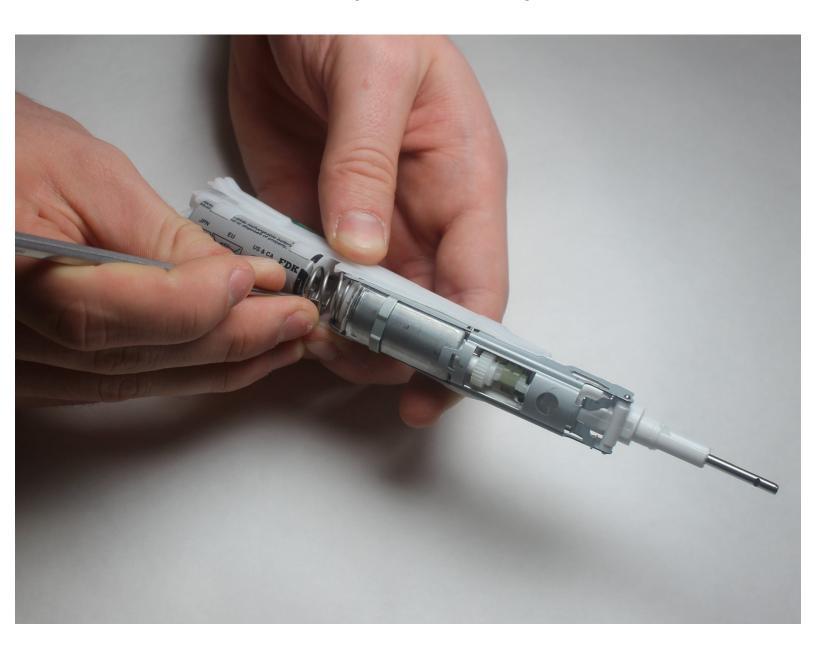


# **Oral-B Black 7000 Battery Replacement**

How to replace the NiMH rechargeable battery for the Oral-B Black 7000 electric toothbrush.

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#### **INTRODUCTION**

The rechargeable battery provides power to the device. It will need to be replaced if it is damaged or wears out with use. Some steps in this procedure require desoldering connections. For a review of soldering techniques, check out this <u>How to Solder Guide</u>.



## **TOOLS:**

- Metal Spudger (1)
- Tweezers (1)
- Soldering Workstation (1)
- Desoldering Braid (1)
- Lead-Free Solder (1)

#### **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.



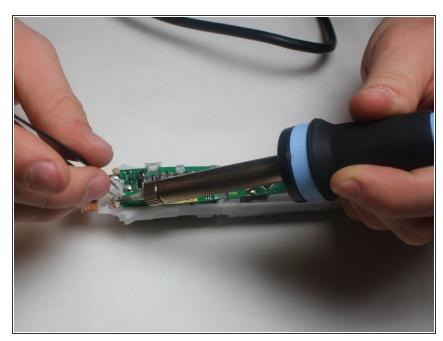
 Remove the top cap by using a spudger to pry the plastic ring off of the toothbrush frame.



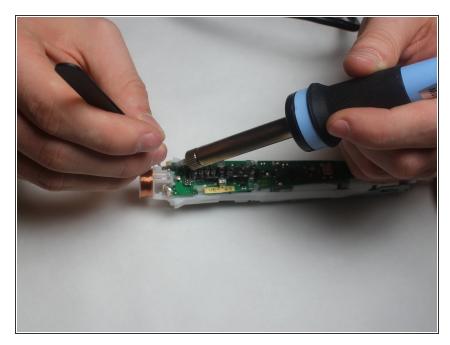


- Use a spudger to loosen the two plastic tabs next to the induction coil that secure the internal assembly to the frame.
- Push on the rotating head in order to pop the assembly out of the black plastic casing.

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.

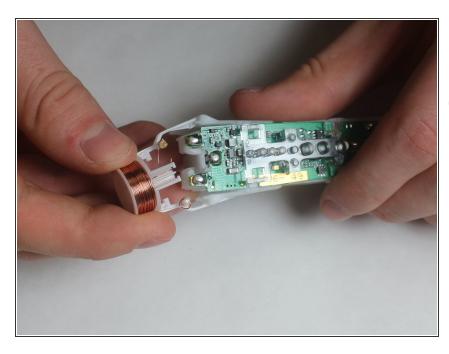


- Unwrap the ends of the wires from the white plastic pegs using a pair of tweezers.
- (i) Each wire end is wrapped around the peg 3-4 times.



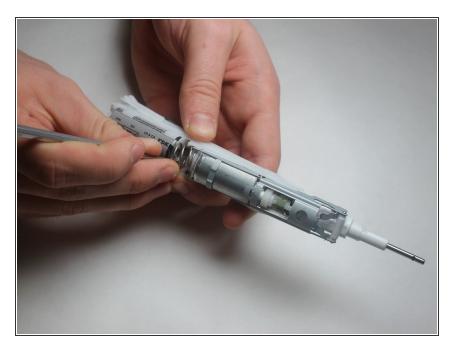
• Melt the solder at the two pads on either side of the top of the motherboard. This will require a high heat soldering iron. Remove the wire from the solder pads using tweezers once the solder melts.

## Step 7

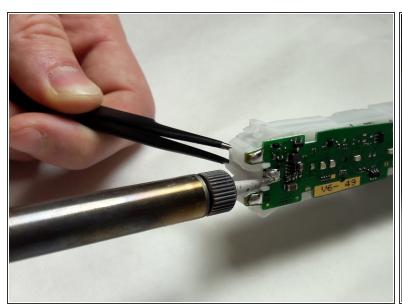


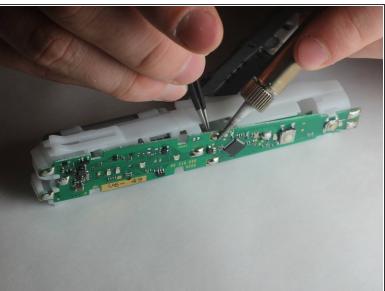
- Remove the induction coil by pulling the plastic tabs out of their keepers.
- (i) A spudger can be used to remove the plastic tabs from their keepers if neccessary.

## Step 8 — Battery



 Remove the spring from the housing using a nylon spudger.





- Use a soldering iron to melt the solder pad at the top of the motherboard, which attaches a battery
  electrode to the board. Remove the electrode by pulling it through the plastic housing after it has
  been desoldered from the board.
- Repeat with the two solder pads on either side of the motherboard just above the black diamondshaped component. The electrode foils can be pulled through the board from the back after the solder is melted.



 Use a metal spudger to pop the battery out of its casing. The electrodes will remain attached to the battery.

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