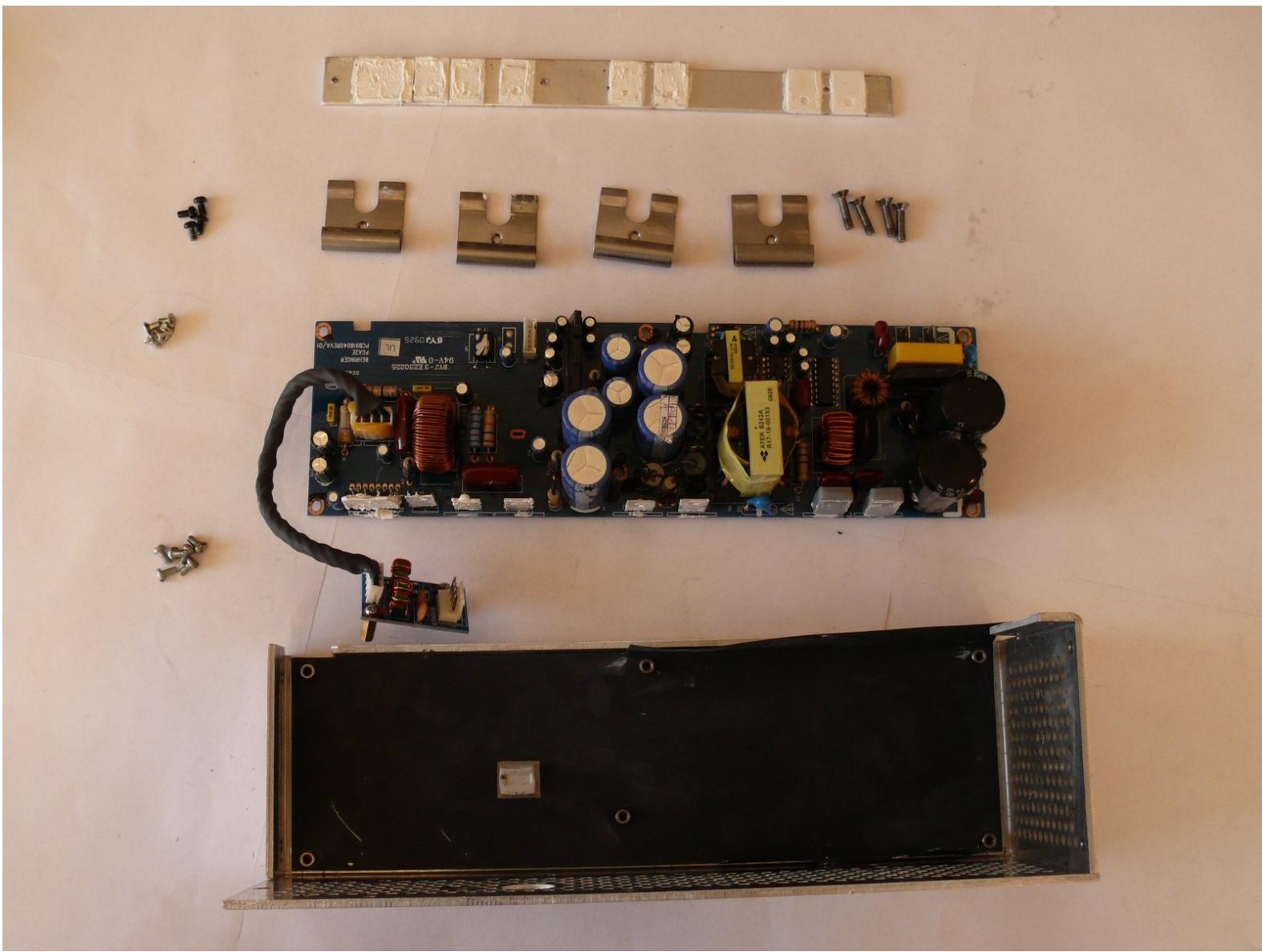




# Behringer Eurolive B212D Audio Amplification PCB Replacement

Remove and replace the main electronics board in the speaker, the audio amplification PCB.

Written By: gameslammer7



## INTRODUCTION

The audio amplification PCB is the PCB which has the task of amplifying the B212D speaker's input signals.

### TOOLS:

- [Phillips #2 Screwdriver \(1\)](#)

## Step 1 — Removing the Behringer Eurolive B212D Electronics Box



 **CAUTION:** Unplug your speaker from the power outlet.

- Remove the 8 Phillips screws from the back of the speaker.

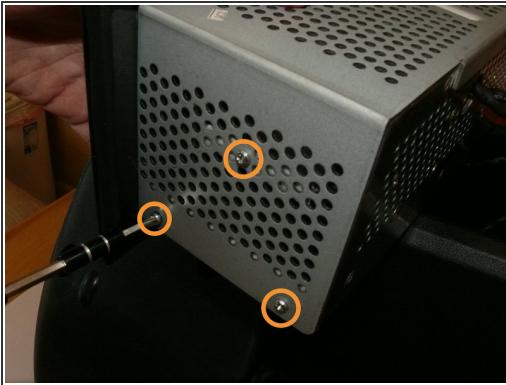
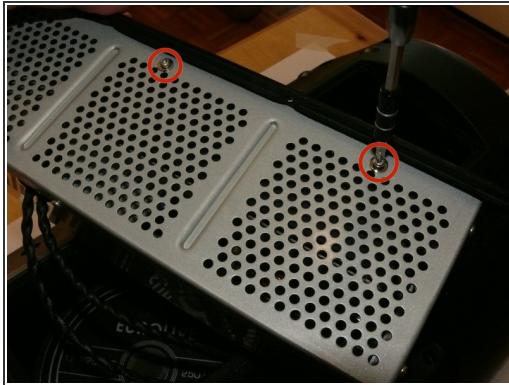
## Step 2



- Carefully remove the back panel, lifting out the metal electronics-box with it.

 To avoid damaging your speaker, remove slowly, as there is still a wire attached from the electronics box to the speaker.

## Step 3 — Detach the Behringer Eurolive B212D Electronics Box



- There are **two silver, 6 mm-long machine screws** with **two 1/8" inner-diameter washers** on the exterior of the metal electronics box; *remove these first* using a **#2 philips screwdriver**.
- There are **five of the same type of machine screw (silver, 6 mm-long)** remaining around the metal electronics box's exterior; remove these as well.

 You should have removed a total of **7 machine screws** and **2 washers**.

 The reason for removing the two screws with the two washers first (or replacing them last when reassembling) is that their holes are actually slots. They are designed as slots to accommodate slop in the assembly, and if unscrewed out of order, you may have difficulty while removing - or possibly even damage - the other five screws.

## Step 4



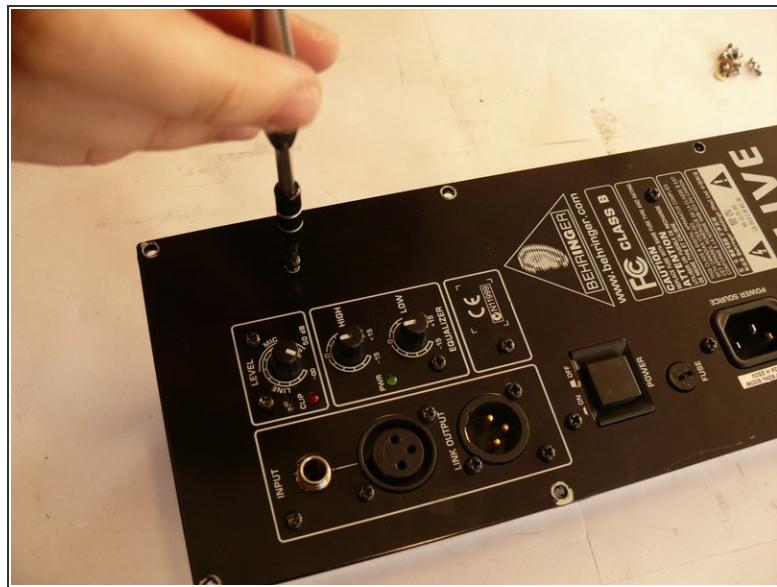
- Remove the portion of the metal housing that you freed with the 7 screws in the previous step.

## Step 5



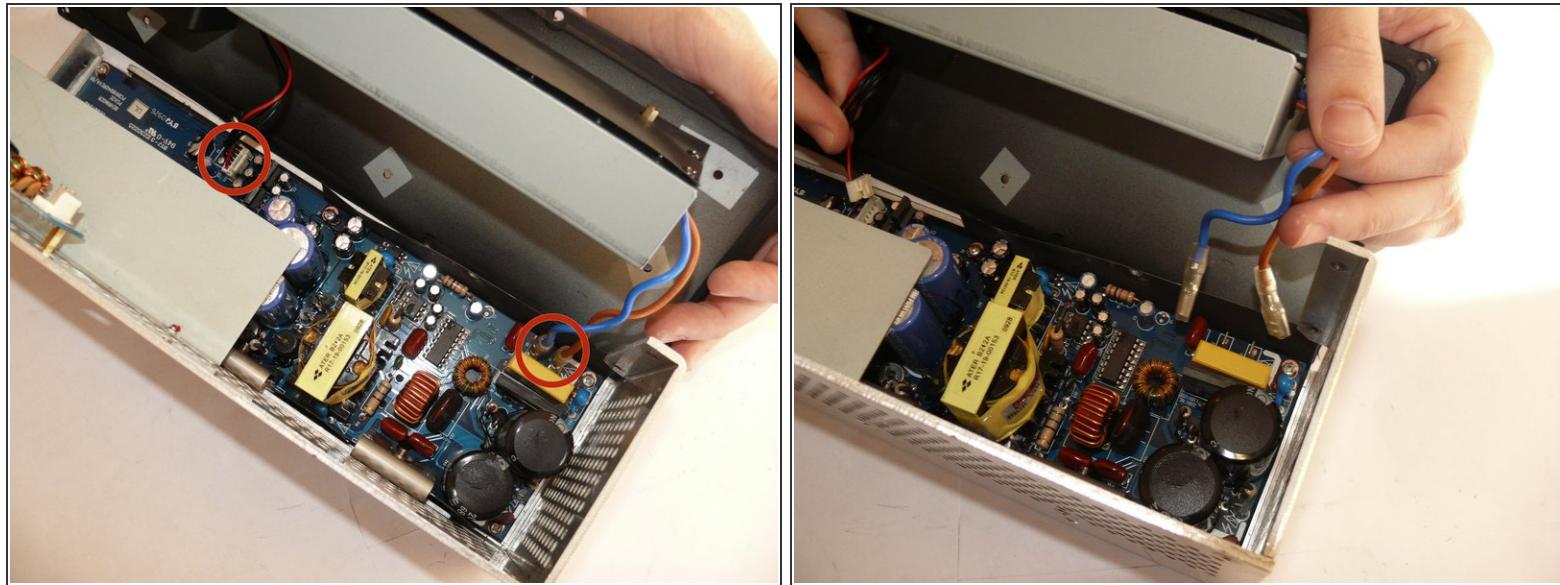
- Inside the metal electronics box housing is a **white clip attached to a small PCB**; remove this.
- The white clip in this image has been glued, indicating that the manufacturer may not expect the end user to remove this clip; it is difficult to proceed with the disassembling without doing so, however, because the rest of the speaker does not provide a sufficient surface on which to work.
- Snake the clip head through the hole in the metal electronics box casing.

## Step 6 — Disassembling Behringer Eurolive B212D Power & Control Panel



- Remove the 4, 7/32" long machine screws with a #2 phillips head screwdriver.

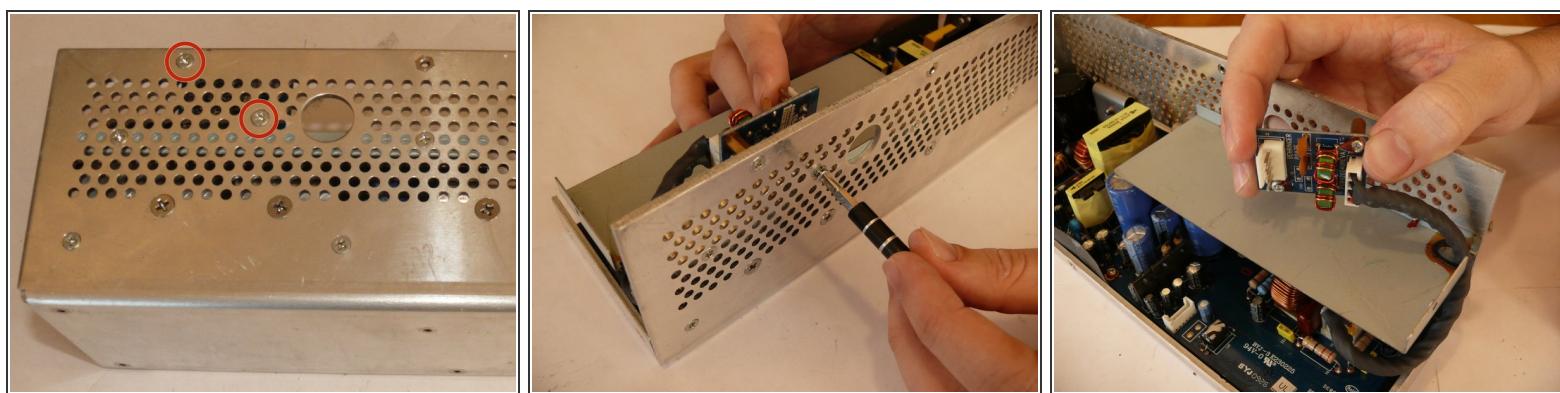
## Step 7



**⚠ Caution:** The circuit board contains many capacitors that could cause serious injury if touched. If possible, use a [capacitor discharge probe](#) to safely rid the capacitors of dangerous charges.

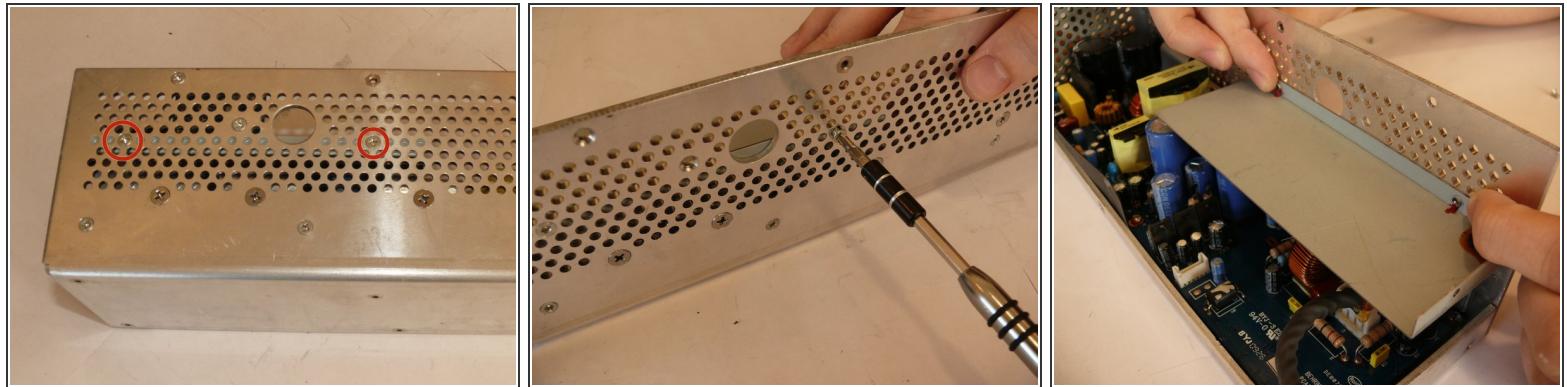
- Rotate the back panel so you can view the interior; **note the three wires attached.**
- Remove the wires to you can fully remove the back panel.

## Step 8 — Audio Amplification PCB



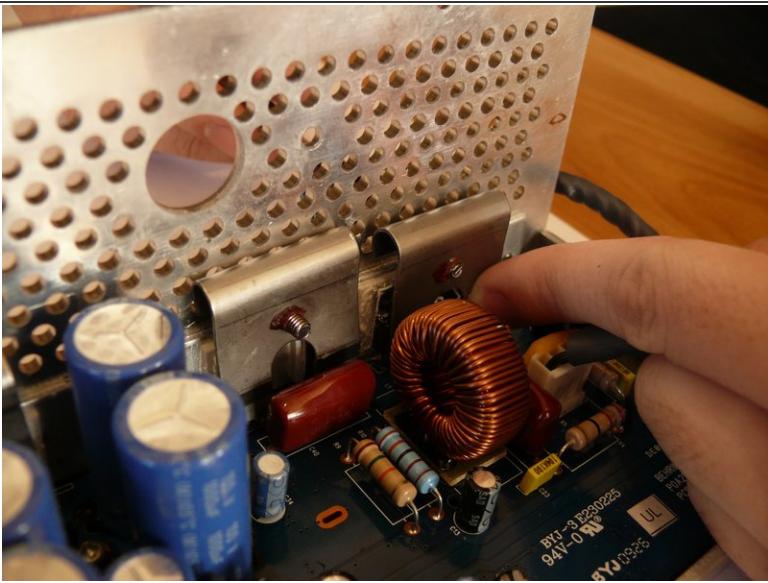
- Remove the 2 indicated **flat head machine screws** indicated using a **#2 phillips head screwdriver**.
- The small PCB could be removed for replacement at this point, but you can also just leave it attached to the audio amplification PCB as you remove other parts.

## Step 9



- Remove the 2 indicated **flat head machine screws** using a **#2 phillips head screwdriver**.
- Remove and set aside the metal panel that was separating the small PCB from the audio amplification PCB.

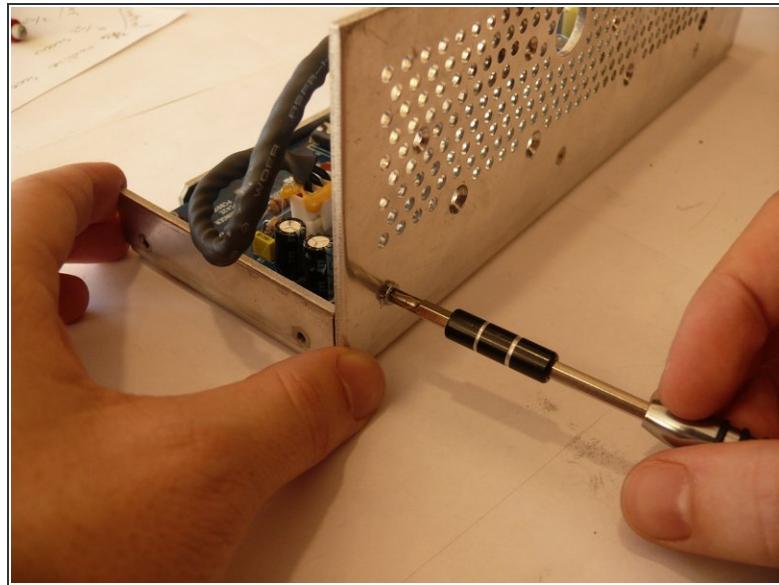
## Step 10



**⚠ Caution:** The circuit board contains many capacitors that could cause serious injury. Use a [capacitor discharge probe](#) to safely rid the capacitors of dangerous charges.

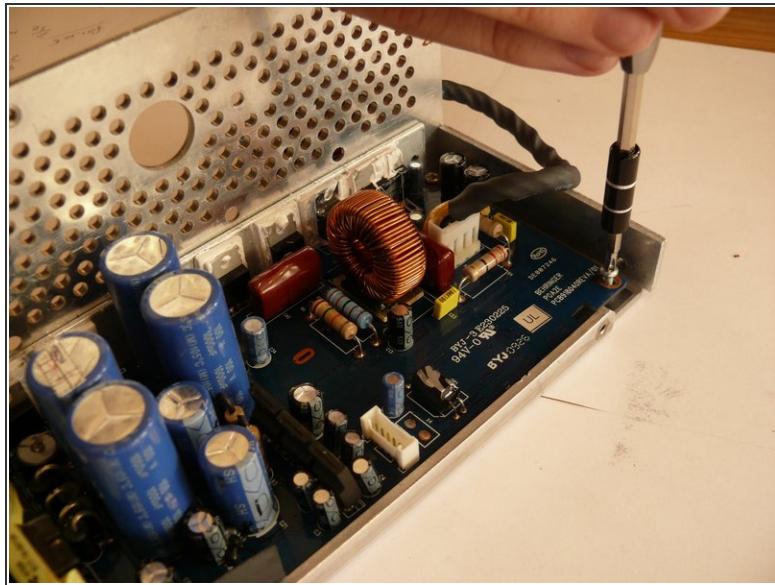
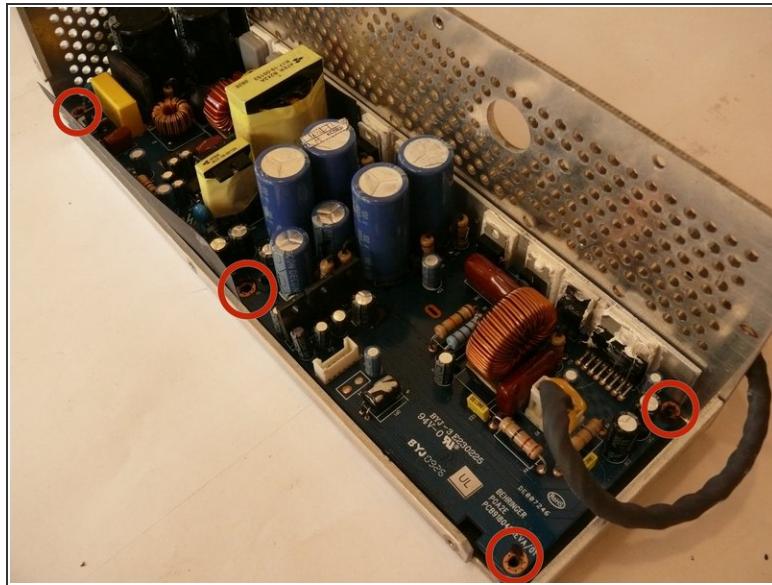
- ⓘ Wearing electrically insulated gloves and rubber soled shoes while working with and near the capacitors ensures greater safety and protection against electric shock. See iFixit's [Project Safety](#) page for additional safety information.
- Note the 4 large **flat head machine screws** which hold the clamps on the opposite side; remove them with a **#2 phillips head screwdriver**.
- ⓘ The clamps are meant to hold the audio amplification PCB's IC's to the common heat sink; they ensure proper contact between the heat sink and the IC's through the ceramic thermal paste.

## Step 11



- Note the 3 **flat head machine screws** holding the heat sink to the metal electronics box; remove them using a **#2 phillips head screwdriver**.
- It may be possible to leave this heat sink connected, but you will have to separate the heat sink from the IC's and be careful not to touch the ceramic thermal paste: its really hard to remove, even with soap!

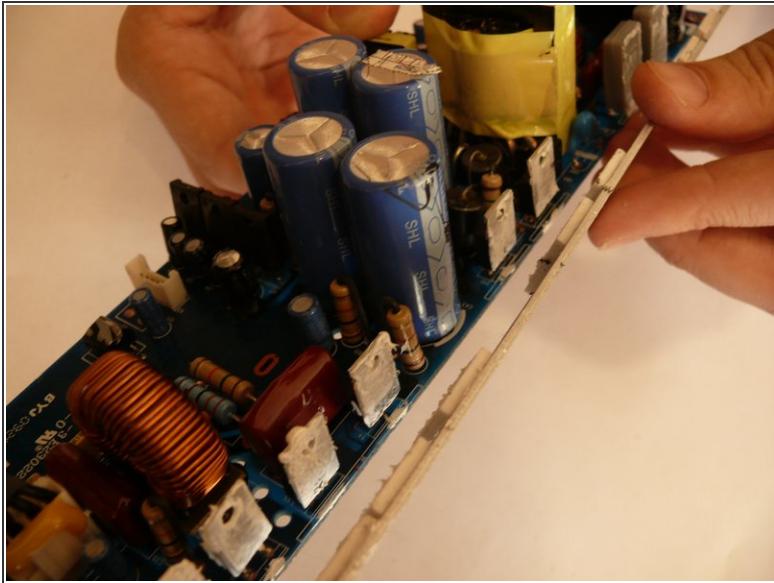
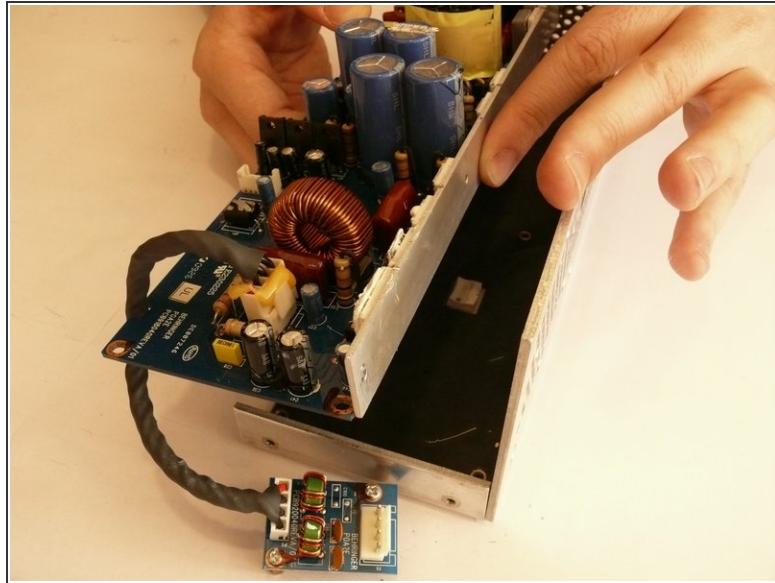
## Step 12



- Note the location of the 4 indicated **machine screws** which hold the audio amplification PCB to the metal electronics box; remove them using a **#2 phillips head screwdriver**.

*(i)* The screws are not actually attached in this photo; sorry!

## Step 13



- Remove the audio amplification PCB from the metal electronics box.
- If you haven't already, remove the heat sink from the IC's, being careful not to get any of the ceramic thermal paste on your skin, as it is difficult to remove, even with soap.

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