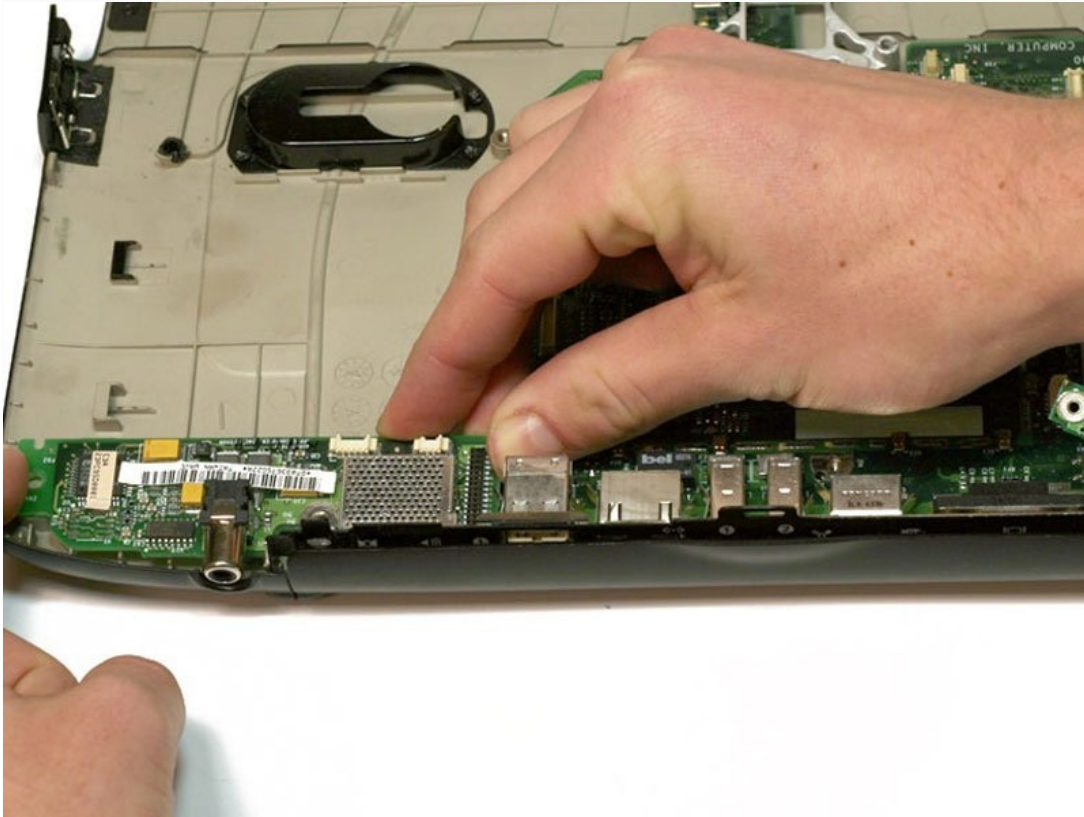# PowerBook G3 Pismo Sound Card Replacement

Tripped over your power cord? Well, at least...

Written By: iRobot

INTRODUCTION

Tripped over your power cord? Well, at least you don't have to replace the entire logic board.
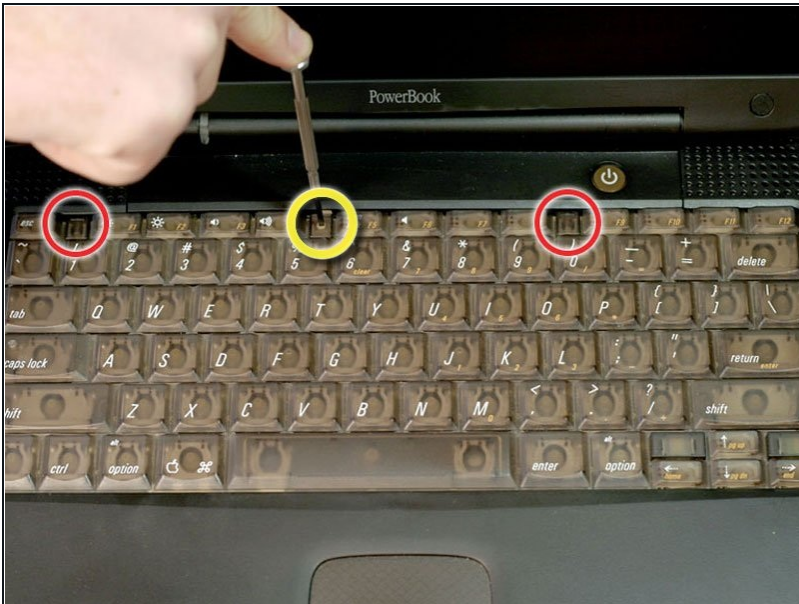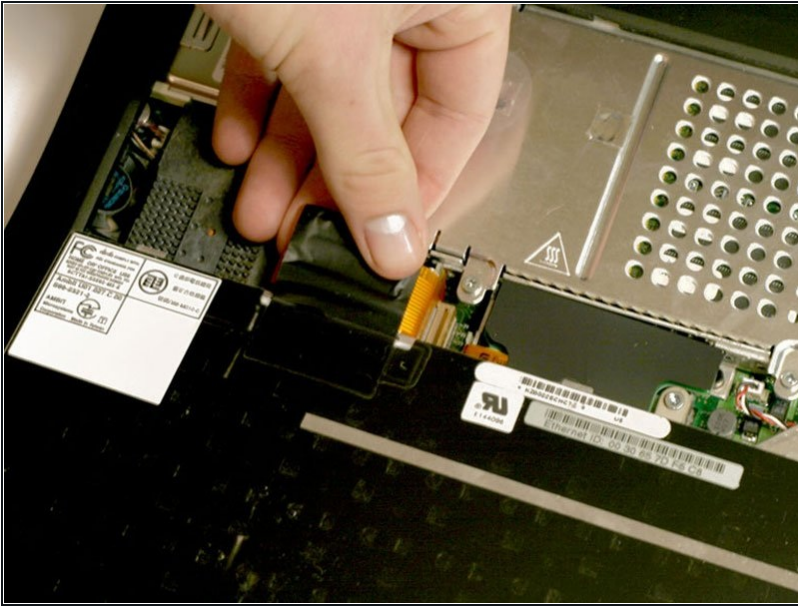

Step 1 — Keyboard

- Turn the keyboard locking screw so that it is parallel to the space bar.

- Pull the keyboard release tabs toward you and lift up on the keyboard until it pops free.

- Lift the keyboard out by pulling it up and away from you. Rest the keyboard, face down, on top of the track pad.
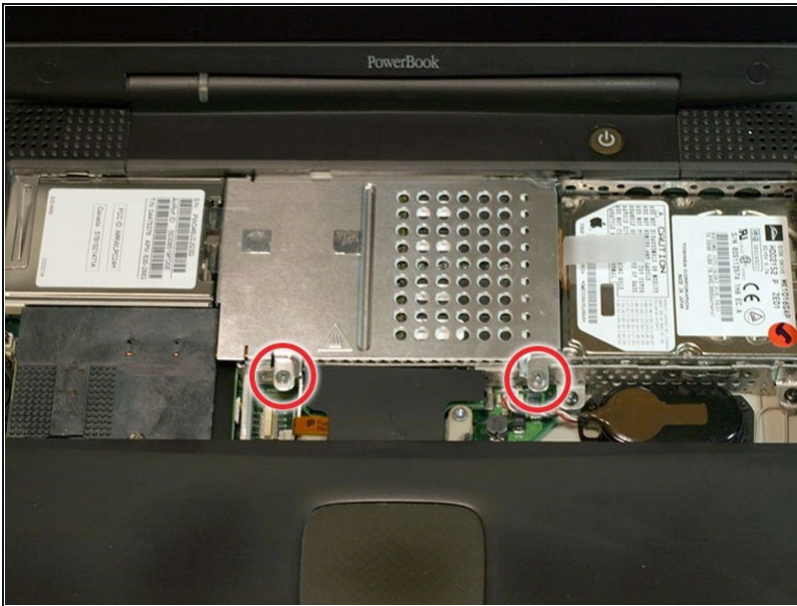
Step 2

- Pull the keyboard ribbon straight up from the logic board. Place the keyboard aside.

- ⓘ The connector may be tight. Gently rock the connector from side to side while pulling directly upward to free it. You can use this technique on many of the cards and cables you'll be disconnecting.

- ⓘ Make sure you have removed the laptop battery and CD/DVD modules from the expansion bays before proceeding.

Step 3

- Your laptop should look approximately like this.

Step 4 — Heat Shield

- Remove the two silver Phillips #1 screws that attach the heat shield to the internal metal framework.

- Lift the heat shield up and pull it toward you.

Step 5

- Your laptop should look approximately like this.

Step 6 — Airport Card

ⓘ Skip this step if your computer does not have an Airport card installed.

● Firmly grasp the plastic tab attached to the Airport card and pull up and then to the right.

ⓘ The Airport card is still attached to the antenna cable, so don't just yank it out of the slot.

Step 7

● Disconnect the antenna cable from the Airport card.
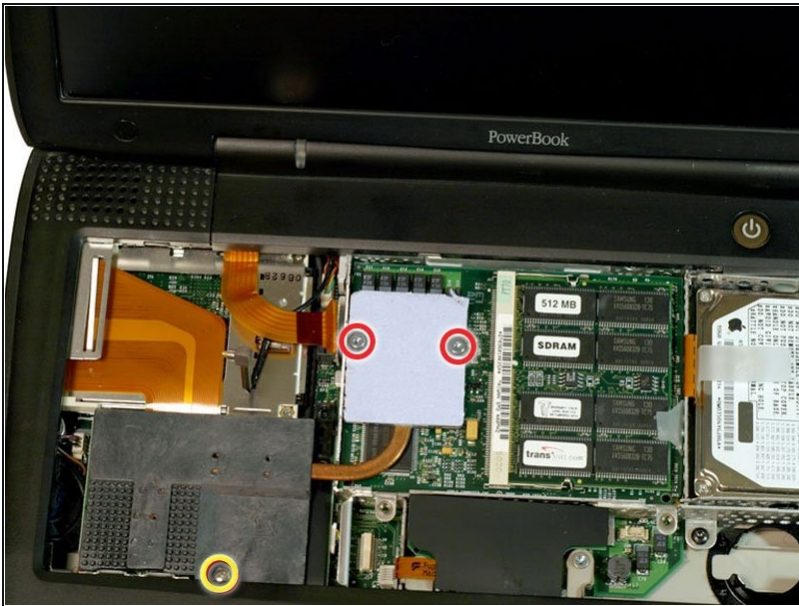
Step 8 — PRAM Battery

- Pull the battery cable directly up from the logic board.

- Remove the battery from its holder by pulling up and to the left.
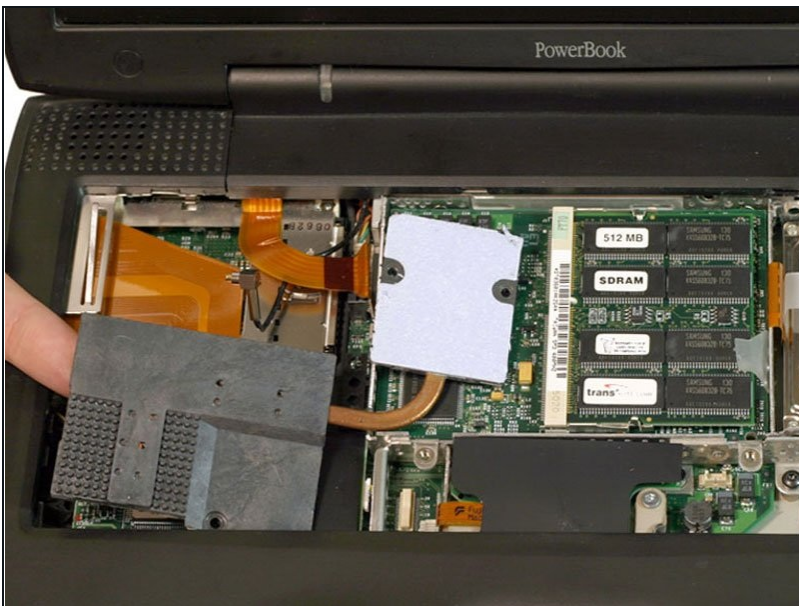
Step 9

- Your laptop should look approximately like this.

Step 10 — Heat Sink

- Remove the long silver Phillips #1 screw from the heat sink.

- Remove the two T8 Torx screws that attach the heat sink to the processor.

Step 11

- Lift the heat sink up from the left side and pull it out.

- ⓘ If you need to mount the heat sink back into the laptop, we have a thermal paste guide that makes replacing the thermal compound easy.

Step 12 — Processor

- Grasp the plastic tab on the processor's right side and pull it directly up.

- (i) Some processors may be missing the plastic pull tab. In this case, we suggest using a non-metal tool to gently pry up the processor. Slip the tool's thin edge under the front right corner of the processor and carefully pry it up.

Step 13

- Your laptop should look approximately like this.

Step 14 — Modem

- Remove the black Torx screw from the right side of the modem.

- Remove the small black plastic rectangle with four holes.

Step 15

- Use the tips of your fingers, a spudger, or a flat non-metal tool to get under the modem's edge and pry it up from its socket.

Step 16

- Disconnect the cable from the right side of the modem.

Step 17 — Hard Drive

- Grasp the orange cable at the left end of the hard drive and disconnect it from the logic board.

- ⓘ Try to grasp the cable on the plastic connector rather than on the flexible cable section.
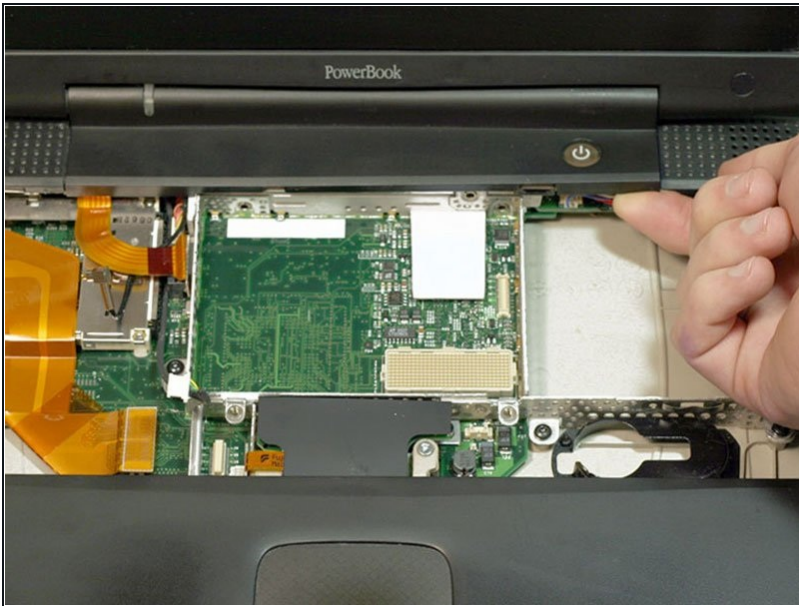
Step 18

- Grasp the plastic tab and pull the hard drive up and to the left, making sure that the metal bracket doesn't catch on the black plastic casing.
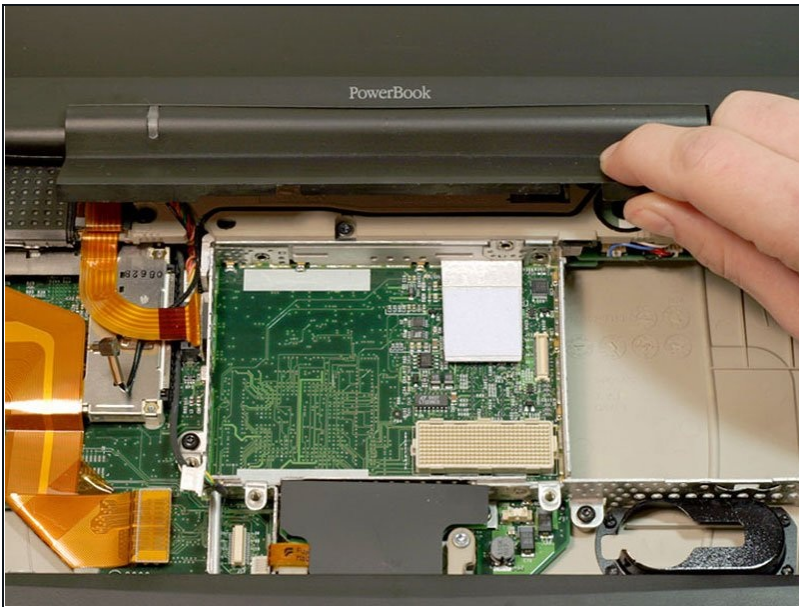
Step 19

- Your laptop should look approximately like this.
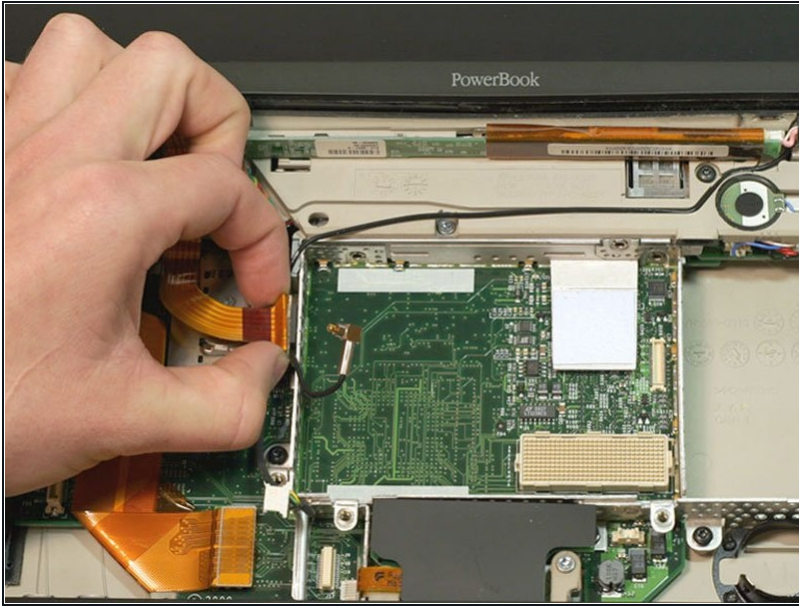
Step 20 — Clutch Cover

- Push the display back so that it lies flat.

- Slip your index finger or a nylon tool under the clutch cover near the power button and pull gently upward until you feel it come free.

- Repeat the previous step on the left side.

Step 21

- Lift the clutch cover up and off, rotating it toward yourself.
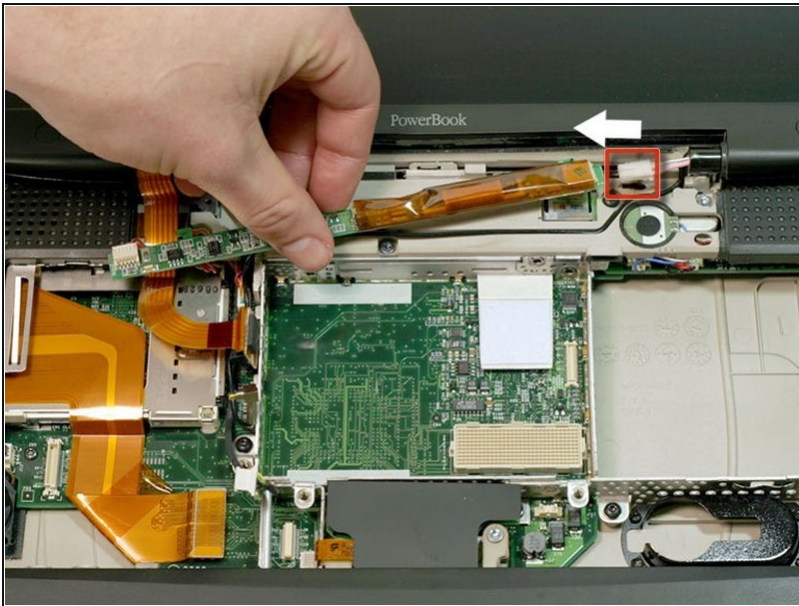
Step 22 — Inverter

- Grasp the orange display data cable and disconnect it from the logic board.
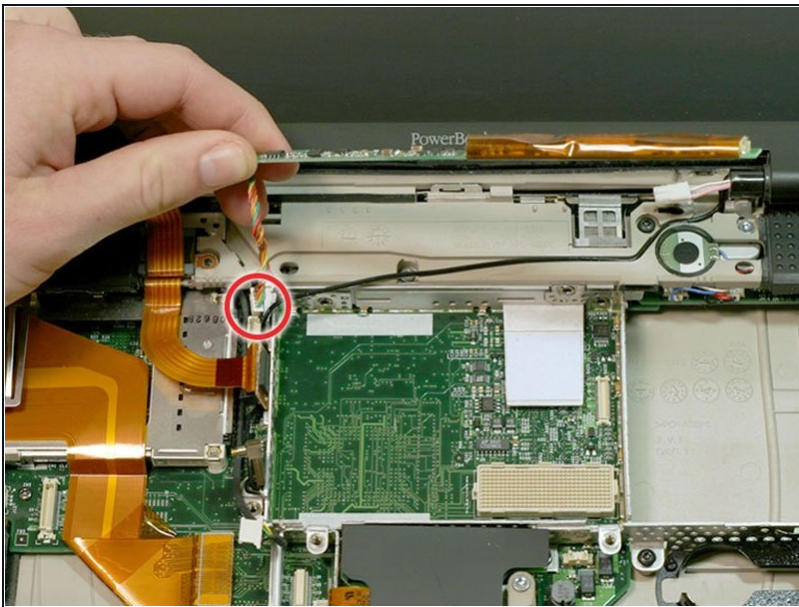
Step 23

- Remove the single black Torx screw that fastens the display cable to the plastic casing.

- Grasp the thin display inverter board at its left end; lift up and rotate toward yourself.

- ⓘ There are two tabs that hold the display inverter in place; these are what you need to get past in order to pull the board free.

Step 24

- Disconnect the white inverter cable from the right end of the board
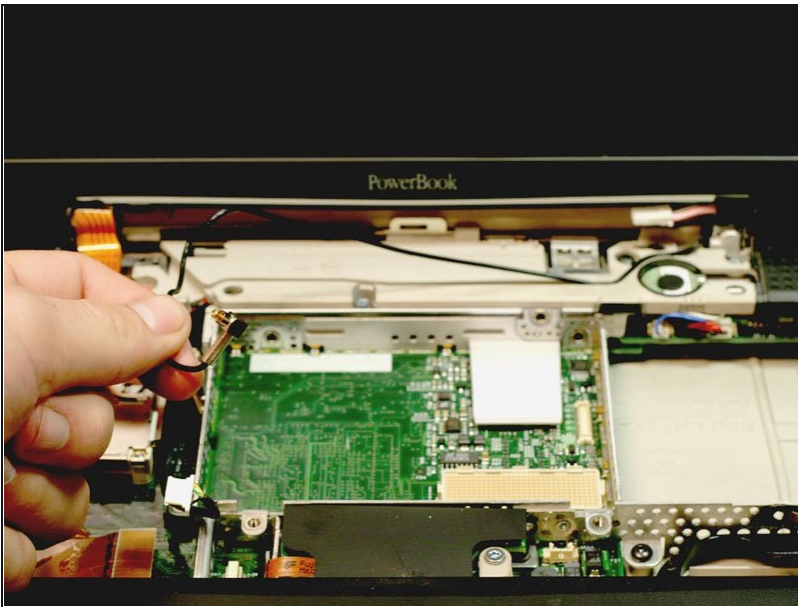
Step 25

- Disconnect the inverter plug, pulling directly up from the logic board.
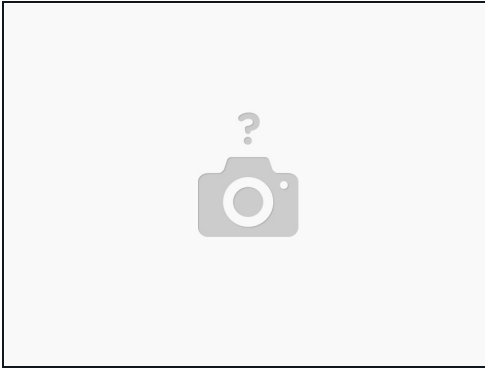
Step 26 — Display

- Turn the laptop around so that its back faces you.

- Open the port door located at the back of the laptop.

- Remove the four black Torx screws.

Step 27

- Returning to the front, pull the black Airport antenna up from its recessed housing.
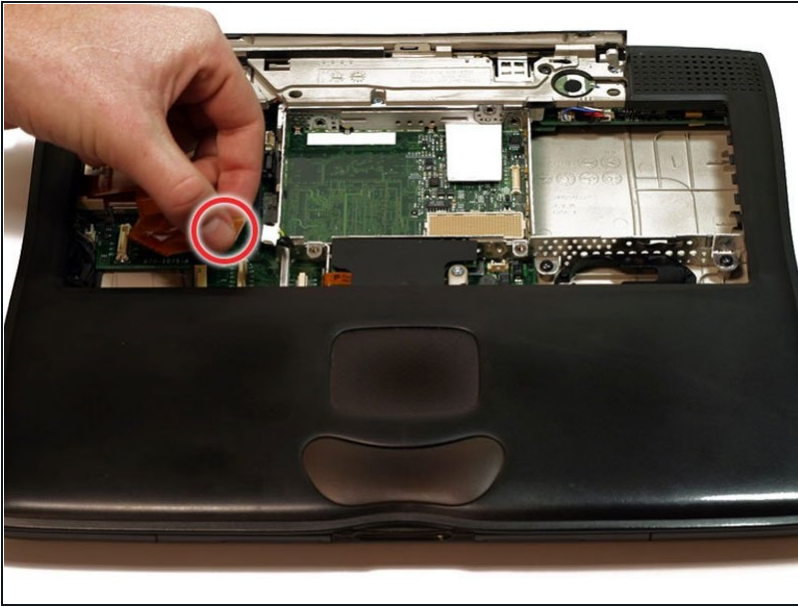
Step 28

- Hold the display on both sides and pull directly up until its hinges are free of their mounts.
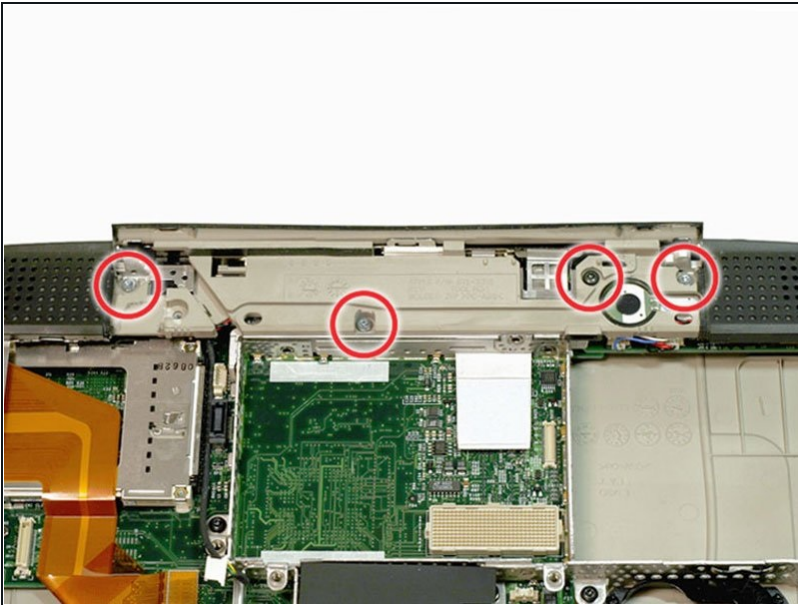
Step 29

- Your laptop should look approximately like this.
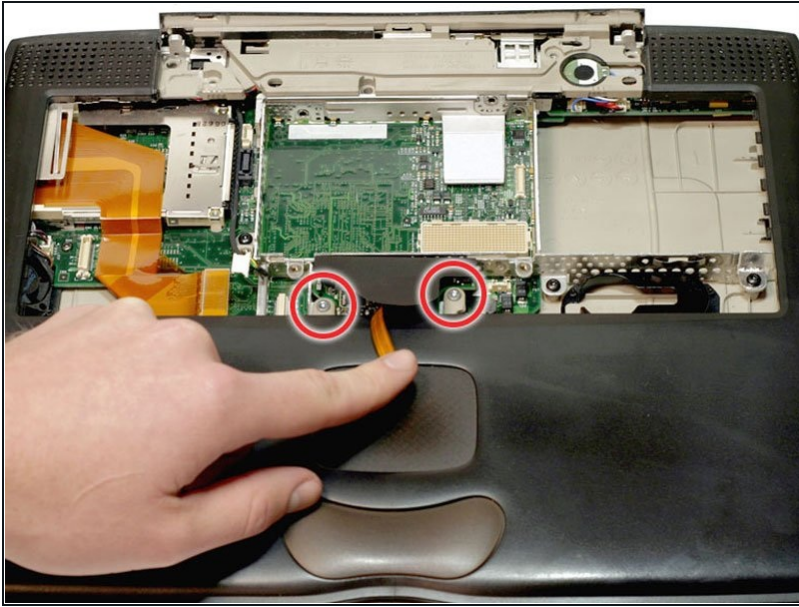
Step 30 — Upper Case

- Disconnect the wide orange cable that connects the airport card slot to the logic board.

Step 31

- Remove the three long silver and one short black Torx screws from the beige plastic casing.
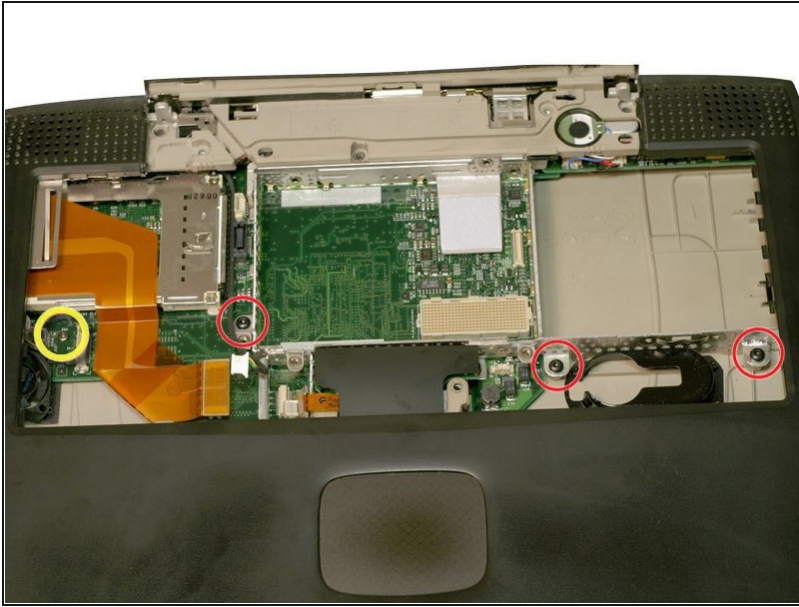
Step 32

- Slide the thin plastic shield away from you, out from under the black casing.

- Disconnect the newly revealed thin orange ribbon from the logic board.

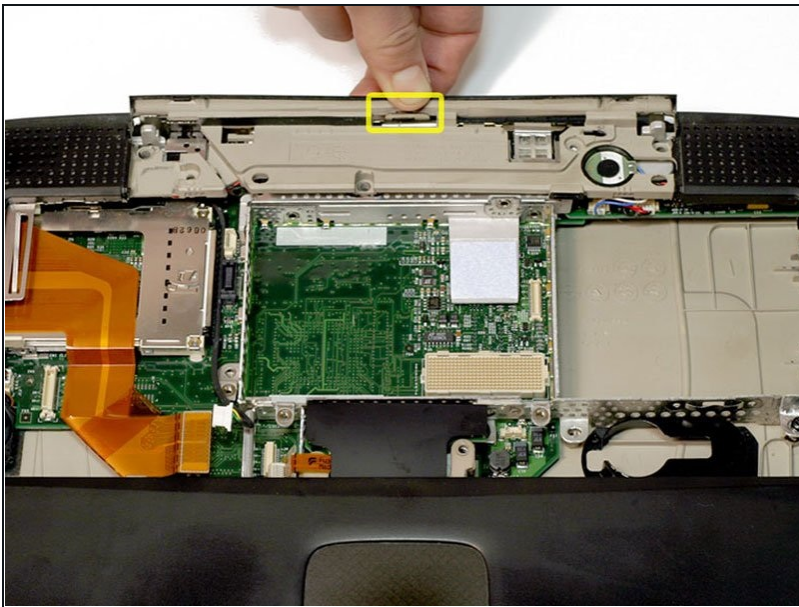- Remove the two long silver Torx screws.

Step 33

- Turn the laptop over.

- Remove the five short Torx screws from the bottom casing.

- Remove the two long Torx screws in the front left and front right corners; make sure to put these back in the proper place when reassembling.
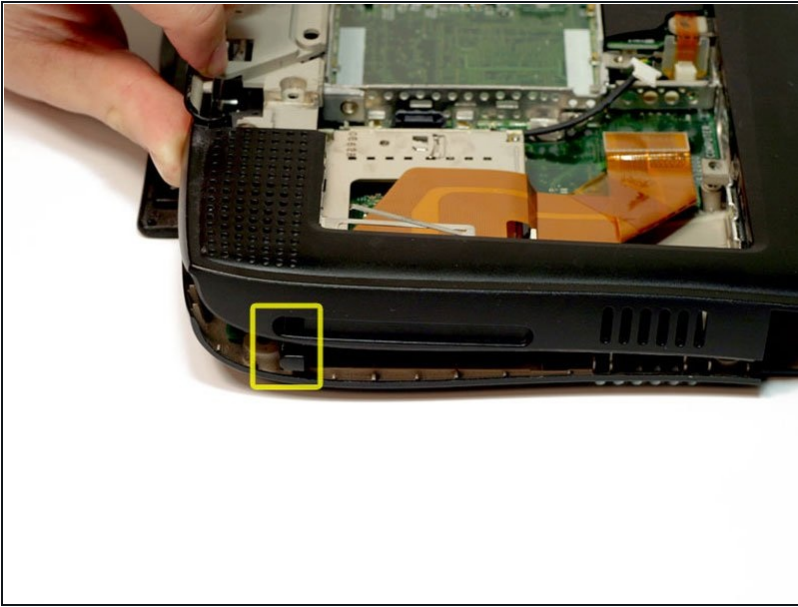
Step 34

- Turn the laptop back over.

- Remove three short black Torx screws from the metal frame.

- Remove the small Torx screw to the far left that fastens the logic board to the casing.
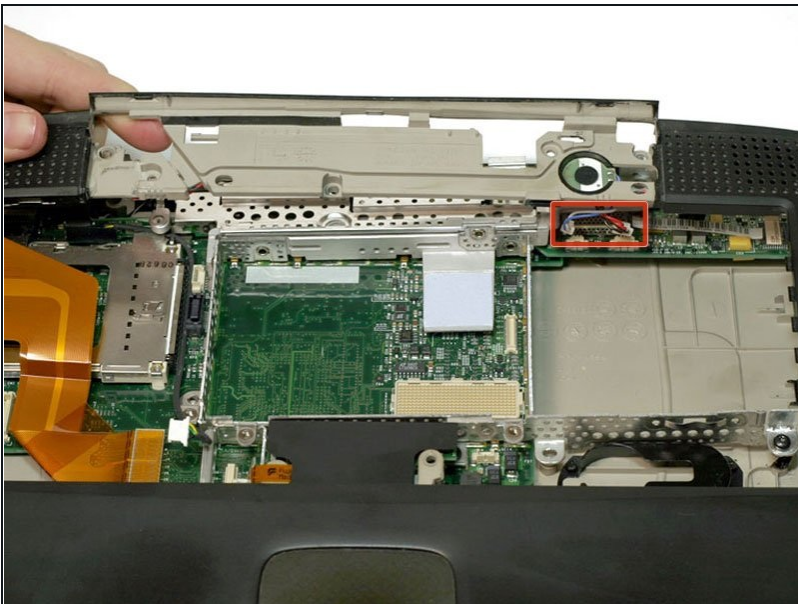
Step 35

- Grasp the upper plastic casing where it locks into the internal frame and pull back. When the plastic tab has cleared the slot that the casing locks into, pull up enough to keep it from locking back into place.

Step 36

- The PC card eject button on the laptop's left side prevents the upper casing from lifting up. In order to bypass the button, push it in far enough so that you can pull the upper casing's left side out and up beyond the button.
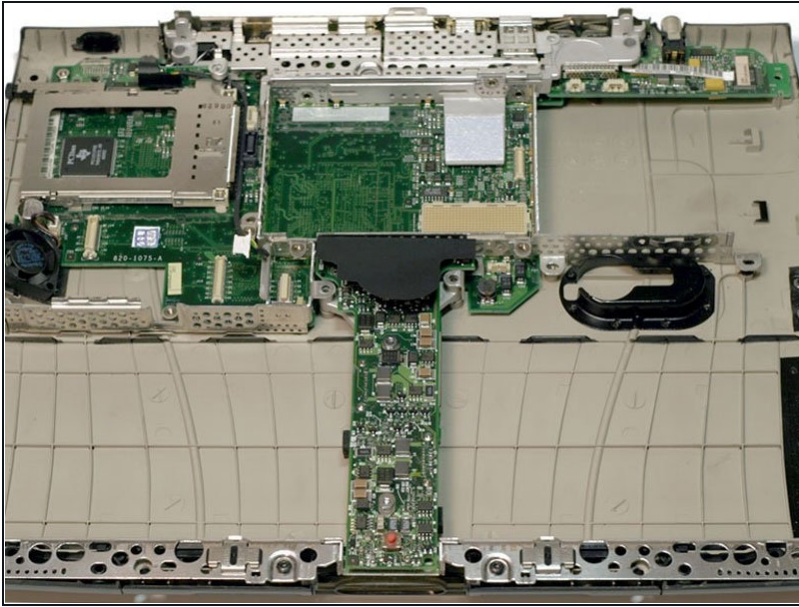
Step 37

- Lift the left side of the case partly up so that you can access and disconnect the audio in/out cables from the sound card in the upper right of the case.

- ⚠ Be careful not to lift the upper casing too far before you have disconnected the audio in/out cables or you may damage the sound card.
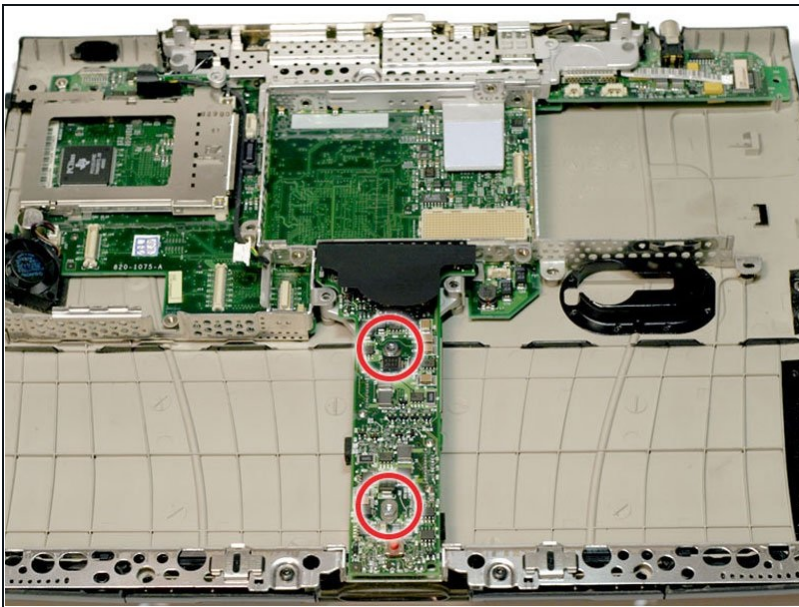
- Remove the upper casing. Note that there are two tabs on the laptop's front that often cause the upper case to stick.
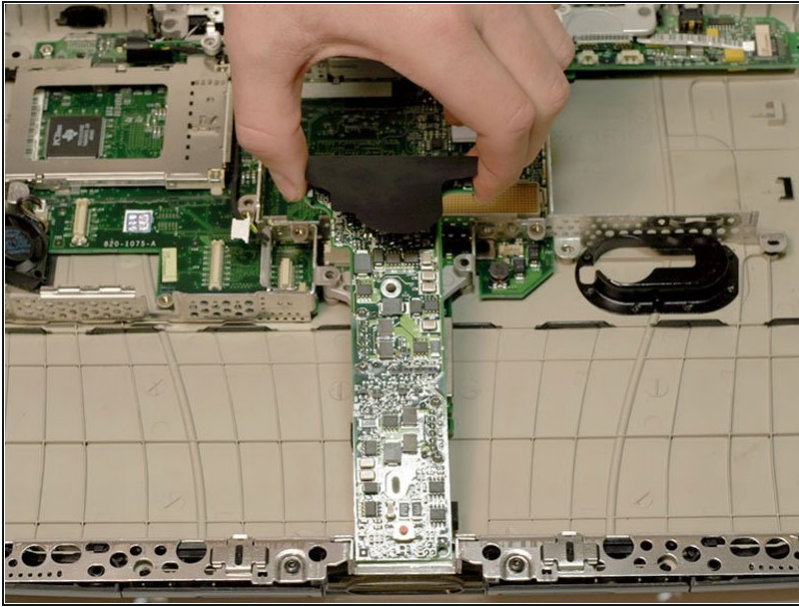
Step 38

- Your laptop should look approximately like this.
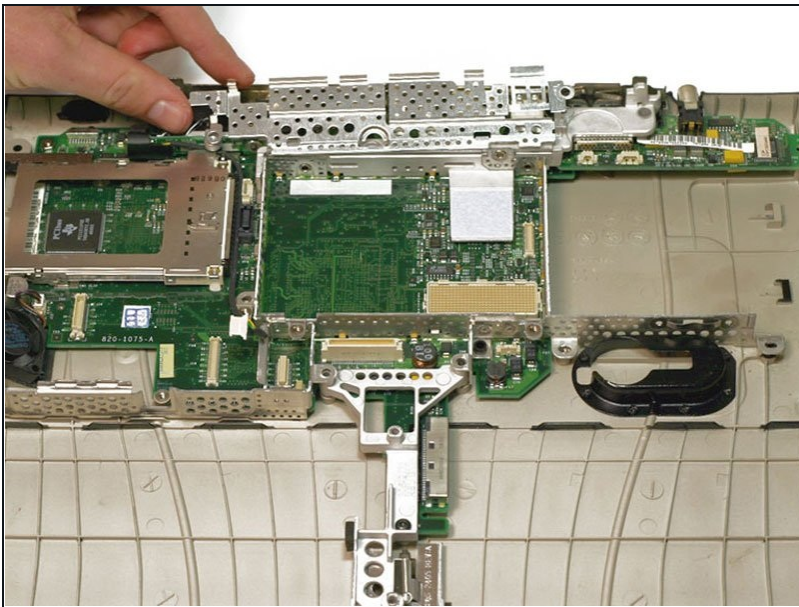
Step 39 — Power Card

- Remove the two long silver Torx screws from the power card in the center of the laptop

Step 40

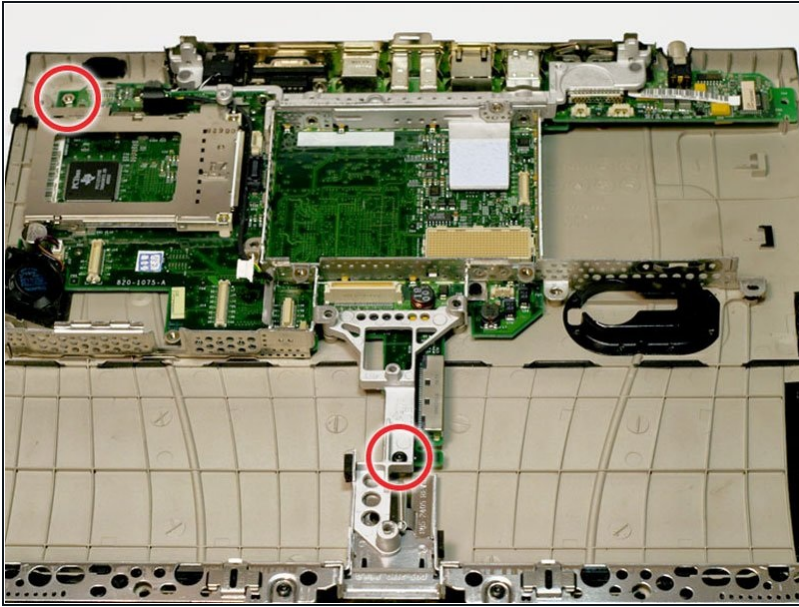- Grasp the power card near the black shield and lift up.

Step 41 — I/O EMI Shield

- Gently clasp the left side of the metal shield between your thumb and forefinger and carefully pull up and toward the front of the laptop.

⚠ Be very careful when removing the leftmost clip on the EMI Shield from its slot, as this piece will bend very easily. This is one of the easiest parts to damage in the Pismo.
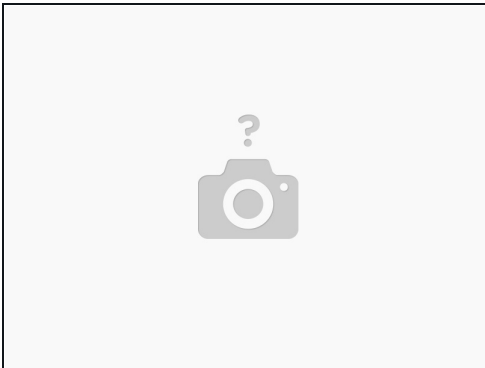
Step 42 — Framework

- Remove the single short black Torx screw anchoring the metal framework to the lower casing.

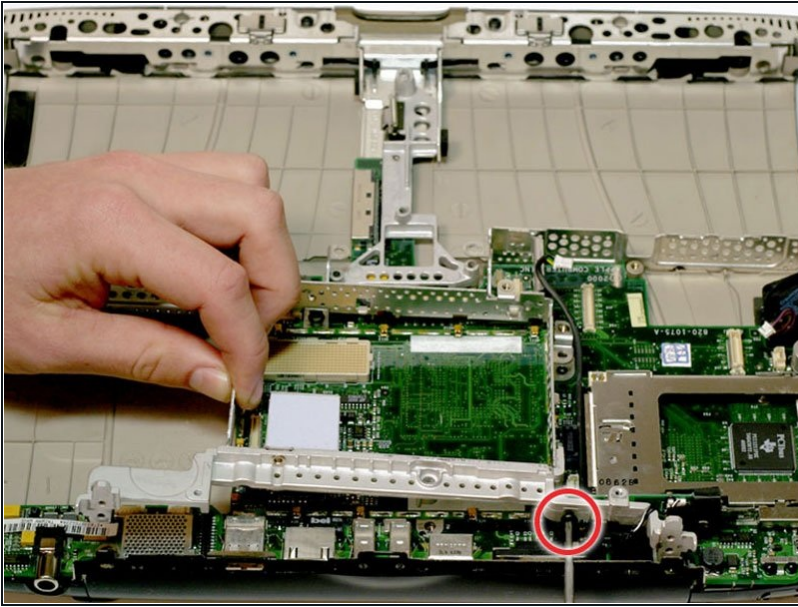- Use needle-nose pliers or a five millimeter nut driver to remove the small metal nut from the bolt.

⚠ If you're using pliers, be extremely careful not to let them slip or you may damage the logic board.
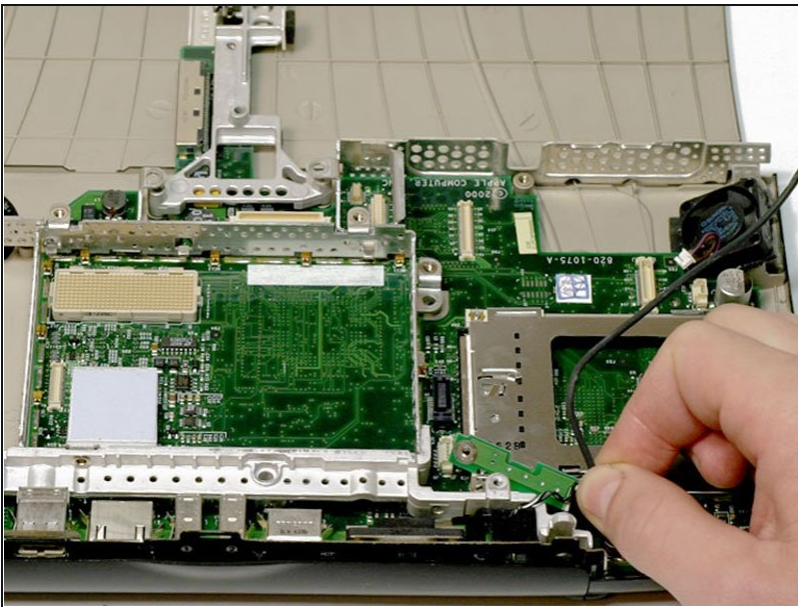
Step 43

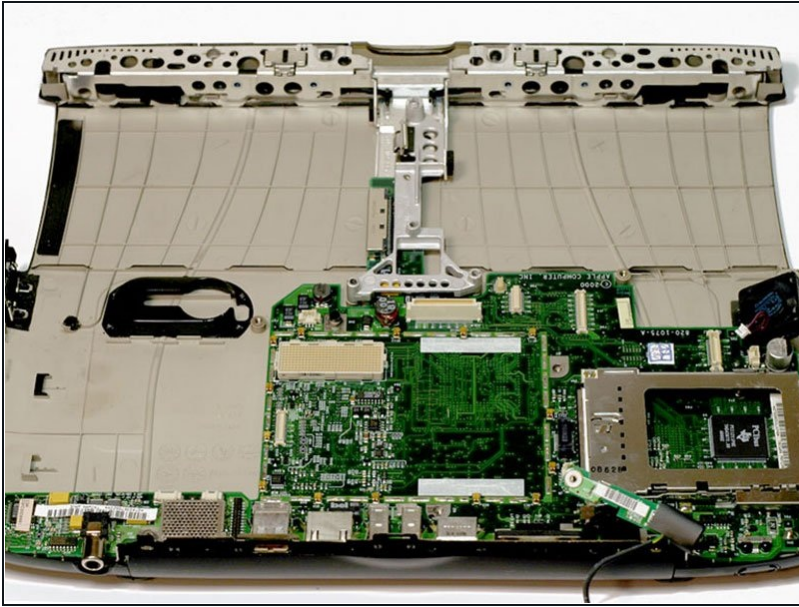- Disconnect the fan cable from the left side of the logic board.

Step 44

- Turn the laptop so that its back is facing you.

- Lift up on the left side of the metal framework and remove the single black Torx screw.
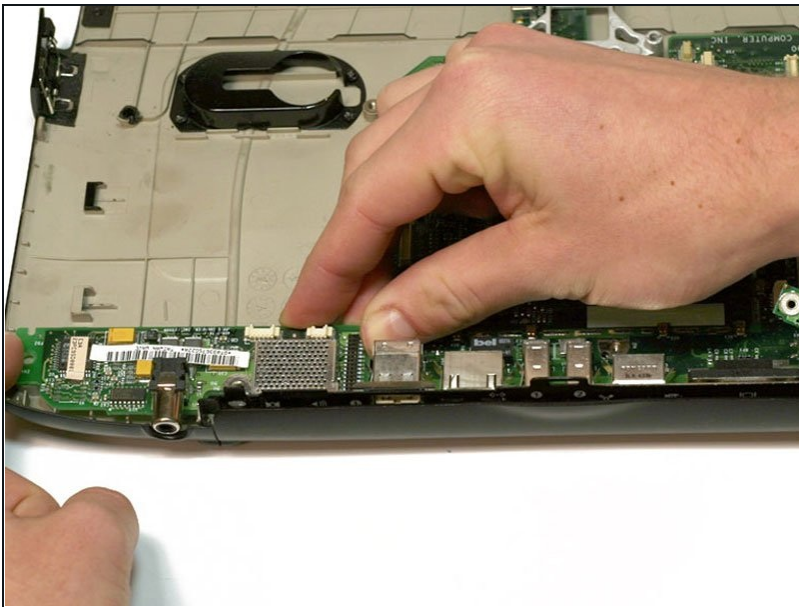
Step 45

- Grasp the EMI Filter by its black end and rotate it toward the front of the laptop. Pull the filter up and beyond the screw bracket.

- Remove the metal framework.

Step 46

- Your laptop should look approximately like this.

Step 47 — Sound Card

- Lift the sound card out by pulling up on both the right and left sides.

- ⓘ If the sound card sticks, pull the black metal wall of the casing toward you while lifting the right side of the sound card up.

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