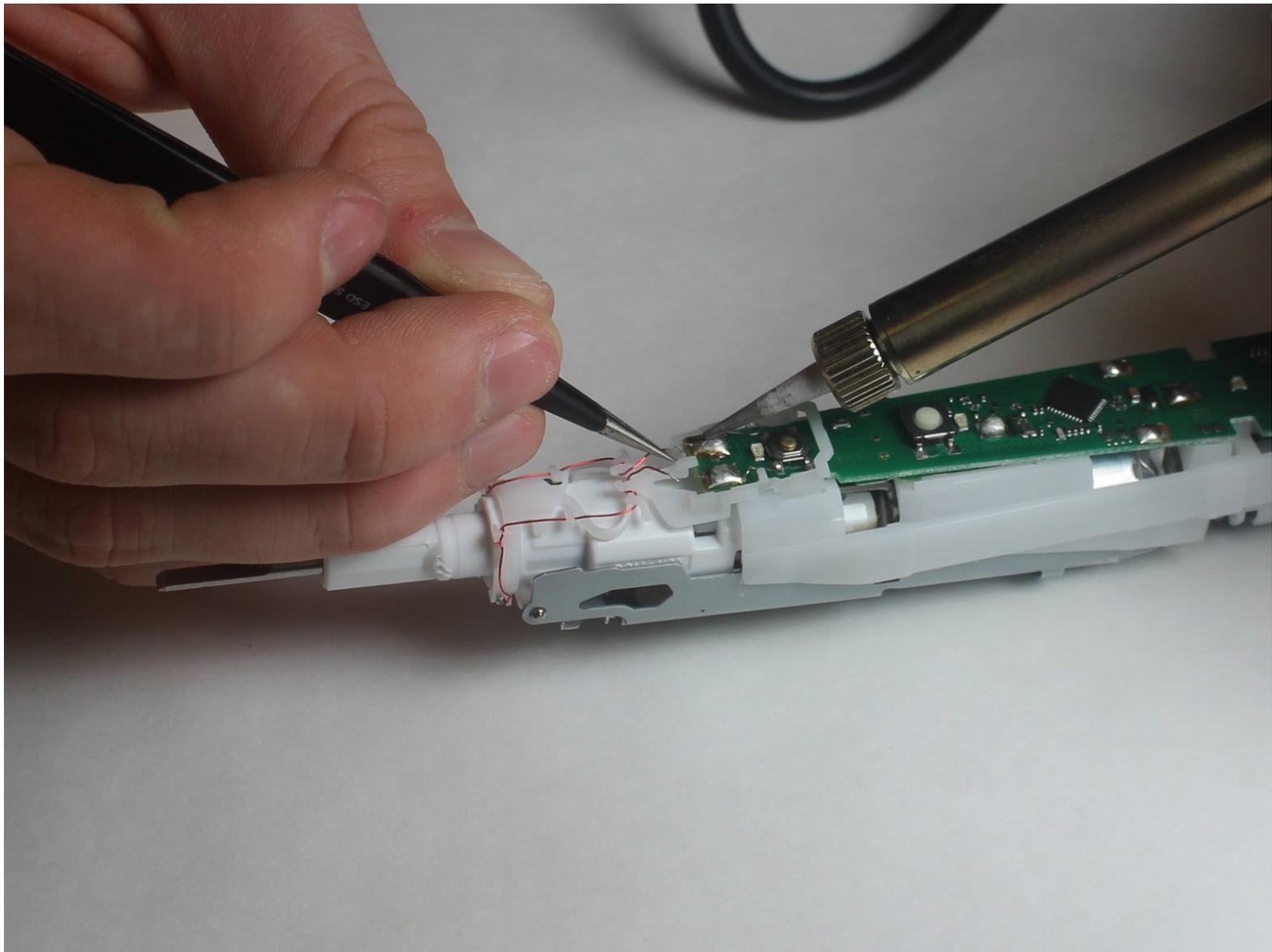




Oral-B Black 7000 Motor Replacement

How to replace the motor for the Oral-B Black 7000.

Written By: Jonathan Bowyer



INTRODUCTION

The motor powers the rotating head of the toothbrush. If it is damaged or wears out due to use, it will need to be replaced. Some steps in this procedure require desoldering connections. For a review of soldering techniques, check out this [How to Solder Guide](#).

TOOLS:

- [Metal Spudger](#) (1)
 - [Tweezers](#) (1)
 - [Soldering Workstation](#) (1)
 - [Spudger](#) (1)
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Step 1 — Induction Charging Coil



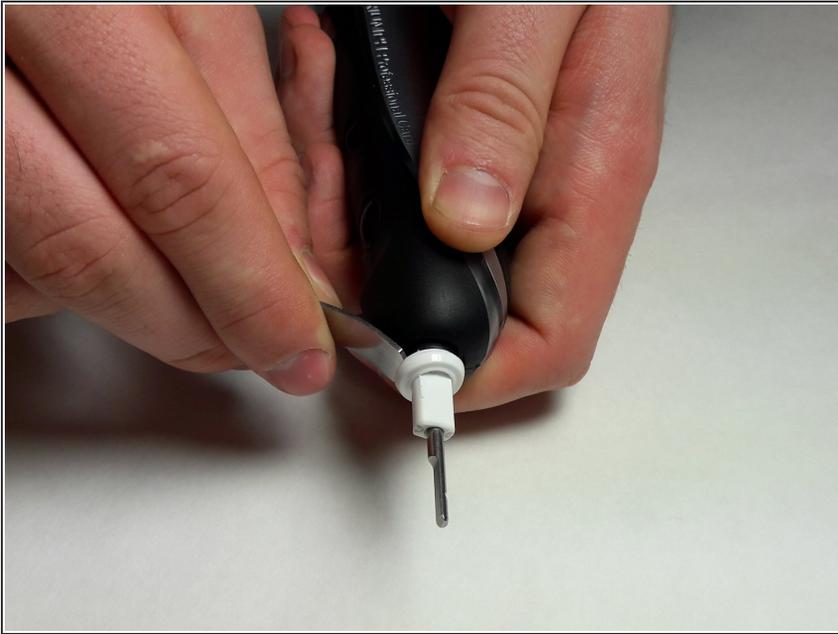
- Use the charging station to remove the a small plastic plug from the end of the toothbrush by inserting the charging station into the end insert and twisting counter-clockwise by 90 degrees.

Step 2



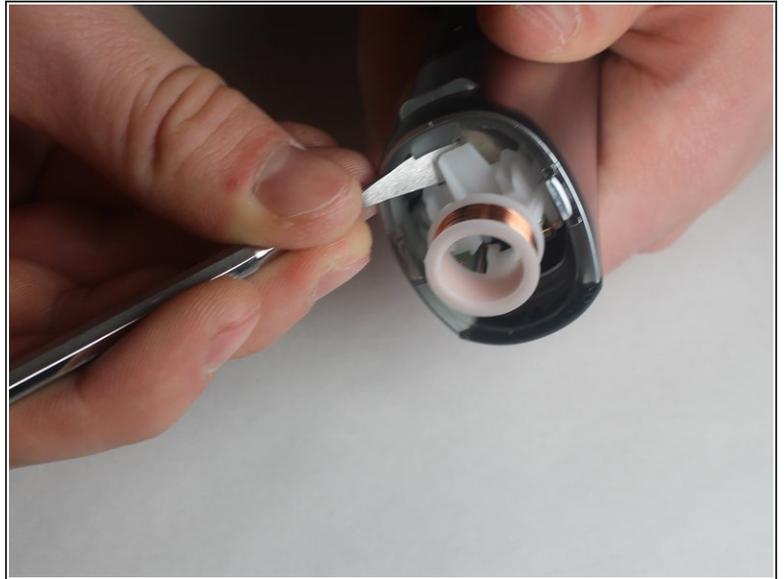
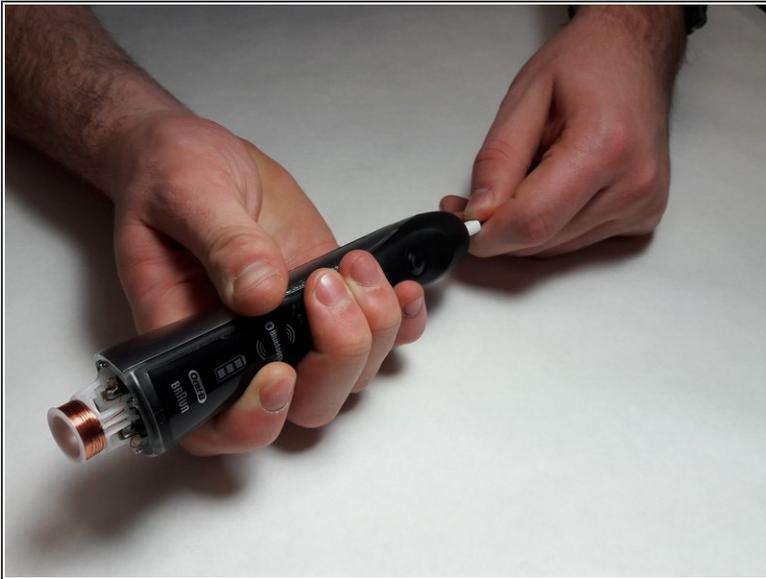
- Remove the end cap from the bottom of the toothbrush by prying it off with a spudger.

Step 3



- Remove the top cap by using a spudger to pry the plastic ring off of the toothbrush frame.

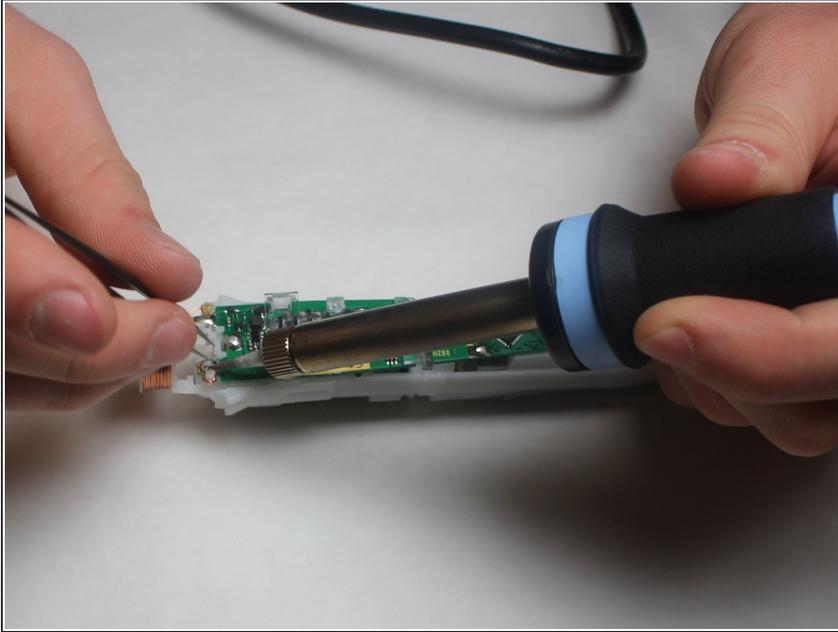
Step 4



- Use a spudger to loosen the two plastic tabs next to the induction coil that secure the internal assembly to the frame.
- Push on the rotating head in order to pop the assembly out of the black plastic casing.

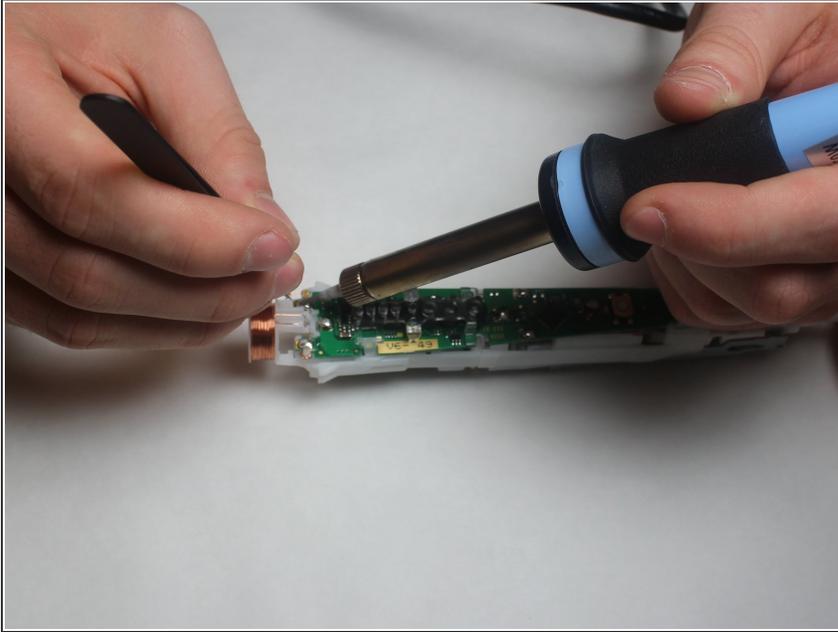
⚠ You can also use a spudger to leverage the assembly out, but this may break the copper wire connected to the induction coil, so be careful.

Step 5



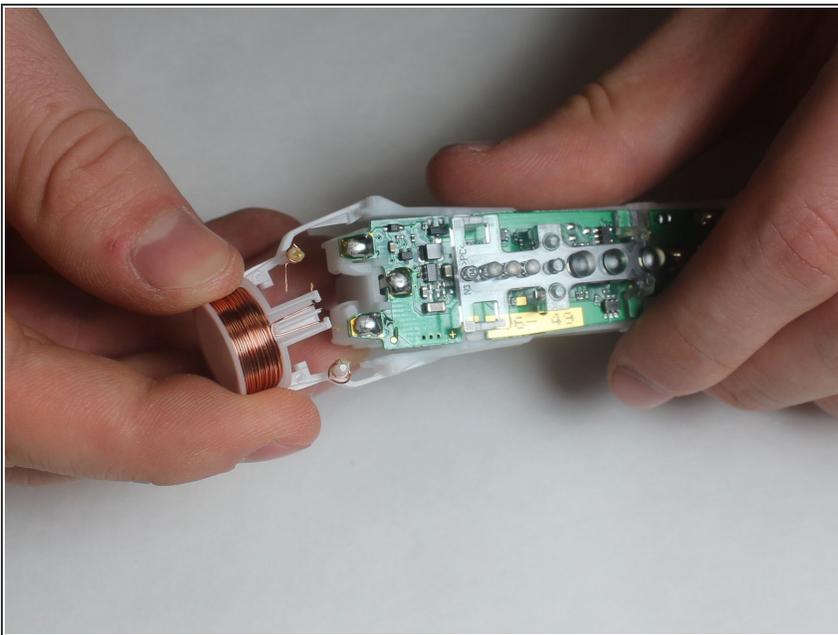
- Unwrap the ends of the wires from the white plastic pegs using a pair of tweezers.
- ⓘ Each wire end is wrapped around the peg 3-4 times.

Step 6



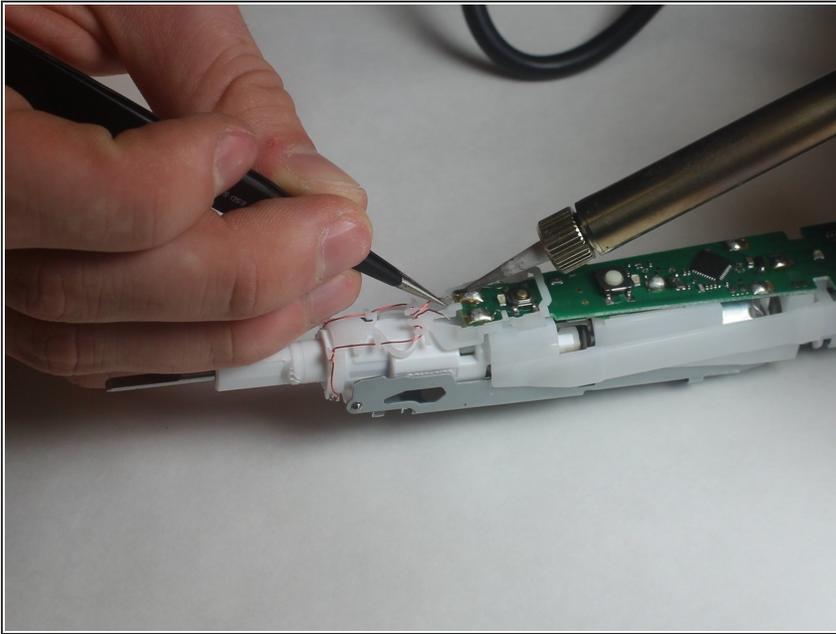
- Melt the solder at the two pads on either side of the top of the motherboard. This will require a high heat soldering iron. Remove the wire from the solder pads using tweezers once the solder melts.

Step 7



- Remove the induction coil by pulling the plastic tabs out of their keepers.
- ⓘ A spudger can be used to remove the plastic tabs from their keepers if necessary.

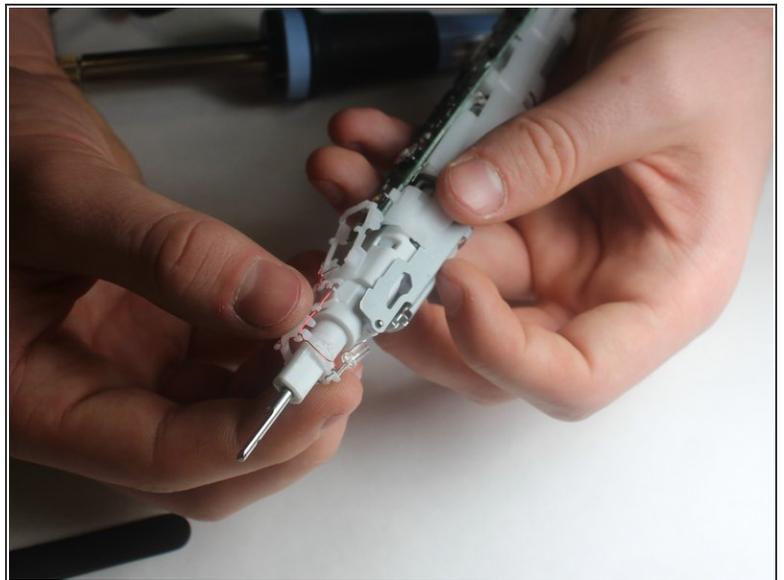
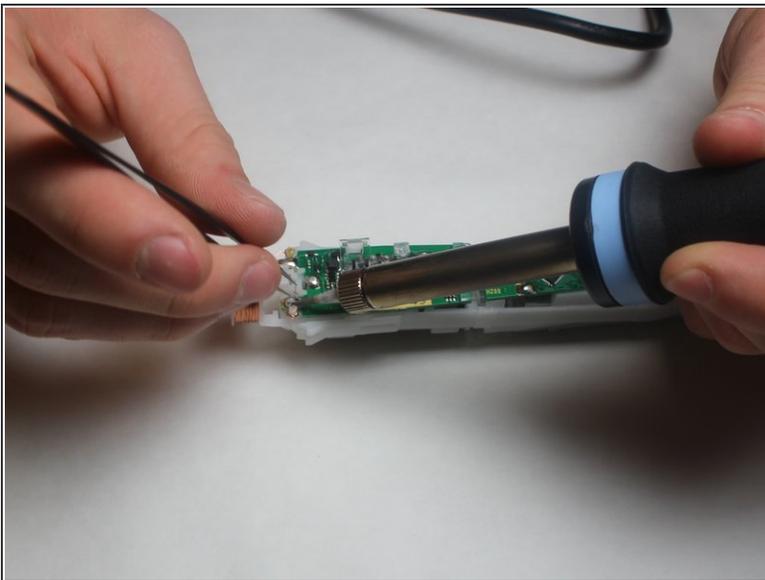
Step 8 — Motor



- Desolder the red LED wires from the solder pads near the rotating head of the device.

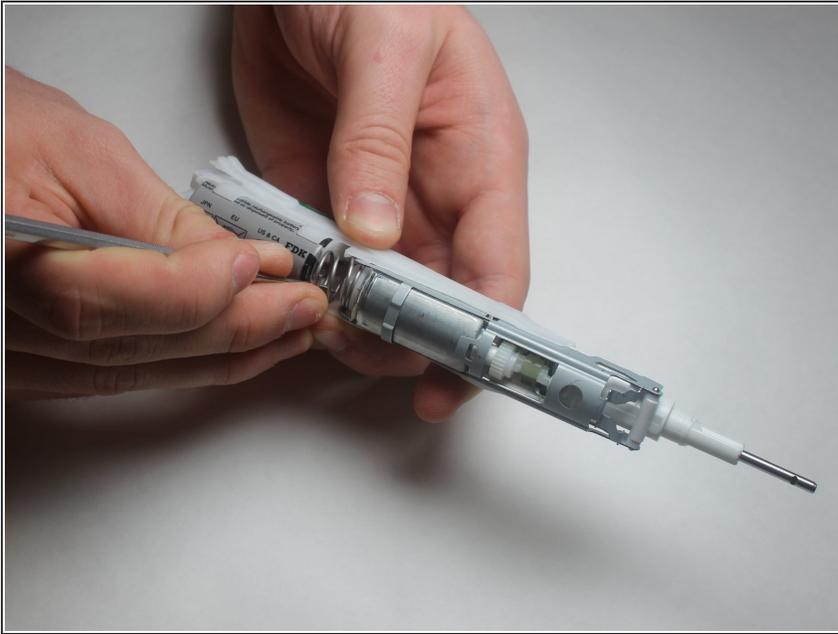
⚠ These wires are quite delicate, so be sure the solder is fully melted before attempting to pull the wire out.

Step 9



- Use a pair of tweezers to remove the plastic housing and the LED from the device.

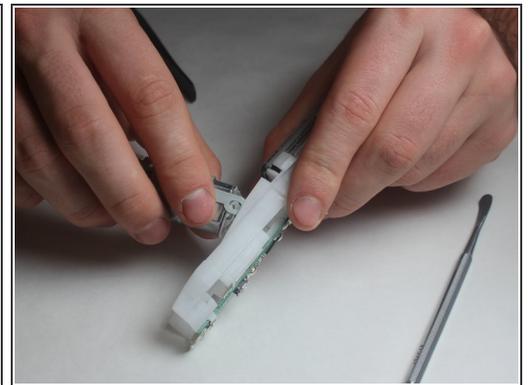
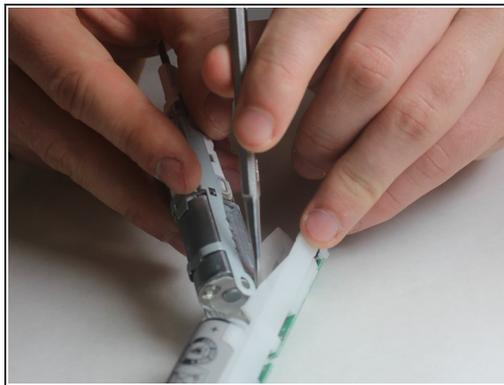
Step 10



- Remove the spring from the housing using a nylon spudger.

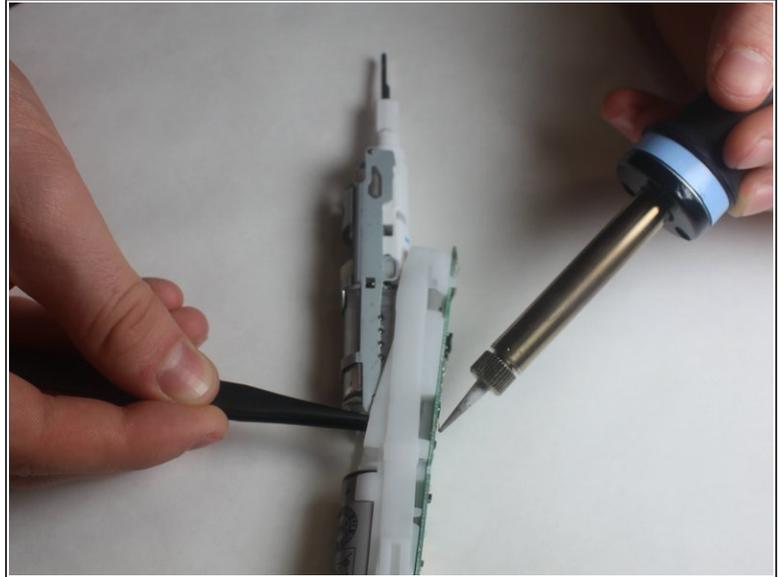
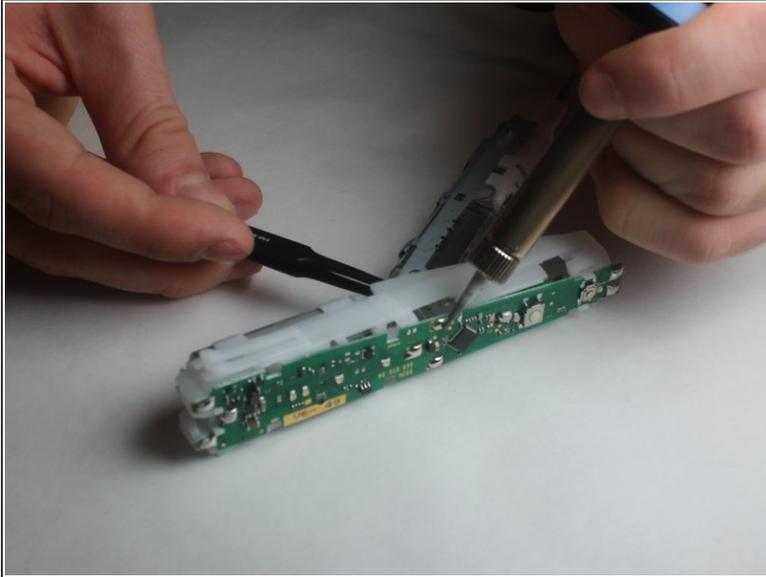
⚠ Use a nylon spudger rather than a metal one in order to minimize the risk of puncturing the battery.

Step 11



- Remove the motor housing from the plastic casing. This can be accomplished by using the nylon spudger to pry the motor housing out of the supporting structures.
- ⓘ The physical parts holding onto the motor are plastic knobs built into the plastic casing. Any manipulation done to the casing to remove the motor should be done within reason so that the casing is able to be reused.

Step 12



- Desolder the motor terminals from the motherboard and remove the motor assembly.

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