



Bose QuietComfort 35 PARTIAL Teardown

Partial teardown. Exposes all circuit boards and battery. Does not disassemble head band, reveal access to speakers/drivers, or disassemble buttons.

Written By: Junrei



INTRODUCTION

Difficulty: Medium

Partial teardown of Bose QuietComfort 35 wireless noise cancelling headphones.

Exposes all circuit boards and battery.

Does not disassemble head band, reveal access to speakers/drivers, or disassemble buttons.

TOOLS:

- [Essential Electronics Toolkit](#) (1)

Step 1 — Bose QuietComfort 35 PARTIAL Teardown



- Today my Bose headphones drained its battery about halfway in only about 1 hour. It used to last well over 15 hours. It was a sign that the battery was on its way out.
- Officially, it costs \$259 + \$100 shipping to have Bose replace the battery. These headphones cost \$300. Ridiculous. I couldn't find any batteries for this online and customer support said the battery is not user-replaceable.
- This guide shows disassembly down to the battery.
- Tools required: Thin bladed phillips screwdriver, plastic or wood spudger when handling battery, small flat blade screw driver. Micro-screwdrivers will work fine.

 Beware of ESD (static electricity). When you open electronics not all parts will be protected from ESD. This can kill some/all of your device. Do not work on/over/near rugs and fuzzy things. Do not wear fuzzy clothes. Discharge yourself to a large metal object before working. Recommended: grounding mat and wrist strap. Can also work naked.

ⓘ ESD: You can even work naked or almost naked to reduce risk of clothing ESD. I'm not kidding. Obviously do not remove clothing in public...

Step 2



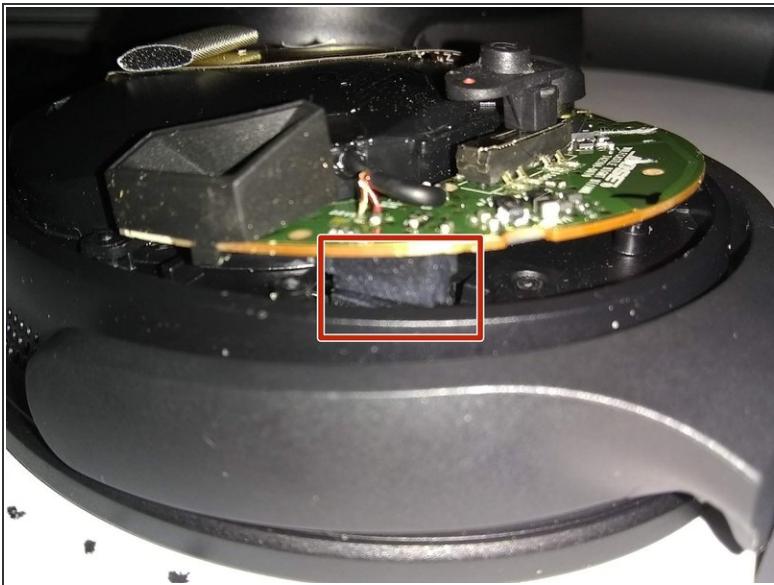
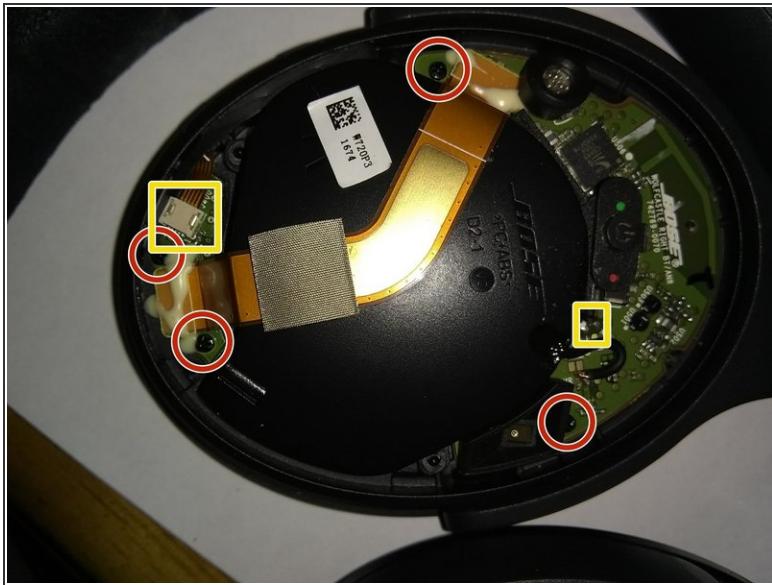
- Lets start with the right side.
- Dip your finger behind the foam muff and pull up to unsnap it.
- Pull the foam cover off of the headphone to reveal screws and a compartment.

Step 3



- There are 3 screws holding the outer metal cover on.
- This reveals the circuit board. Be careful not to lose the rubber around the mic.
- Make sure you don't lose the power switch.
- Ribbon cable safety: Don't shear side to side. Don't twist. If disconnecting disconnect it using a pry tool at the connector, never by pulling up on the cable!
- **THIS IS OPTIONAL.** Only do this if you need to: If removing the ribbon cable, once this cable is disconnected you can gently pull up on it (not bending too sharply!) to detach the adhesive from the speaker chamber
- 3rd picture shows prying upwards on the edge of the ribbon connector. It has some glue that must be pushed aside. It is weak so you can probably just pry up on the ribbon connector.

Step 4



- To remove the circuit boards you can remove the 4 short screws as shown.
- For the top board you can pry around the edges (use plastic or wood tool). Note that there is a connector on the back that connects to a board inside the compartment on the other side.
- The bottom board I recall was just loose. Beware of ruining the other ribbon connector (yellow) attached to it.

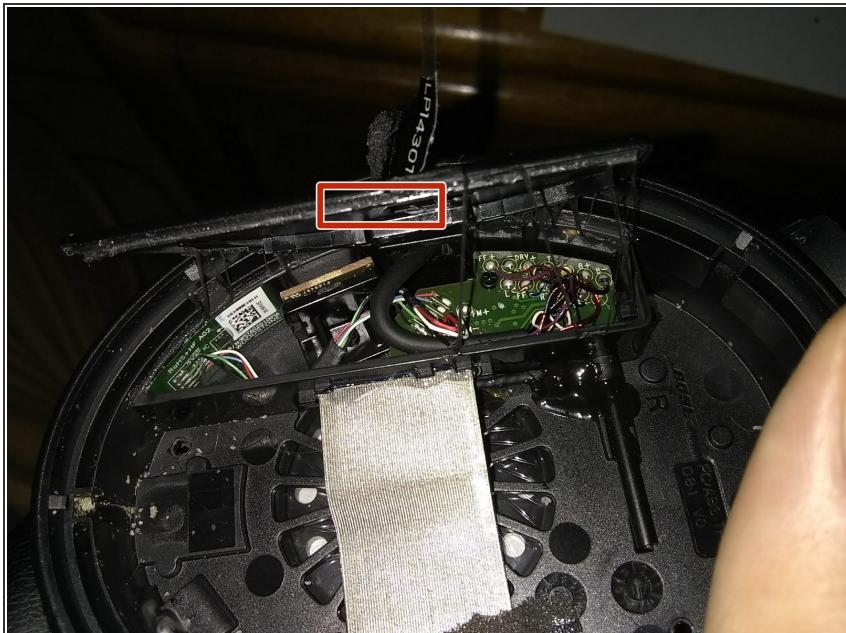
⚠ For the top board there is a speaker wire (yellow) going behind it that will keep this from being removed. It is thin so it could be broken easily.

Step 5



- FYI, headband connection can be disconnected by simply prying between the phone body and the band.

Step 6

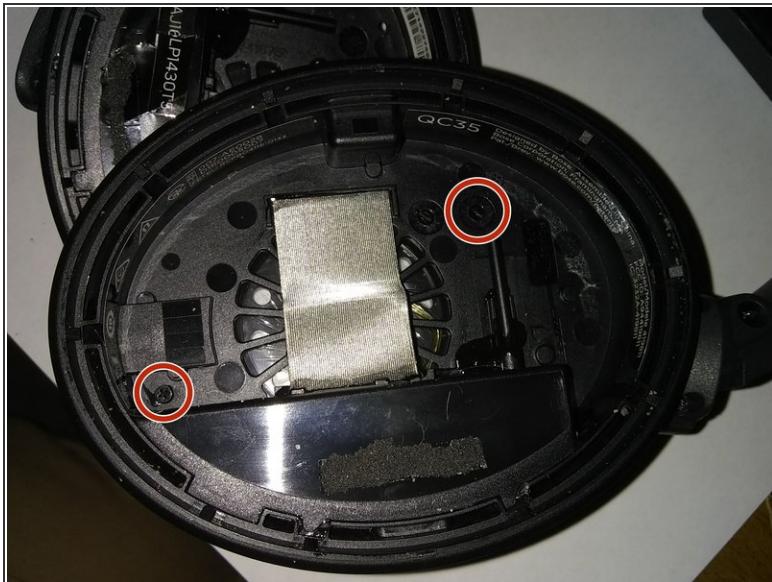


- On the other side, there is a compartment with a cover glued to it. The glue isn't terribly strong. You

can stick a thin screwdriver in the notch shown to split it open.

- Once opened the glue will not reseal properly most likely.
- Inside is a circuit board and another mic, and the cable to the other side.
- I did have some trouble opening this as I tried to push it open from the other side using the hole on the other side for the headband.

Step 7 — Left side



- Moving onto the left side, remove the cover and the foam pieces.
- This side has only 2 screws holding the front cover on.
- Here is the circuit for the left side.

Step 8



- Flip it over
- Here I stuck a screwdriver in the notch on the compartment cover. You have to use quite a bit of force to push the screwdriver in there.

i Better to use a micro-screwdriver for this instead of what I did. It would probably slip in there easier.

! Extreme caution should be taken during this step. Try not to suddenly push a metal screwdriver in there because the battery is right behind it. You don't want to puncture the battery.

Step 9



- The battery is revealed!

⚠ Use a WOODEN or PLASTIC tool to pry the battery free of its adhesive. It is not held in strongly. If you use METAL you may puncture the outer foil and compromise the battery.

Step 10 — Battery



- On the other side the battery is soldered to the board.
- It is marked with T (temperature), B-, and B+.
- The battery is a Synergy AHB110520CPS. An online search revealed nothing. I wonder if this is a proprietary battery only sold to Bose, or its just already obsolete (1.5 yrs old).
- The battery specs are 495mAh 3.7V, 4.2V max (I think).
- It is an Advanced Hybrid Battery, which is a very compact battery technology made by Synergy Taiwan.

! Replace with a battery of similar specifications, and try to find one with similar internal resistance. I am not sure how to measure that for this battery but you may look it up online.

Step 11



- Reassembly is the reverse of the disassembly
- To reattach the foam muffs press the border into the frame of the headphone plastic using your fingernail (thumbnail preferably). It will snap in at various places.