

# PowerBook G4 Aluminum 17" 1-1.67 GHz Sound Card Replacement

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#### **INTRODUCTION**

No sound from the headphone jack? Swap out the sound card!



# **TOOLS:**

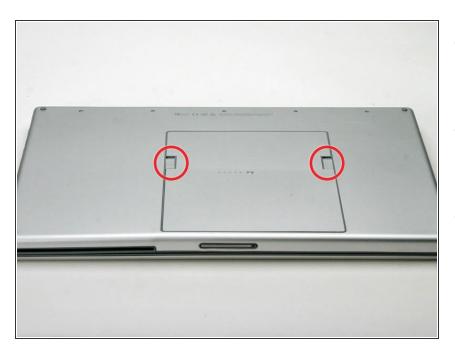
- Phillips #00 Screwdriver (1)
- Spudger (1)
- T8 Torx Screwdriver (1)



### **PARTS:**

- G4 Aluminum 17" 1 GHz Sound Card (1)
- G4 Aluminum 17" 1.33/1.5 GHz Sound Card (1)
- G4 Aluminum 17" 1.67 GHz (LR) Sound Card (1)
- G4 Aluminum 17" 1 GHz Sound Cable
  (1)
- G4 Aluminum 17" 1.33 1.5 GHz Sound Cable (1)
- G4 Aluminum 17" 1.67 GHz (LR) Sound Cable (1)

### Step 1 — Battery



- Orient the computer so that the side with the line of screws on it is away from you.
- Use your thumbs to push both battery release tabs away so that the edge of the battery lifts up.
- Lift the battery out of the computer.

## Step 2 — Upper Case



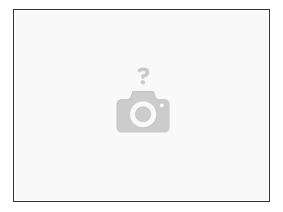
 Remove the three identical Phillips screws from the memory door.



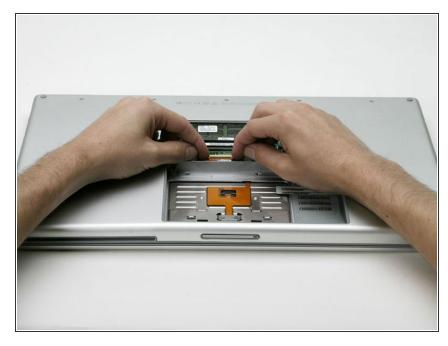
 Lift the memory door up enough so that you can get a grip on it, and slide it toward you, pulling it away from the casing.



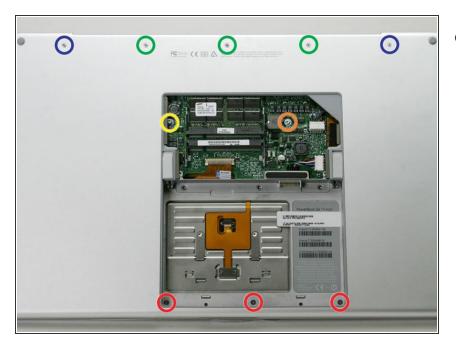
- Release the tabs on each side of the RAM chip at the same time. These tabs lock the chip in place and releasing them will cause the chip to "pop" up.
- Pull the chip directly out from its connectors. If there is a second RAM chip installed, pop it out in the same manner.



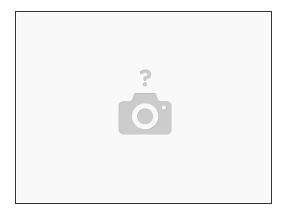
- (i) This is a diagram of the trackpad ribbon clamp connector you will disconnect in the next step.
- 1) With your fingernails, grasp the locking bar on either side slide it a small amount (about 1/16" or 2 mm) towards the battery.
- 2) After disengaging the locking bar, slide the cable out of the connector.



- For this step, you only need to move the connector about 2 mm. Pulling too hard or too far will damage the connector.
- Loosen the trackpad connector by pulling the locking bar toward the battery housing, using the tips of your fingers.
- Slide the trackpad cable out of the loosened connector.
- when reattaching the trackpad ribbon cable, make sure that the orange cable is slid into the connector above the locking bar.
- Note: When reassembling the case, the trackpad cable can get stuck below the slot to the motherboard. It's possible to nudge it out slowly by gently prodding it on either side with a small screwdriver. You don't need to use much force to do this. Eventually it will just pop back out and you can reconnect as per the instructions above. Also, note that the locking bar comes loose so if you see a little piece of plastic lying around when reassembling, that's what it is.:)

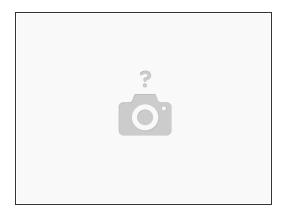


- Remove the following 10 screws from the bottom case:
  - Three 1.7 mm Phillips from the front edge of the battery compartment.
  - One 3.9 mm T8 Torx to the right of the memory card.
  - One 6.9 mm T8 Torx at the left edge of the memory compartment.
  - Three 12.4 mm fully threaded Phillips from the center of the row of screws along the back edge of the case.
  - Two 15.1 mm 2.5 mm threaded Phillips, one from either end of the row of screws along the back edge of the case.



- Turn the computer over and rotate it so that the DVI port faces you.
- Remove the four identical Phillips screws spread along this edge of the case.

## Step 9



 Turn the computer 180 degrees so that the power receptacle faces you, and remove the four Phillips screws (identical to those in the last step).

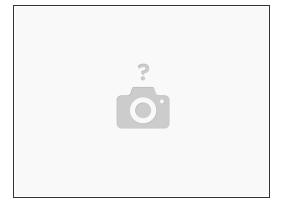


- Open the computer and turn it so that the screen faces you.
- Pull the upper case off, lifting from the back, and working around the edges.



- Use a spudger to loosen the casing if it sticks.
- Once the casing is entirely free, lift it off of the computer.

### Step 12 — Hard Drive



- ↑ The sound ribbon cable is very fragile. Be especially careful when disconnecting the cable from the logic board.
- Disconnect both ends of the orange sound ribbon cable that crosses over the hard drive, removing tape as necessary.

## Step 13



 Disconnect the orange hard drive ribbon from the logic board.

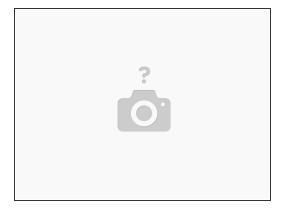


- Remove the four T8 (lower right screw is 3.8 mm, the other 3 are 11 mm) Torx screws from the corners of the hard drive bracket.
- i Make sure you're removing the screws from the hard drive bracket, not the hard drive itself.



- Deroute hard drive ribbon from beneath the speaker cable.
- Lift the hard drive and its attached cable out of the computer.

## Step 16 — Sound Card



- Disconnect the sleep light connector from the sound board.
- Disconnect the speaker connector from the sound board.

# Step 17



 Remove the two T8 Torx screws from the sound board.



 Grasp the sound card near the ports and pull it out, rotating it clockwise to work around obstacles.

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