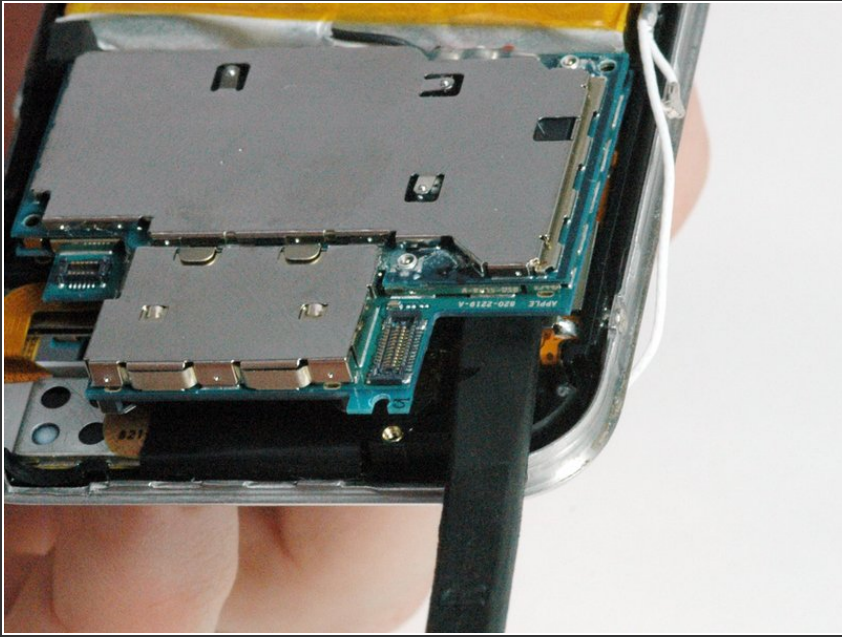
⚠ Leave the battery resting slightly out of its housing, but be sure not to put too much pressure on the battery wires as the solder joints break easily.

Step 20



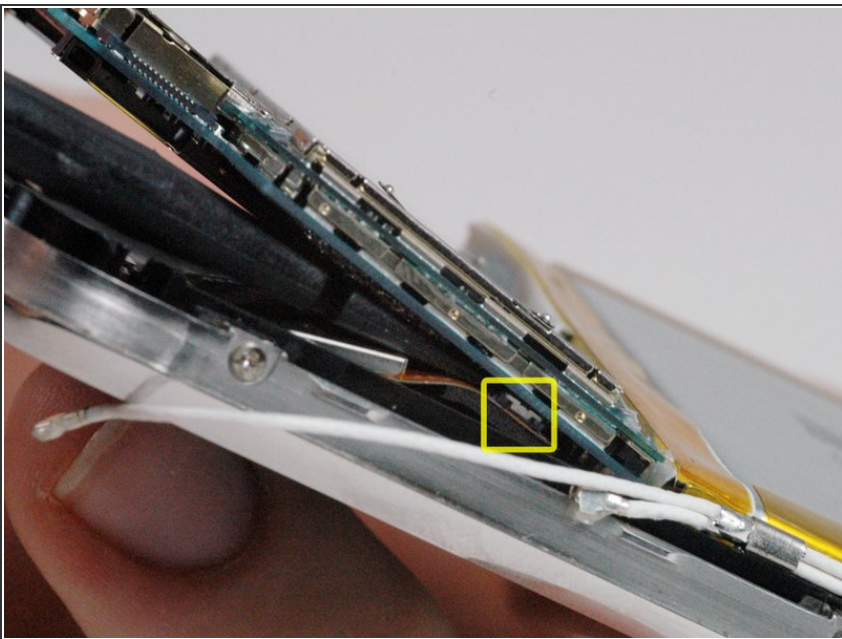
- Slide a spudger beneath the logic board on the side opposite the battery connector and pry up slightly. Don't lift up too far, because there are still four attached connectors on the bottom of the logic board.

Step 21



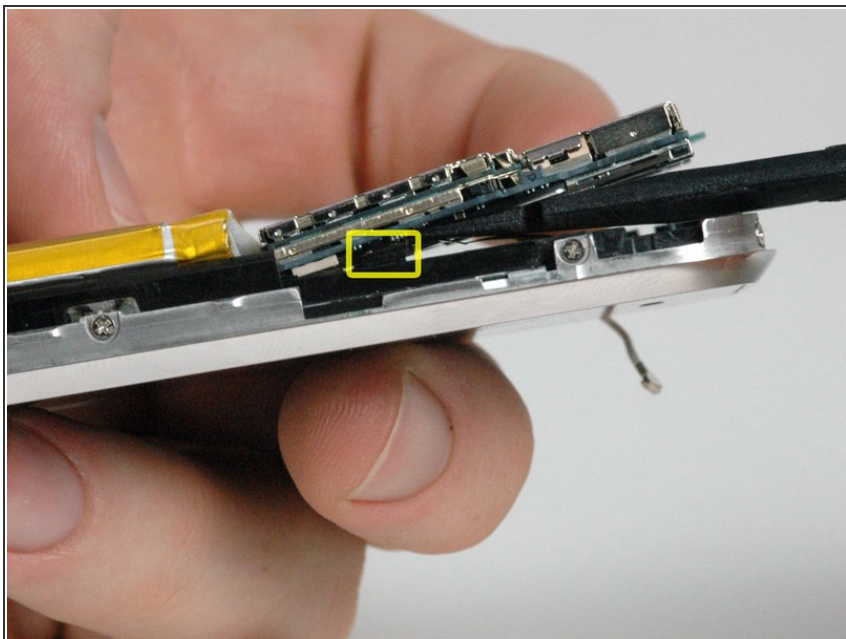
- In a similar manner, slide a spudger beneath the logic board where the camera was. Again, don't lift up too far yet as there are still four attached connectors on the bottom of the logic board.

Step 22



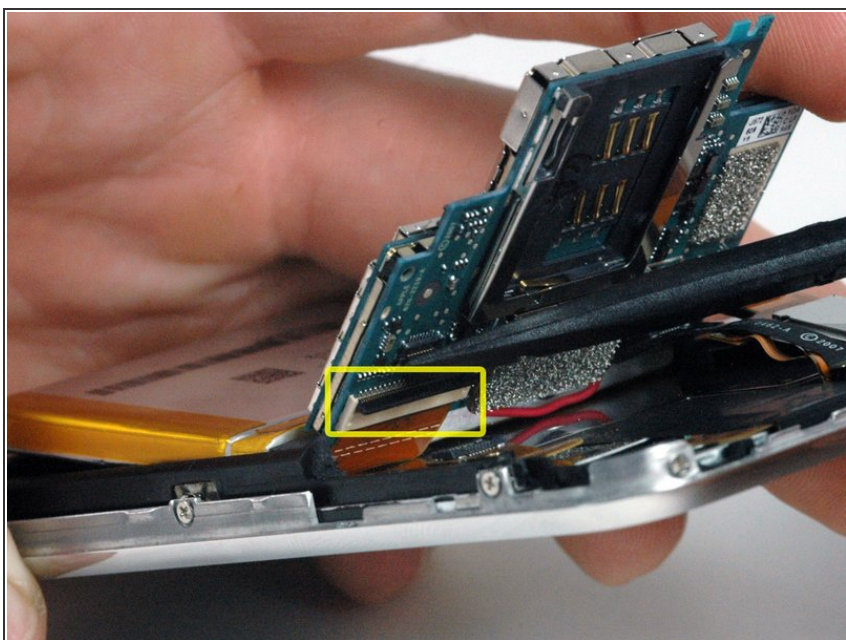
- Lift up the logic board slightly and slide a spudger beneath the logic board to disconnect the display ribbon cable.
- After freeing the first connector, slide the spudger further towards the battery and the center of the iPhone to disconnect the speaker connector.

Step 23



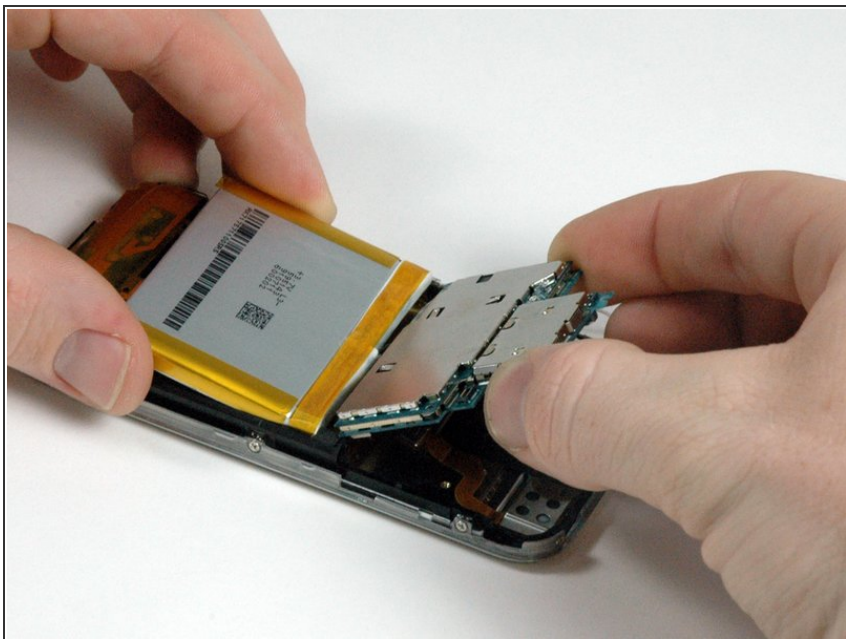
- Go to the other side of the logic board and use a spudger to disconnect the touch sensor cable on the under side of the logic board.

Step 24



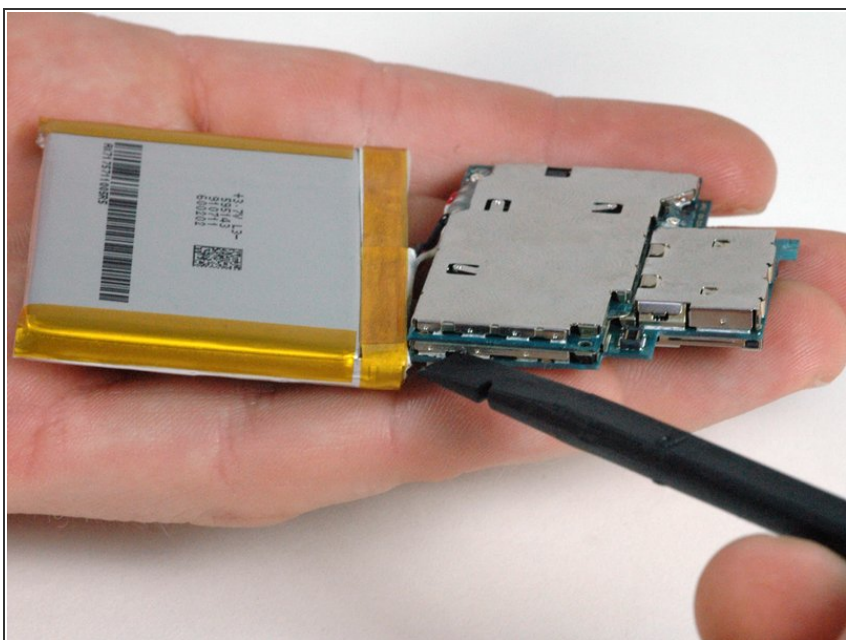
- Slide a spudger beneath the black locking bar and pry up to rotate the bar 90 degrees (the bar is already rotated in the picture).

Step 25



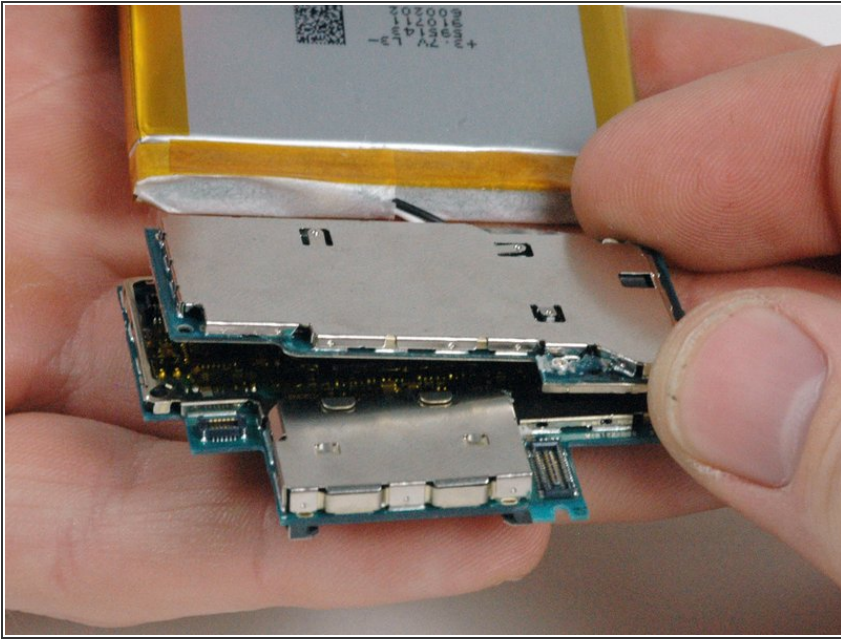
- Hold both the battery and the logic board assembly and slide both parts away from the orange antenna and out of the iPhone.

Step 26



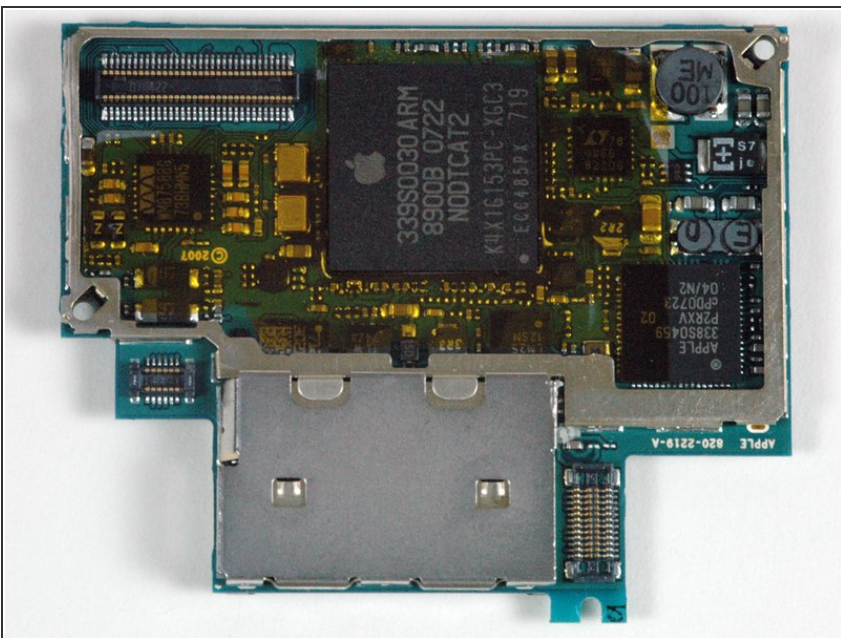
- There are two stacked circuit boards on the iPhone. The communications board is on the top, and the logic board is located on the bottom.
- To separate the boards, insert a spudger into the gap in the metal shielding as shown. Carefully pry with the spudger to loosen the connector.

Step 27



- Continue to separate the two boards. The silver metal shielding may not immediately separate. If necessary, work around the edge of the board to separate the metal shielding.
- ⓘ If you are replacing the communications board, you need to desolder it from the battery. The [battery replacement guide](#) can help you remove the battery.

Step 28 — Logic Board



- Logic board remains.

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