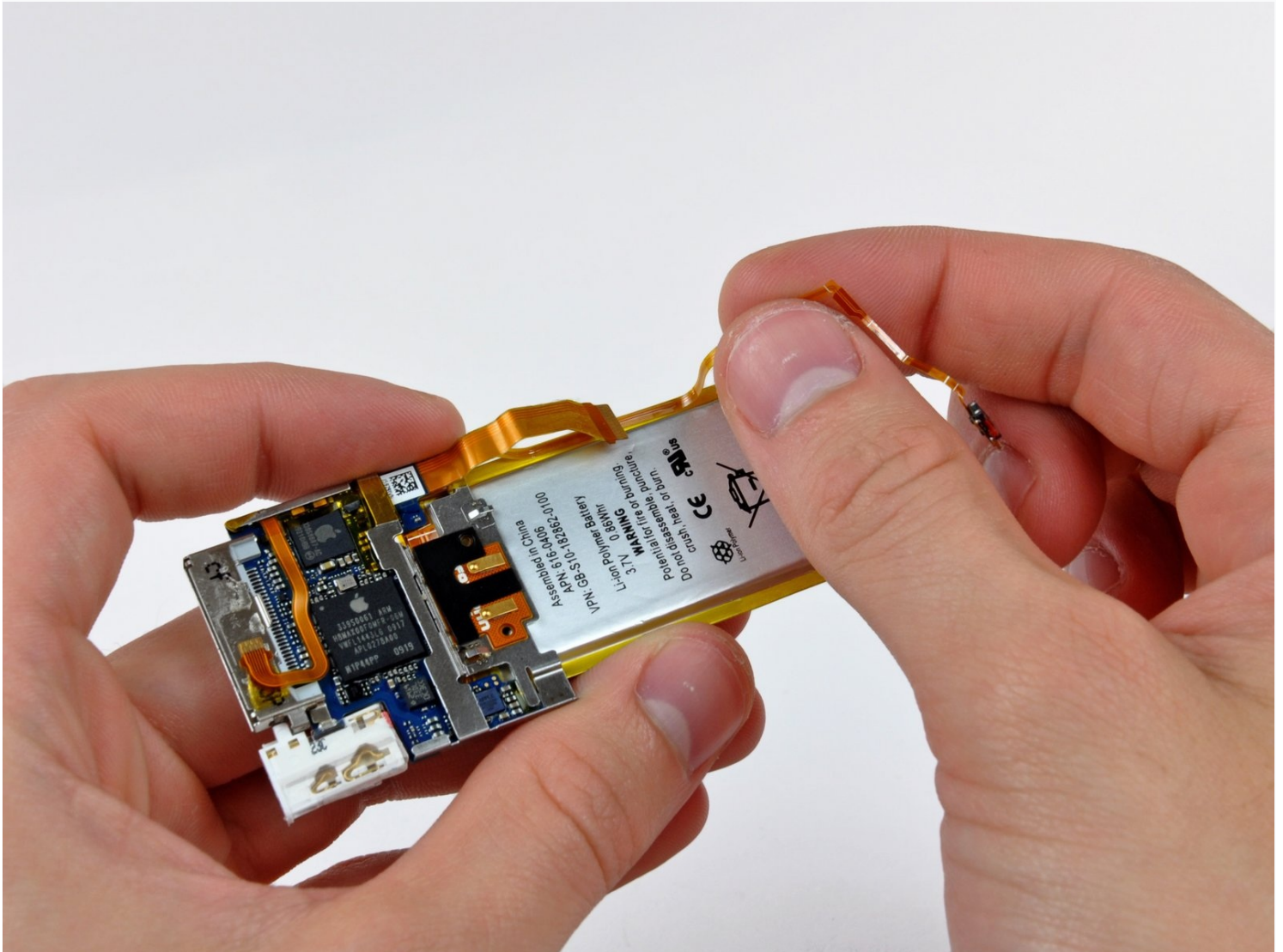




iPod Nano 4th Generation Battery Replacement

Replacing the battery requires a fine tip...

Written By: Walter Galan



INTRODUCTION

Replacing the battery requires a fine tip soldering iron and is a difficult job that only experienced solderers should attempt.

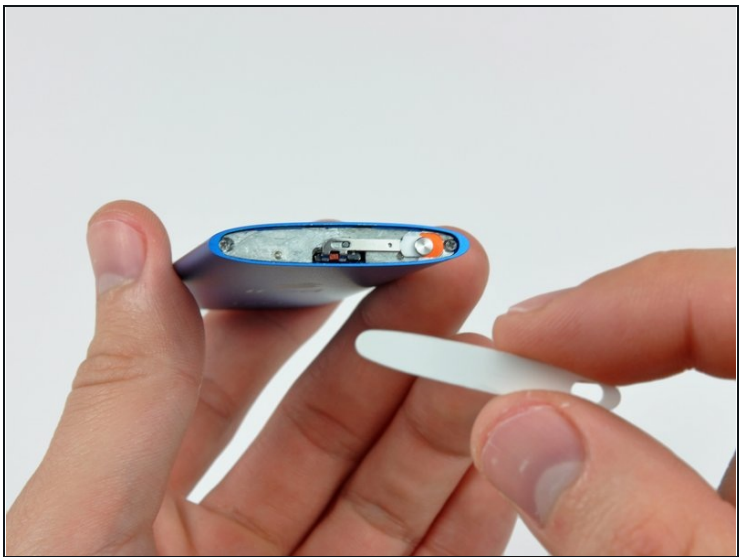
TOOLS:

Metal Spudger (1)
Phillips #00 Screwdriver (1)
iFixit Opening Tool (1)
Lead-Free Solder (1)
Spudger (1)
Tweezers (1)
Soldering Iron (1)

PARTS:

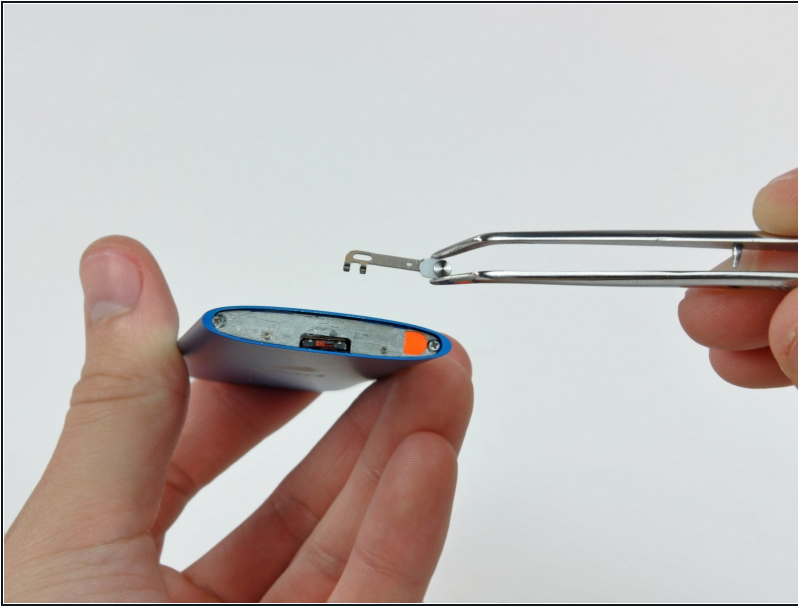
iPod nano (4th Gen) Battery (1)

Step 1 — Glass Panel



- Insert the edge of an iPod opening tool into the gap between the outer case and the top bezel.
- Pry the top bezel off the adhesive securing it to the display retainer.
- ① At this point the hold switch slider is free and may fall. Be careful not to lose it.

Step 2



- Remove the hold switch slider from the top of the Nano.

Step 3



- Remove the two angled Phillips screws from the two corners of the display retainer.

⚠ These screw heads are extremely small and easily stripped.

Step 4



- Insert an iPod opening tool between the outer case and the display retainer.
- Use the tool to slide the display assembly out of the case slightly.

⚠ Do not rotate the display retainer about the top edge of the display, as it is attached to a thin steel bracket that is easily broken.

⚠ Do not forcefully remove the display retainer, as the hold switch cable is liable to snap.

Step 5



- Slide the display out of the Nano. It will move about .5" until the display data cable limits its travel.

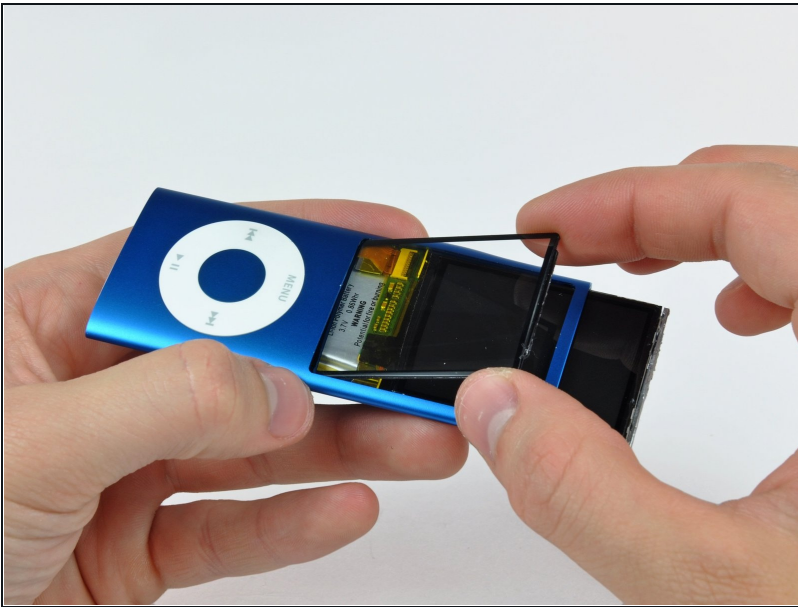
⚠ Do not put unnecessary tension on the very thin display data cable.

Step 6



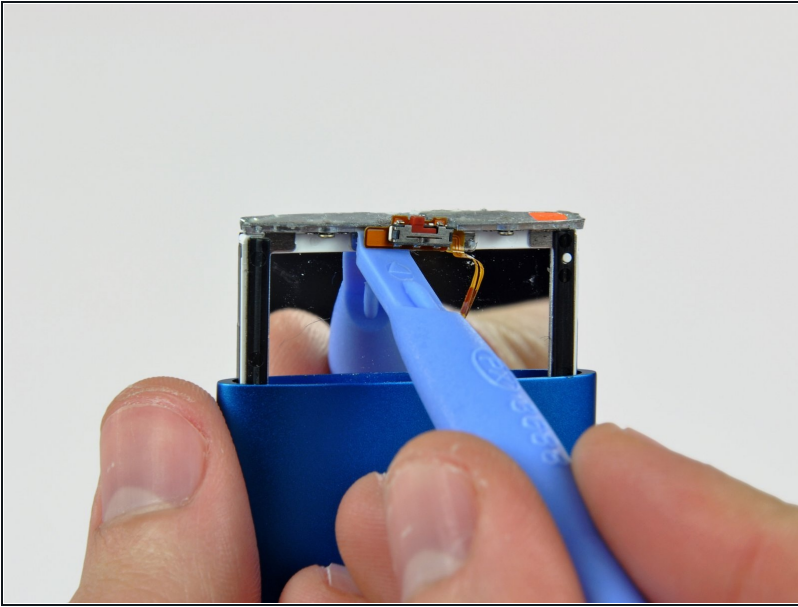
- With the display pulled out of the case as much as possible, gently press on the lower edge of the glass panel until it pops in slightly (~1 mm).
- Use your thumbs on the lower edge of the glass panel to slide the glass down and into the case until the top edge pops up out of the case.

Step 7



- Lift the glass panel out of the Nano.
- ✦ Before reinstalling the glass panel, be sure to clean the face of the display and the inside of the panel as any dust or fingerprints will be annoyingly visible when the Nano is turned on.

Step 8 — Display



- Use the edge of an iPod opening tool to separate the hold switch from the adhesive securing it to the top edge of the display.

⚠ The hold switch ribbon cable is extremely fragile and easily broken. Work gently.

Step 9



- Peel back the Kapton tape covering the display data cable socket.

Step 10



- While holding the light colored socket down with one finger, use the tip of a spudger to flip the ZIF cable lock up toward the bottom of the Nano.

Step 11



- Use an iPod opening tool to peel the display data cable off the thin metal plate attached to the display.

⚠ Be careful not to rip the display data cable.

Step 12



- Pull the display out of the Nano, minding the hold switch cable that may get caught.

⚠ As you pull the display out of the case, **be careful not to break the hold switch cable.**

Step 13 — Logic Board Assembly



- Insert an iPod opening tool between the bottom bezel and the dock connector.
- Separate the bottom bezel from the adhesive securing it to the Nano and set it aside.

Step 14

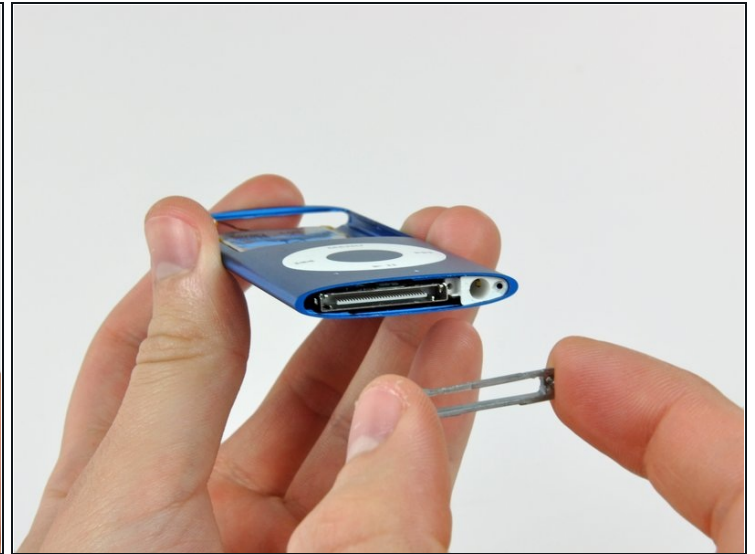


- Remove the three Phillips screws along the bottom of the Nano.

⚠ These screw heads are extremely small and easily stripped.

- ⓘ The slightly longer of the three screws belongs in the middle.

Step 15



- Use an iPod opening tool to pry the aluminum dock bezel out of the Nano.

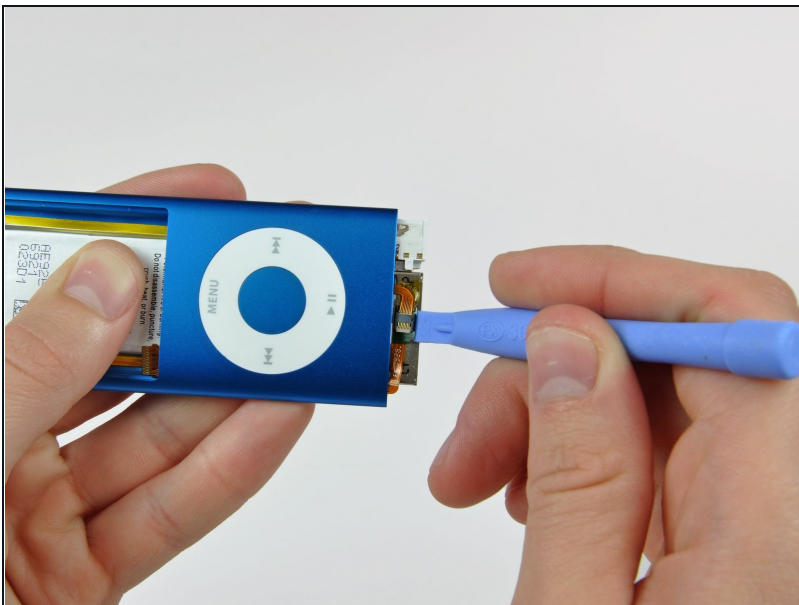
⚠ The dock bezel is very thin cast aluminum. To avoid breaking it, do not excessively flex it during removal.

Step 16



- Use the flat end of a spudger to separate the battery from the adhesive securing it to the outer case.
- ⓘ The lithium polymer battery used in the Nano is very flexible. Try not to deform it excessively while separating it from the outer case.
- Use the flat end of a spudger to push the logic board assembly and battery slightly out of the bottom of the Nano. Stop once it pops out a little bit.

Step 17



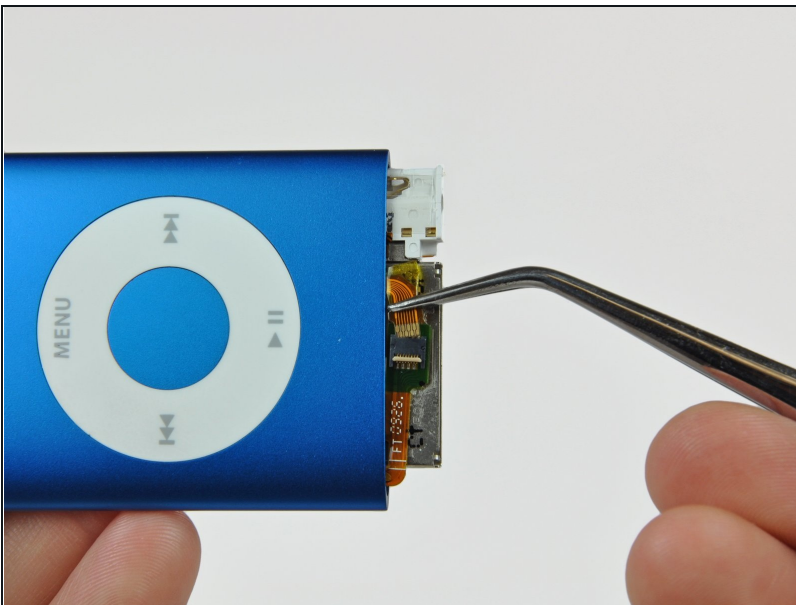
- Use the edge of an iPod opening tool to peel the click wheel ribbon cable and its ZIF socket off the dock connector.

Step 18



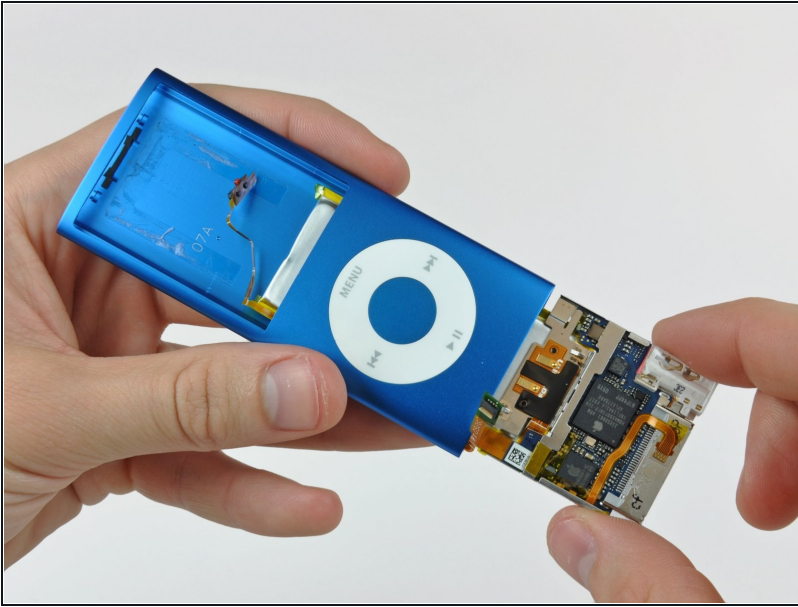
- Use the edge of an iPod opening tool to flip the ZIF cable lock up toward the headphone jack.

Step 19



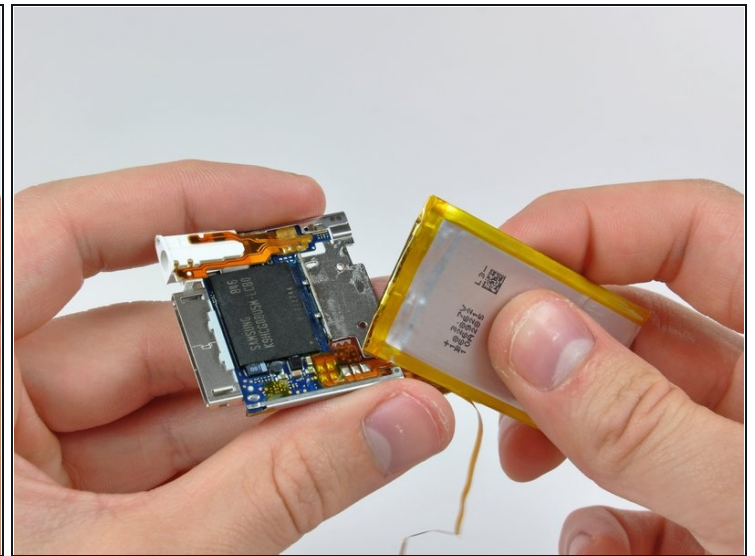
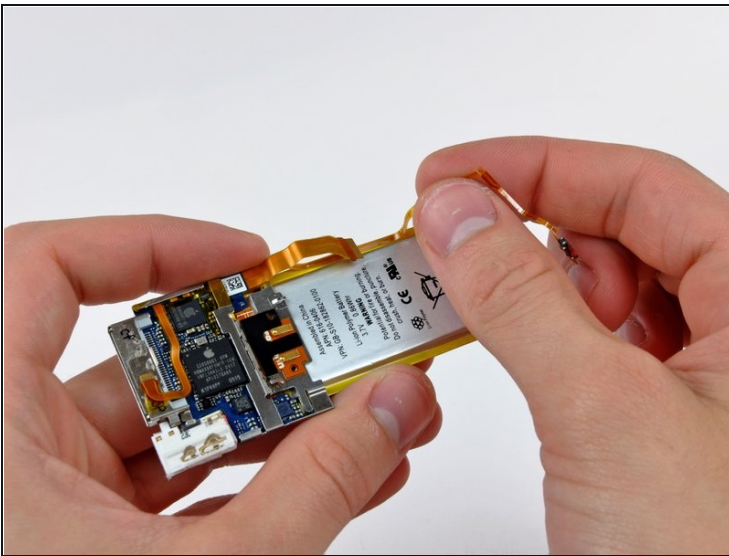
- Use a pair of tweezers to slide the click wheel ribbon cable out of its socket.
- ⚠ Before proceeding, be sure that **both the click wheel ribbon cable socket and its cable** are freed from the adhesive securing them to the dock connector and logic board.
- Peel back the cable on both ends!

Step 20



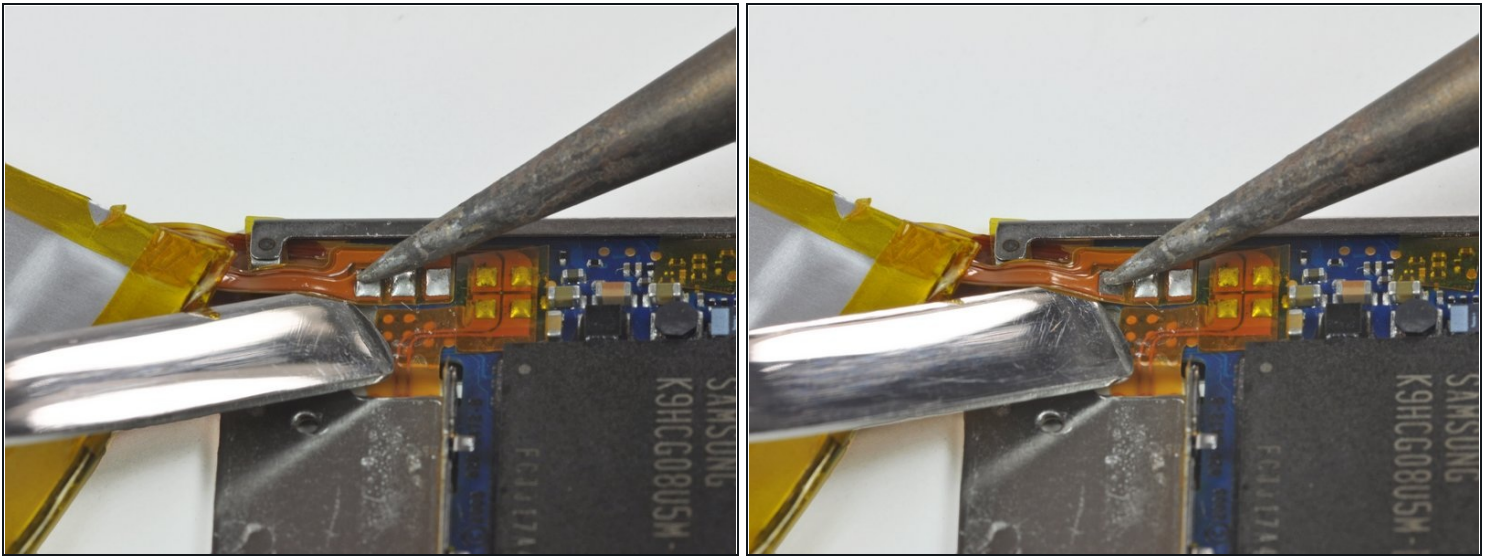
- Pull the logic board assembly out of the outer case, minding the hold switch and click wheel cables that may get caught.
- ❗ When reassembling, ensure the click wheel cable is toward the front of the Nano and not in the grooves on the side. If it is in the groove you will probably cut it while sliding the logic board into place.

Step 21 — Battery



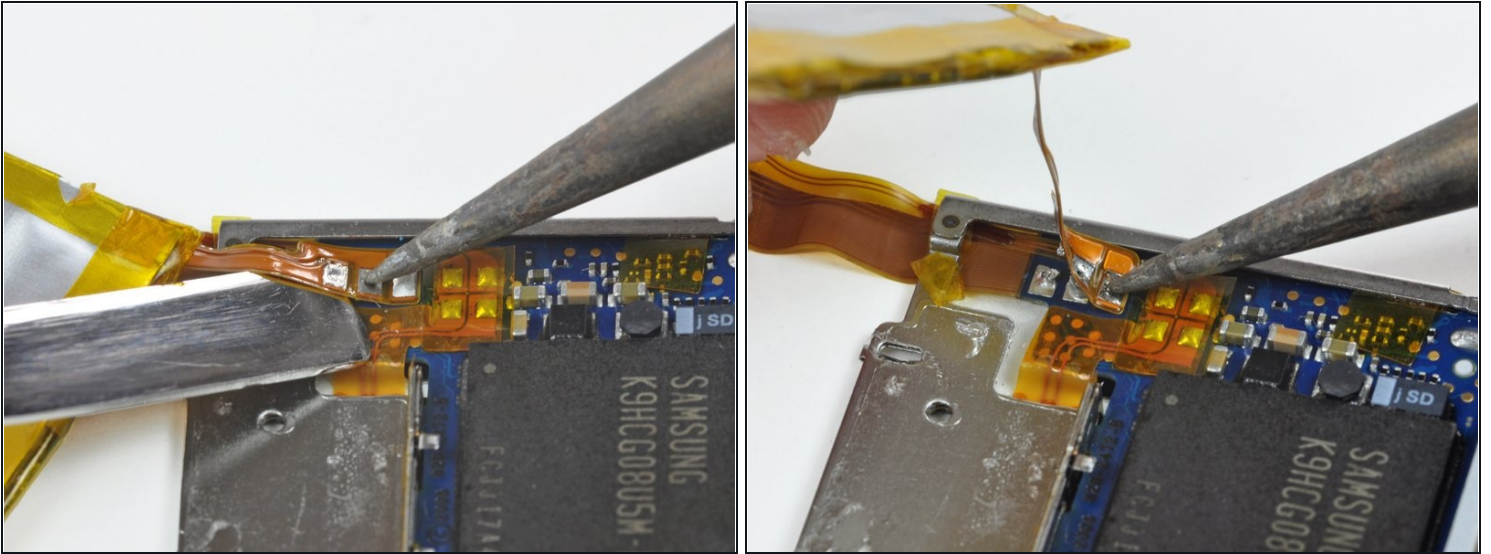
- Peel the hold switch cable from along the edge of the battery and lay it aside. The hold switch cable is not attached to the battery.
- ⚠ The battery is held on to the logic board by a strong adhesive. Force may be required to remove the battery from the logic board.
- Pry the battery off the adhesive securing it to the metal tray on the logic board.

Step 22



- ① The battery on the fourth generation nano is attached via solder pads with small holes that go through the battery ribbon cable and attach to flat pads on the face of the logic board. In this step, you will heat each solder pad individually while using a metal spudger to pry it up from the logic board.
- ⚠ **DO NOT** bridge the connection between the solder pads both on the board and on the ribbon cable with your spudger. Shorts have the potential to ruin the logic board.
- ⚠ Beware of overheating the board and the cable. Only hold the tip of the iron against the pad long enough to let the solder melt. Excess heat buildup has the potential to ruin the logic board or melt the ribbon cable. Consider letting the board cool off between melting each solder pad.
- Start working from one side of the battery ribbon cable. In our case, we started on the left. Heat the leftmost solder pad while gently prying up from under the ribbon cable to free it from the board.

Step 23



- Repeat the previous step for each of the two remaining pads, working either right to left or left to right.
- ① At this point, the battery should be free from the logic board.
- Lift the old battery out of the nano and set it aside.

To reassemble your device, follow these instructions in reverse order, while **being careful** not to damage the iPod.