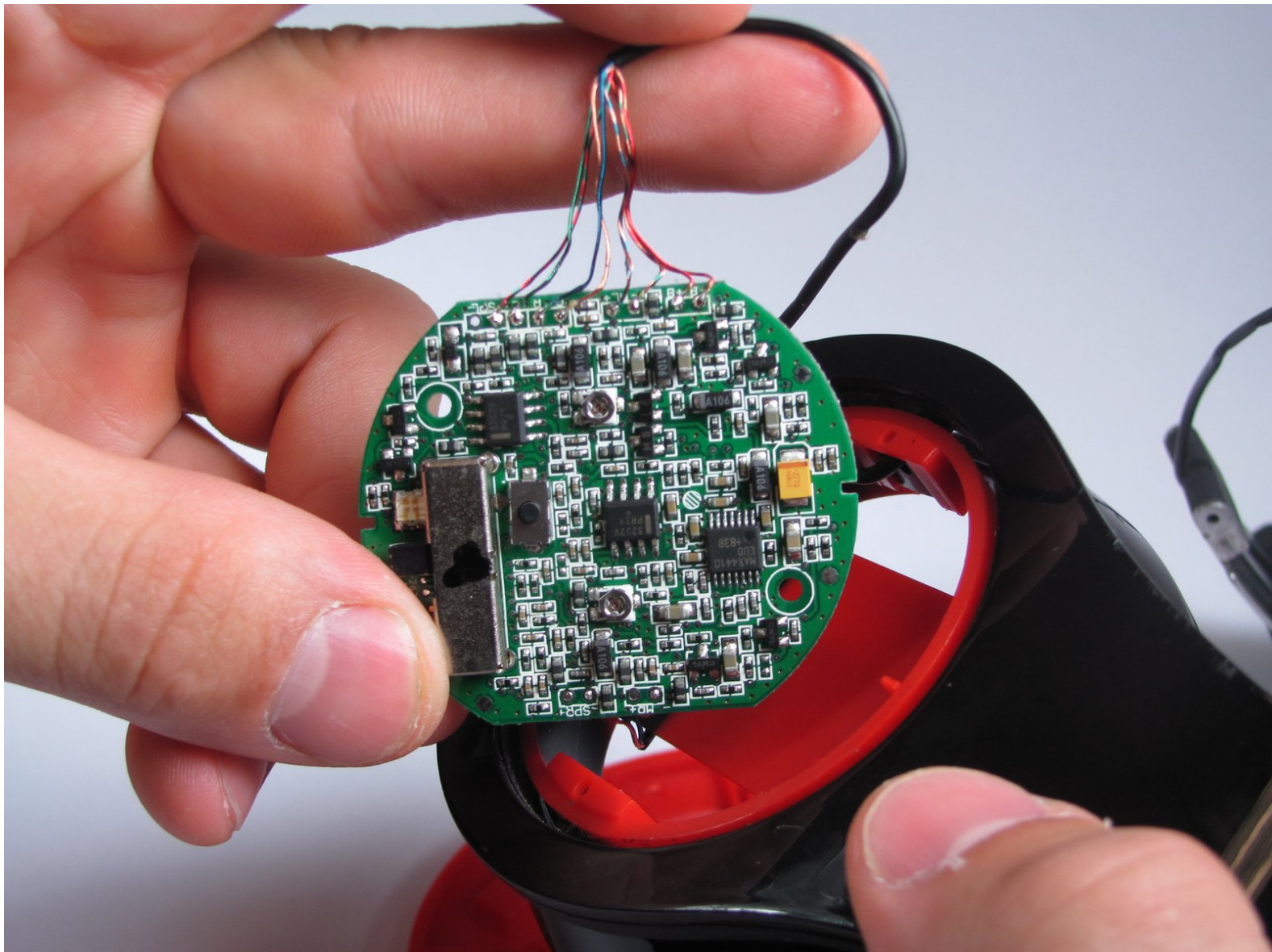




# Beats Studio First Generation Motherboard Replacement

This guide will guide you through the disassembly of the first generation Beats Studio headphones to ultimately help you replace the motherboard.

Written By: Oscar



# INTRODUCTION

Use this guide to replace the motherboard on the first generation Beats Studio.



## TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Phillips #0 Screwdriver](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Tweezers](#) (1)



## PARTS:

- [Beats by Dre. Studio Power Button](#) (1)
- [Beats By Dre. Studio Right Headphone Cover](#) (1)

## Step 1 — Removing the outer headband screws.



- Using the T5 Torx screwdriver, remove the black screws on both sides of the outside of the headband.
- 4 (2 per side) Torx type T5, 3.5mm long screws.

## Step 2 — Removing the plastic hinge guards.



- Use the plastic opening tool to **gently** pry the black plastic hinge piece directly away from the headband as shown.



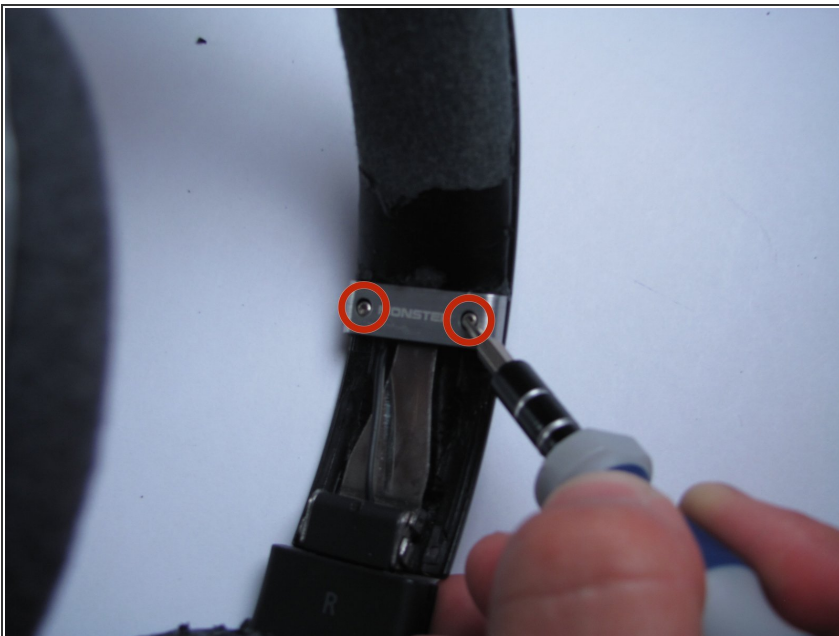
### Step 3 — Removing the hinge pins.



- Remove the small metal hinges from their housings. There are a total of 4 hinges, two per side of the headphones.

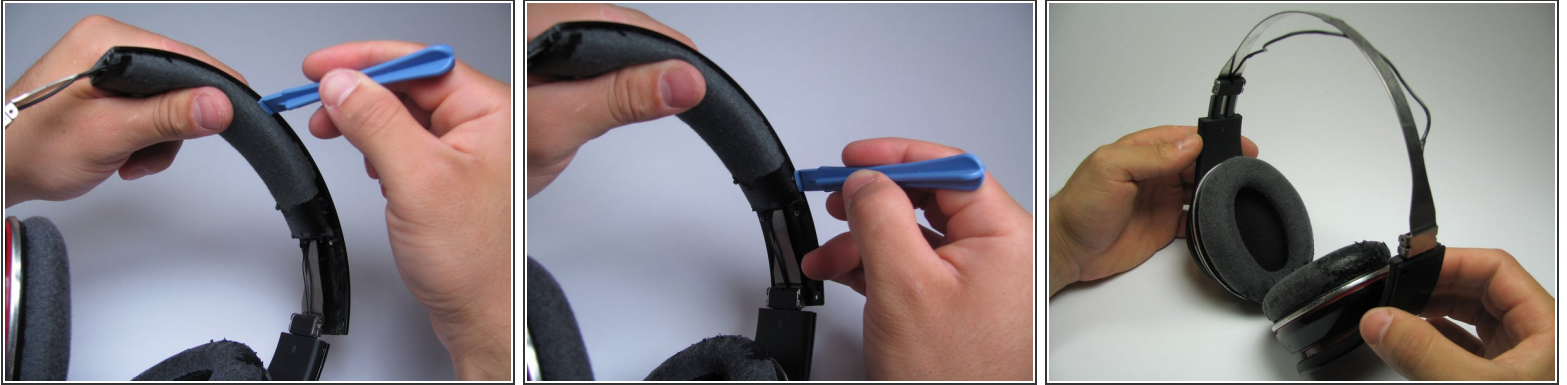
⚠ The hinge pins may slide out upon removal of the black hinge piece from the previous step. Be careful not to lose the hinge pins.

### Step 4 — Removing the metal bands.



- Using a T5 Torx screwdriver, remove the silver screws from the silver segment of the headband.
- 4 (2 per side) Torx type T5, 4.0mm long screws.

## Step 5 — Removing the headband cushion.



- Using the plastic opening tool, **gently** pry the headband cushion directly away from the plastic portion of the headband as shown. Pry the plastic portion a small amount and then move the opening tool sideways along on the headband. Repeat on both sides until the cushion separates from the top plastic part of the headband.

## Step 6 — Removing the metal headband support.



- Carefully remove the metal band from each of the hinge housings on each side. These should come off quite easily, provided that you have removed the hinges as instructed in step 3.
  - Congratulations, you have completely removed the headband! This will allow for ease of accessibility to the speakers should you choose to delve further into the depths of your headphones.
- ⚠ The black wire connecting the two speakers is somewhat fragile! Check that it isn't frayed. If it is frayed, consider repairing it with some electrical tape, splicing it, or replacing it.

## Step 7 — Removing the ear cushion.



- Pinch the ear cushion between your thumb and forefinger.

⚠ Be very careful when pulling off the ear cushion, as the material holding the cushion onto the plastic ring can rip easily.

- **Carefully** pull the cushion directly away from the earpiece.

⚠ The cushion will have a thin piece of foam inside of it that may fall out upon removal. Make sure to save this for reassembly.

- Repeat for the other ear cushion.



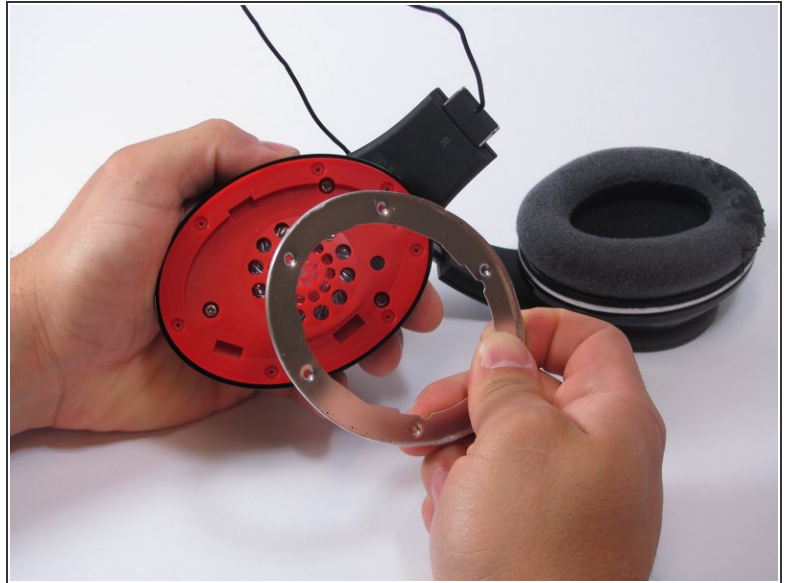
## Step 8 — Removing the plastic ring.



- Use the plastic opening tool to remove the black ring from the speaker. This will allow you to access the screws on the metal ring.
- Congratulations, you now have access to the rest of the speaker!
- ❗ **For reassembly, the black ring cannot snap back into the speaker the way it was disassembled. It must first go inside the black lip of the ear cushion. The black lip is located on the back side of the ear cushion. Please refer to the last two pictures on this step.**
- The black lip is located on the back side of the ear cushion.



## Step 9 — Removing Metal Ring Earpiece



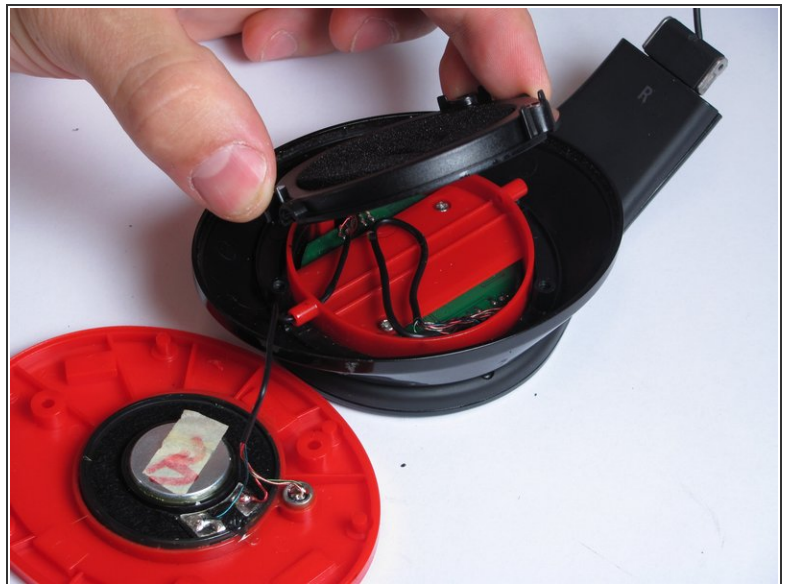
- Make sure you are working on the speaker that has the label "R" for the right ear. This speaker is the one you must disassemble in order to access the motherboard.
- Use a 00 Phillips head screwdriver to remove the screws holding down the metal ring.
- 7 Phillips type 00, 3.9mm long screws.
- Set aside the metal ring.

## Step 10 — Removing the Drive (Speaker)



- Using the 0 Phillips head screwdriver, remove the 3 screws holding down the red speaker assembly.
- 3 Phillips type 0, 8.0mm long screws.

## Step 11 — Remove Plastic Cover With Foam Top



- The screws removed in the previous step held the cover in place so, go ahead and just lift it out!
- Easy as 1-2-3!

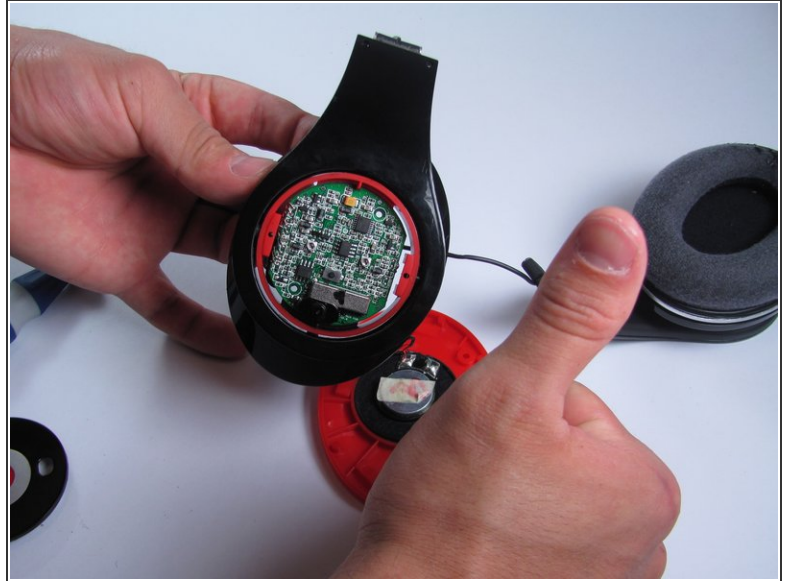
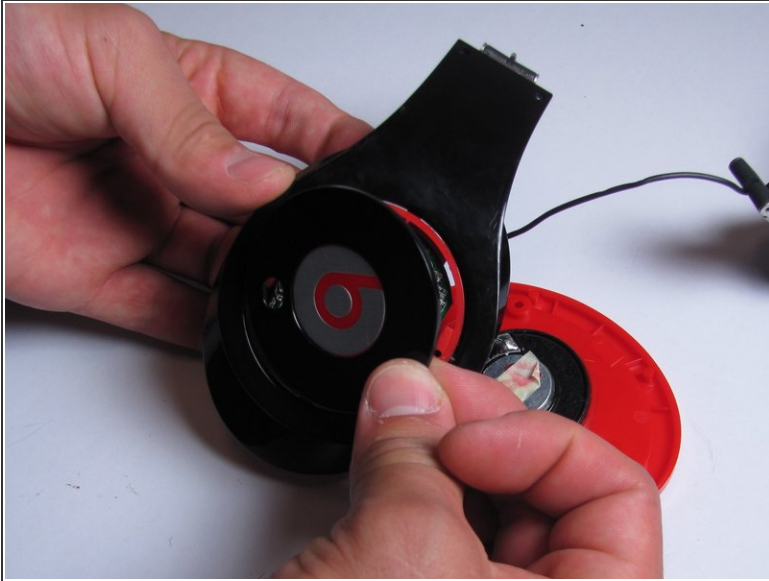
## Step 12 — Removing Motherboard and Cover



- Use the 0 Philips screwdriver to remove the two 6.0 mm screws that hold the motherboard and cover.
- ⚠ Place one hand on the other side ( where the beats logo is) so, that when you take the two screws out, the cover and motherboard don't fall out.
- 2 Philips type 0, 6.0mm long screws.



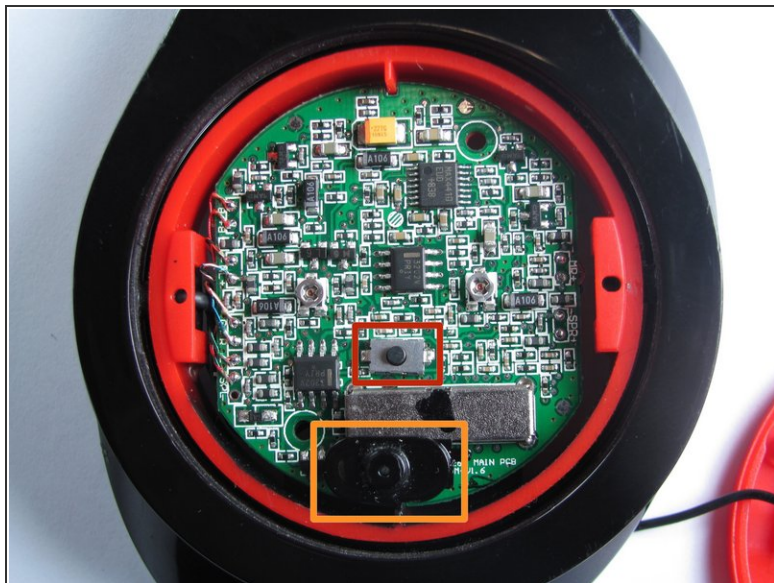
## Step 13 — Remove Motherboard Cover



- Once the screws have been removed from the other side, turn the speaker housing around.
- Simply lift the cover with the beats logo off.
- Congratulations! You have uncovered the motherboard!!



## Step 14 — Remove Power Button Cover



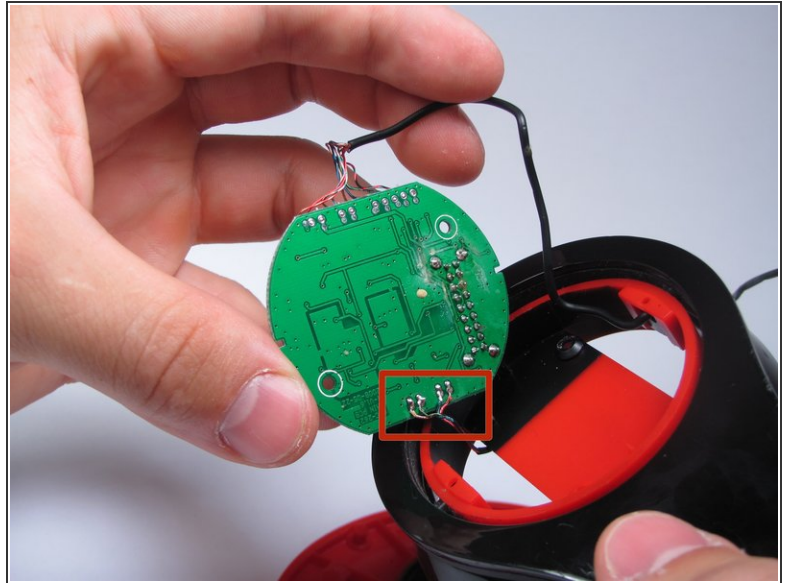
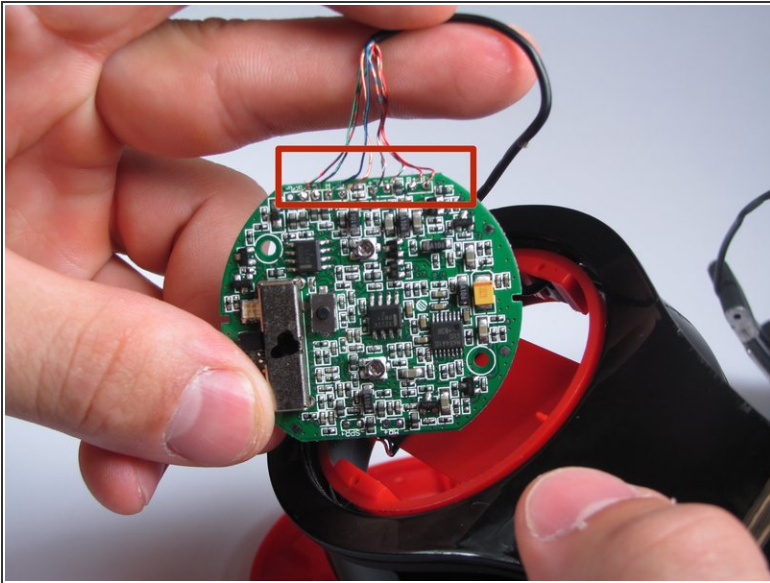
- Locate the black power button switch, then gently remove it with a pair of tweezers.
- The mute button
- Power switch.

## Step 15 — Remove Motherboard From Housing



- ⓘ Sometimes the motherboard will just fall out of its housing. If it doesn't, use a plastic opening tool to gently pry or push out.

## Step 16 — The Motherboard has Landed!



- Congratulations, you now have access to the motherboard!
- The wires can now be de-soldered and the old motherboard can be replaced with a new one.
- Before you begin soldering, make sure to mark or label all of the wires so that you remember exactly where they go.

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