

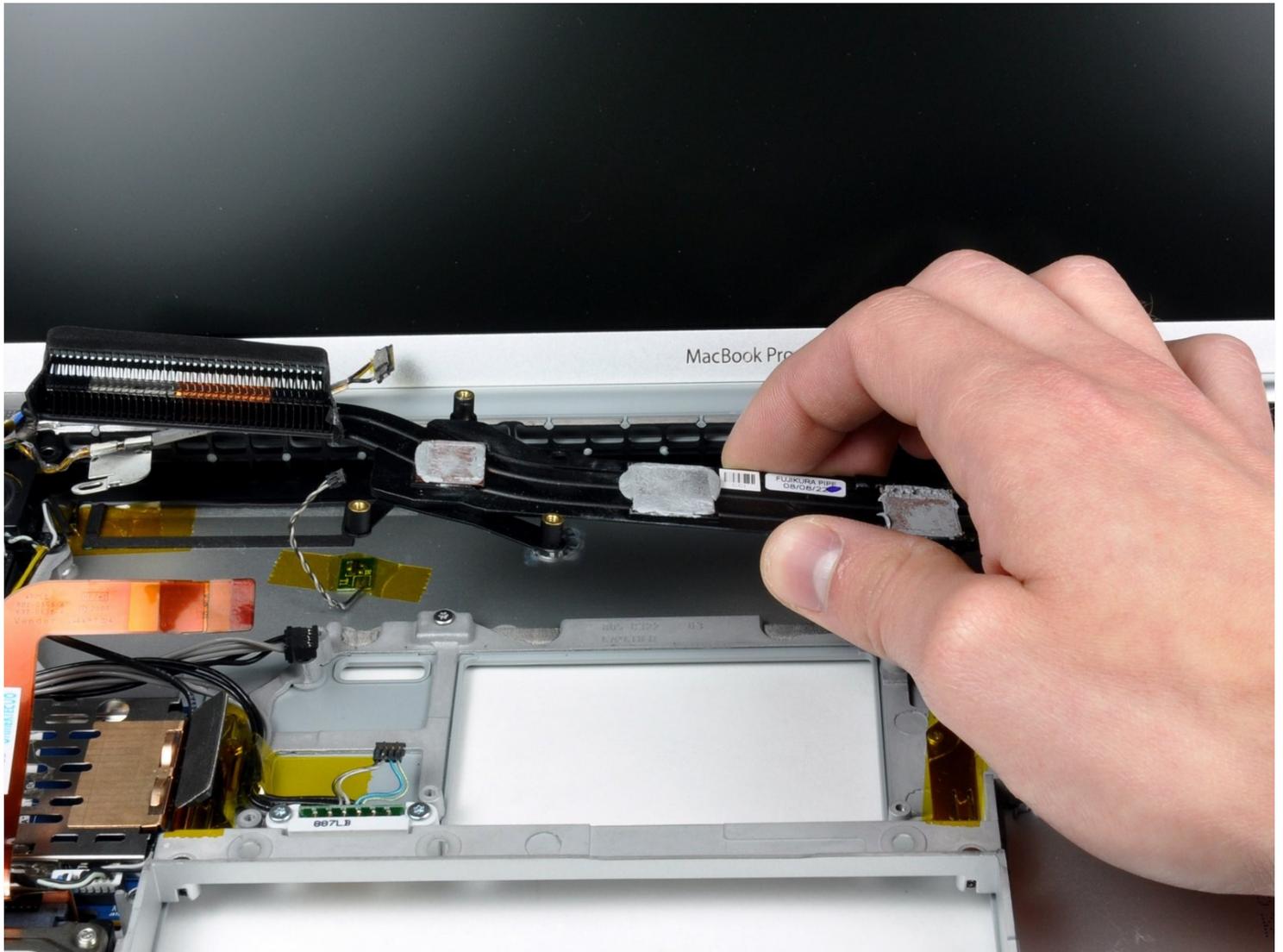


MacBook Pro 15" Core 2 Duo Models A1226 and A1260

Lower Case Replacement

Replacing the metal bottom case.

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INTRODUCTION

Replacing the metal bottom case.

TOOLS:

- 4mm Nut Driver (1)
- Arctic Silver ArctiClean (1)
- Arctic Silver Thermal Paste (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)
- T6 Torx Screwdriver (1)

PARTS:

- MacBook Pro 15" (Model A1260) Lower Case (1)
- MacBook Pro 15" (Model A1226) Lower Case (1)

Step 1 — Battery



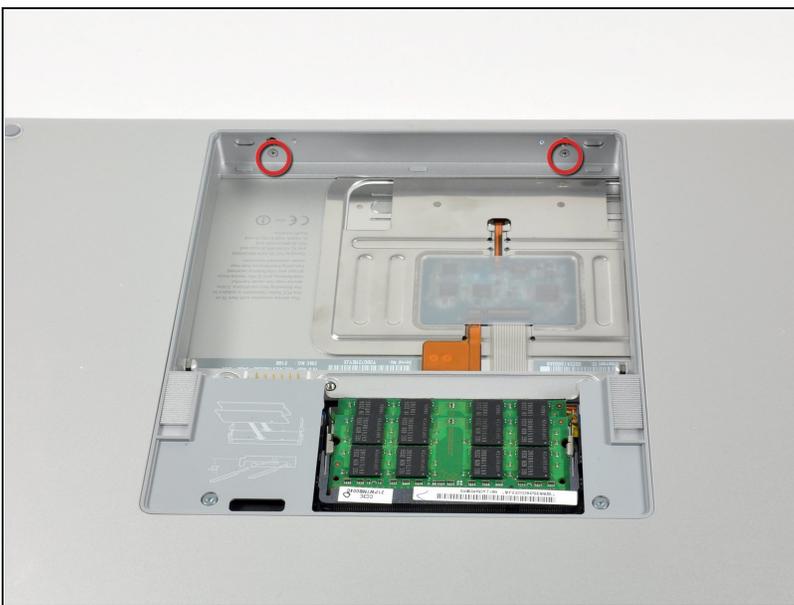
- Use your fingers to push both battery release tabs away from the battery, and lift the battery out of the computer.

Step 2 — RAM Shield



- Remove the three identical 2mm Phillips screws from the memory door.
- Lift the memory door up enough to grip it and slide it toward you, pulling it away from the casing.

Step 3 — Upper Case



- Remove the two 2.8 mm Phillips screws in the battery compartment near the latch.

Step 4



- Remove the following 6 screws:
 - Two 10 mm T6 Torx screws on either side of the RAM slot.
 - Four 14.5 mm Phillips screws along the hinge.

Step 5



- Remove the four 3.2 mm PH00 Phillips screws on the port side of the computer.

Step 6



- Rotate the computer 90 degrees and remove the two 3.2 mm Phillips screws from the rear of the computer.

Step 7



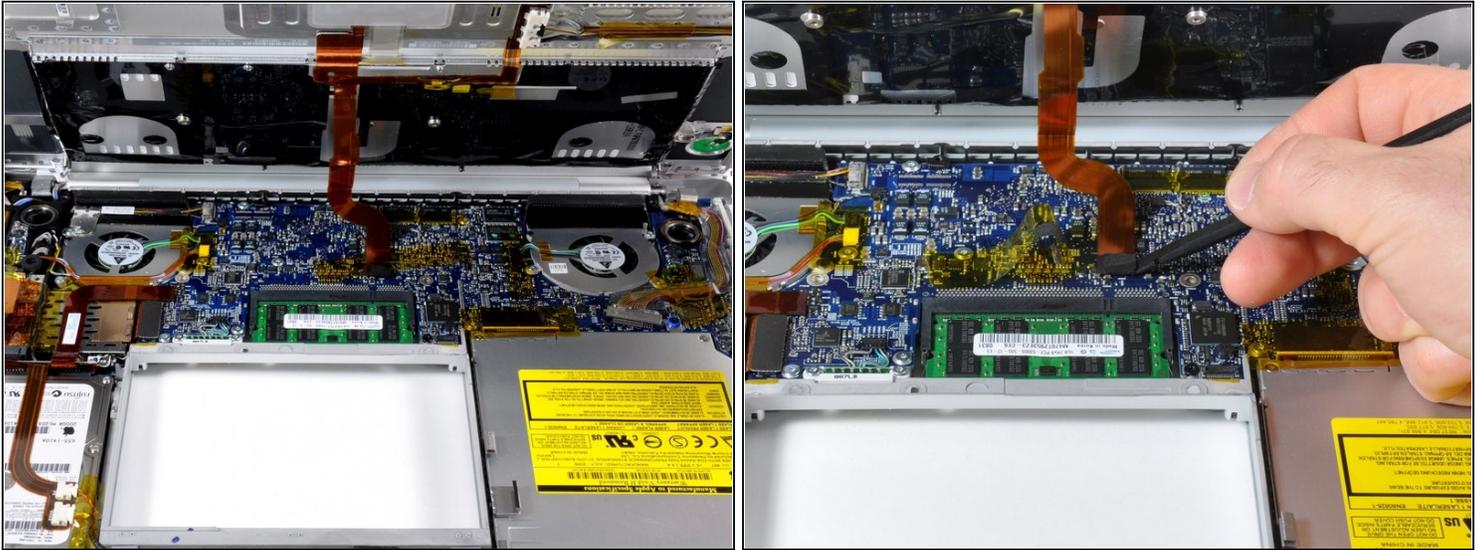
- Rotate the computer 90 degrees again and remove the four 3.2 mm Phillips screws from the side of the computer.

Step 8



- ⓘ Do not yank the upper case off quickly. The case is attached to the logic board via a ribbon cable.
- Lift up at the rear of the case and work your fingers along the sides, freeing the case as you go. Once you have freed the sides, you may need to rock the case up and down to free the front of the upper case.
- There are four plastic clips above the DVD slot, and another above and to the left of the IR sensor. These clips can be very difficult to disengage without prying. They can also be difficult to re-engage during reassembly.
- ✦ **Reassembly Tip:** Press down firmly on the tip of the top case above the location of each clip until you hear a *snap* to reseat them in their slots.
- ✦ **Reassembly Tip:** The two center DVD clips will rarely snap back into place properly without help, and downward pressure will instead simply deform the frame around the DVD slot. Support the frame by inserting a plastic spudger into the DVD slot directly under the clip location until it is snug, then press down until you hear the *snap*.

Step 9



- Disconnect the trackpad and keyboard ribbon cable from the logic board, removing tape as necessary.
- ⓘ Note: It is possible to replace the hard drive without disconnecting the keyboard from the chassis, but it will need to be held upright to keep it out of the way, while still allowing you both hands to work on the drive removal.
- ⓘ Be careful when removing the keyboard-trackpad ribbon cable to ensure that the rear of the upper case is disengaged from the area near the hinge. It is easy to accidentally bend the screw receivers on either side of the keyboard.
- Remove the upper case.

Step 10 — Optical Drive



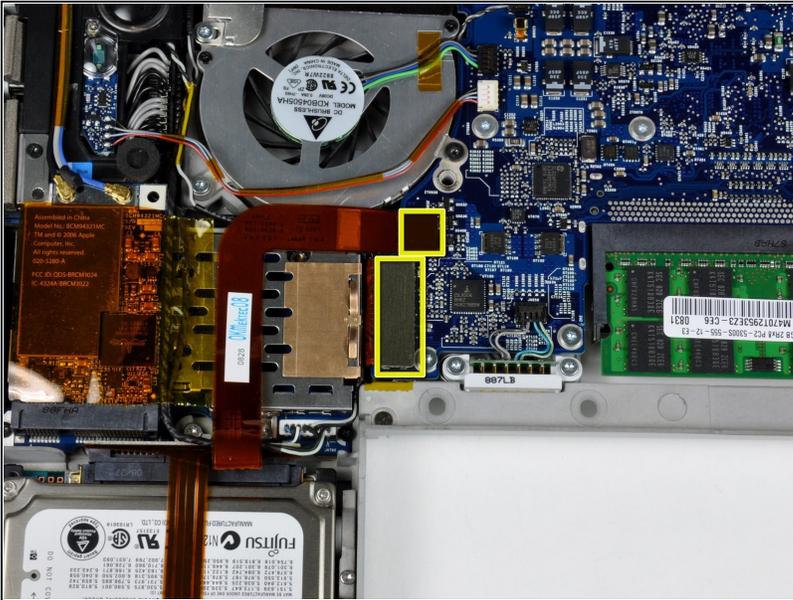
- Use the flat end of a spudger to disconnect the orange SuperDrive ribbon cable from the logic board, removing tape as necessary.

Step 11



- Remove the following 4 screws:
 - Two 3.3 mm silver Phillips screws on either side of the SuperDrive.
 - One 4.7 mm silver T6 Torx screw from the top left corner of the drive.
 - One 6.2 mm black Phillips screw at the top right corner of the drive.
- Lift the optical drive up and out of the computer.

Step 12 — Logic Board



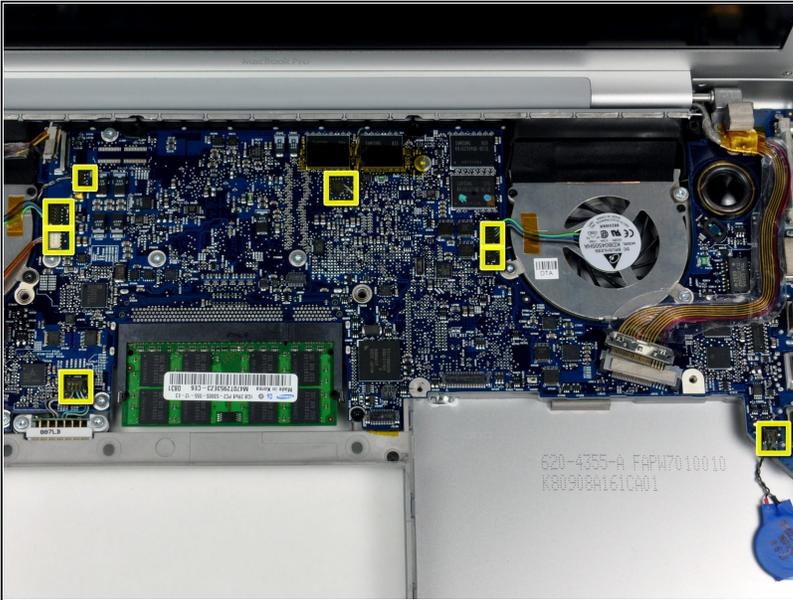
- Disconnect the hard drive and ExpressCard connectors from the left side of the logic board.

Step 13



- Disconnect the iSight and display data cables from the logic board by sliding them straight back out of their connectors, removing tape as necessary.

Step 14



- Disconnect the eight indicated connectors by placing a spudger beneath the wired side of each one and lifting up.

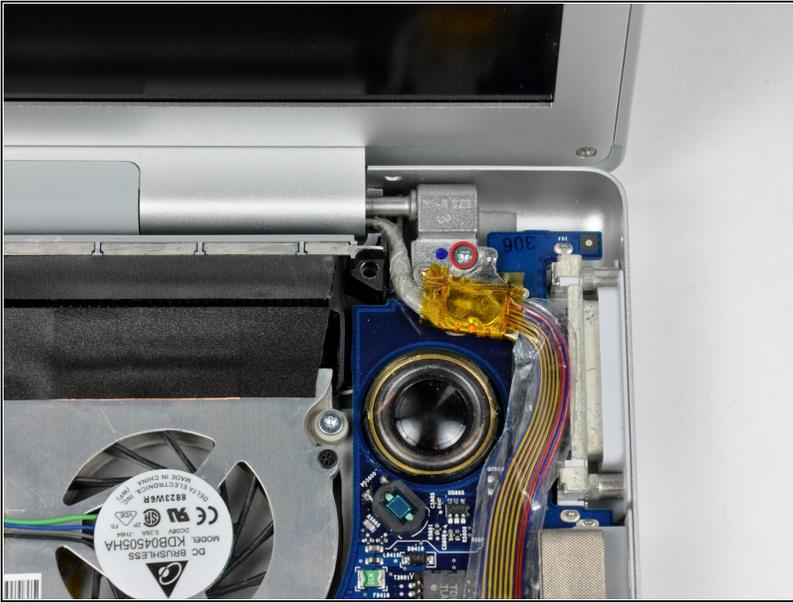
⚠ Use care when disconnecting some of the smaller connectors. A forceful prod with the spudger may accidentally break them off the logic board.

Step 15



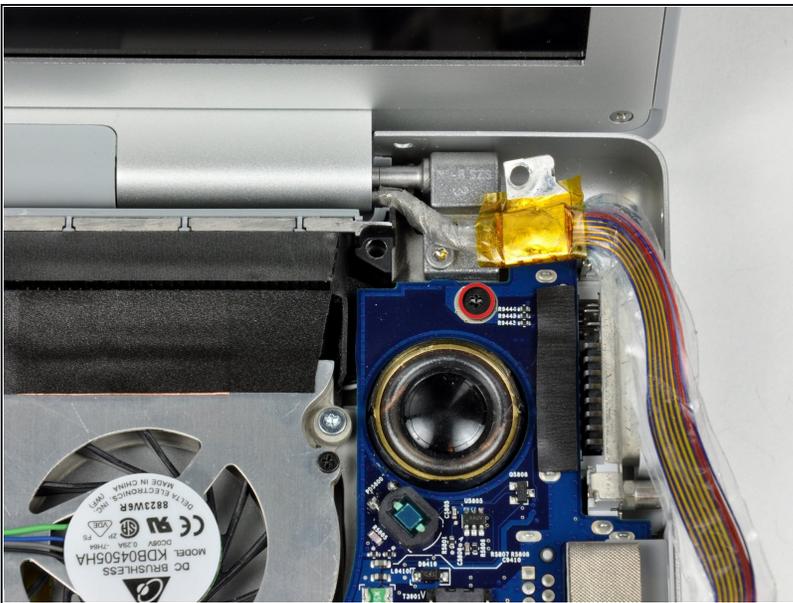
- Remove the foam bumper from the top of the right hinge of the display.

Step 16



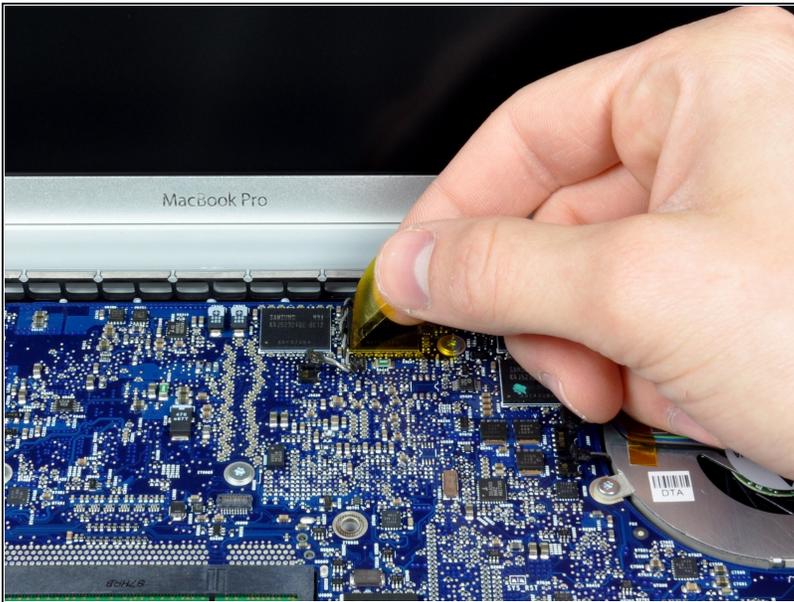
- Remove the silver 9.5 mm T6 Torx screw securing the ground loop in the display data cable to the casing.

Step 17



- Remove the single black 6 mm T6 Torx screw securing the upper portion of the logic board to the lower case.

Step 18



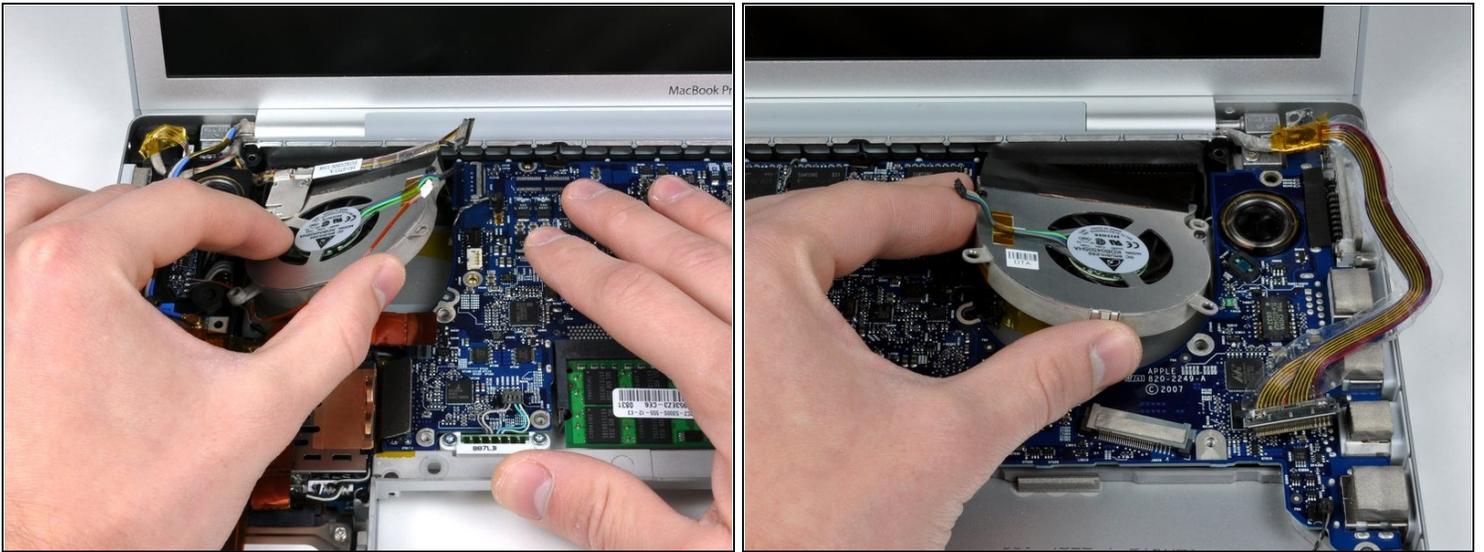
- Peel up the orange Kapton tape securing the right thermal sensor cable to the logic board.

Step 19



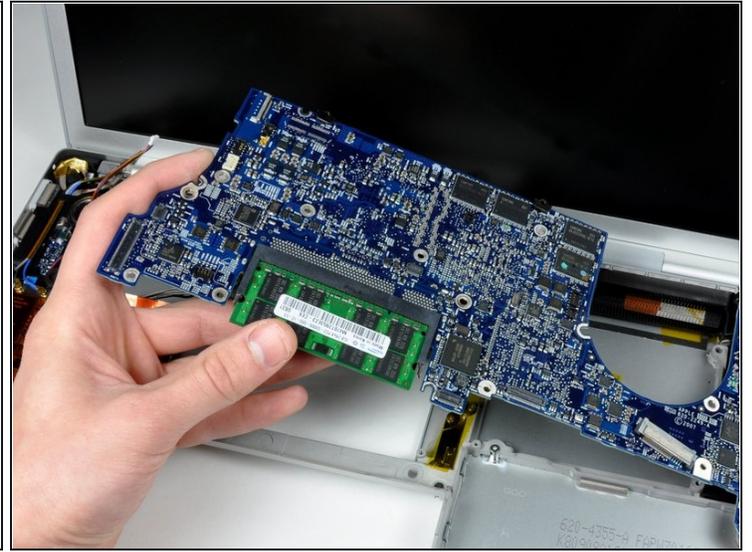
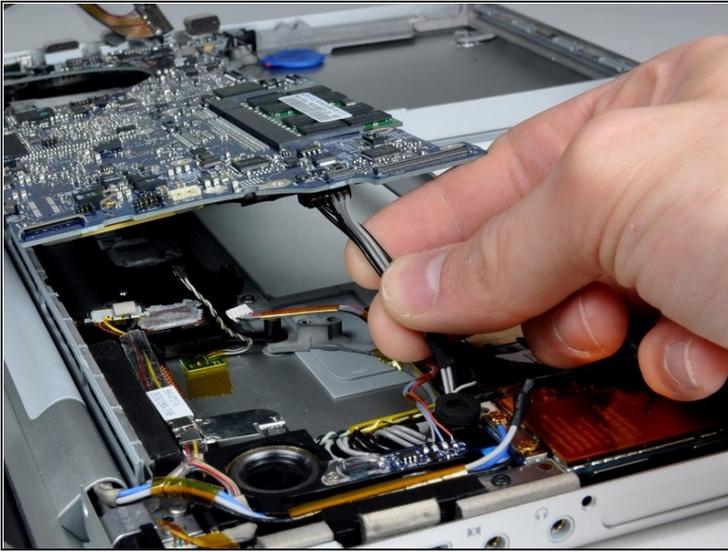
- Remove the following 15 screws:
 - One 4.4 mm black Phillips screw to the right of the ram slot.
 - Eight 4.7 mm silver T6 Torx screws securing the logic board to the lower case.
 - ⓘ If you leave the five uppermost orange screws in place, the heatsink/pipes come out effortlessly, still mounted onto the main board. That way its thermal connection is retained, and you won't need to reapply thermal paste as instructed two steps below.
 - One 6.2 mm black T6 Torx screw on the right side of the left fan.
 - Five 9.4 mm silver T6 Torx screws securing the left and right fans.

Step 20



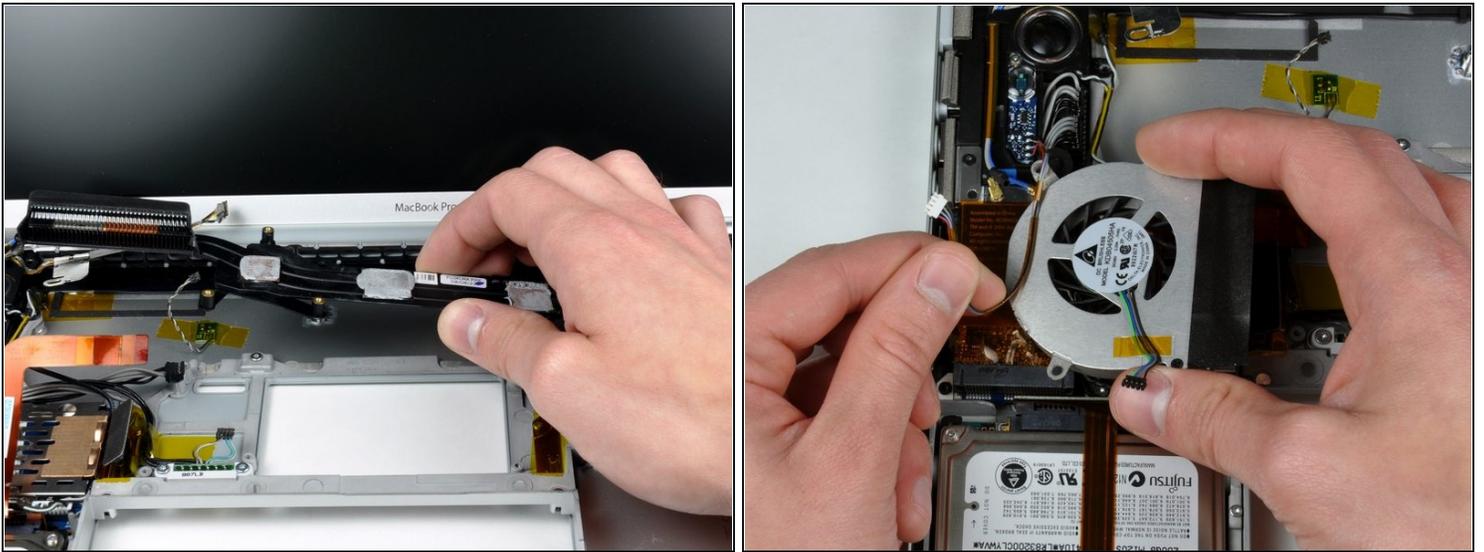
- Hold the logic board down with one hand and use your other hand to lift the left fan up from its housing. There is a piece of black tape securing the left fan to the heat sink. Carefully peel this tape up from the heat sink as you lift the left fan up.
- ⓘ Place the left fan above the Airport card. It is not necessary to remove the fan from the computer entirely.
- Lift the right fan up and carefully peel up the tape securing the fan to the heat sink as you go.
- Remove the right fan from the computer.

Step 21



- Lift up the left side of the logic board and disconnect the gray and black power cable from the bottom of the board.
⚠ Pull the power cable connector parallel to the face of the logic board.
- Grasp the logic board at the left side and at the thin section, and rotate the logic board out of the lower case.
- ☑ If you detached the heatsink from the motherboard two steps above, you'll have to clean off and replace the old thermal compound from the chips on the back of the logic board. Use our [Applying Thermal Paste Guide](#) to prepare the processor and heat sink surfaces.

Step 22 — Lower Case



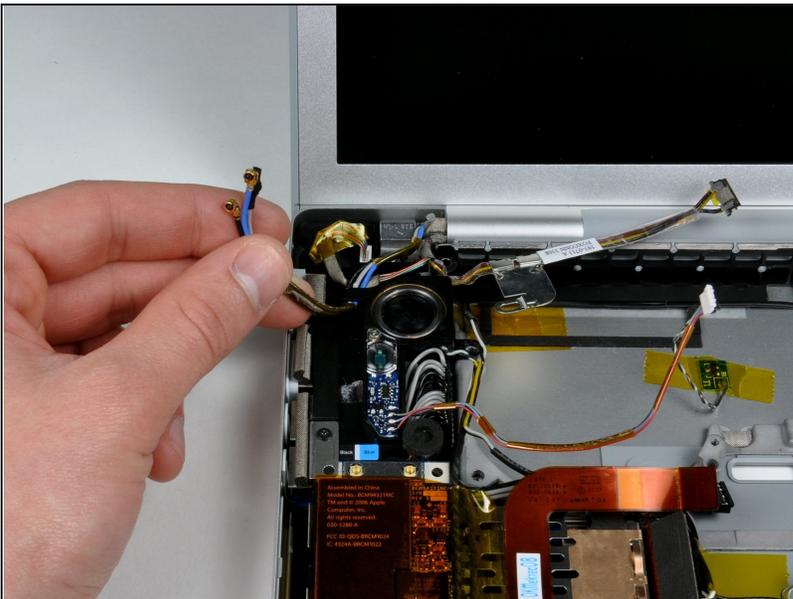
- Lift the heat sink out of the computer.
 - Peel up the iSight cable from the black tape at the top of the left fan.
 - Peel up the left ambient light sensor cable from above the left fan, removing tape as necessary.
 - Remove the left fan from the computer.
- ⓘ If you need to mount the heat sink back into the laptop, we have a [thermal paste guide](#) that makes replacing the thermal compound easy.

Step 23



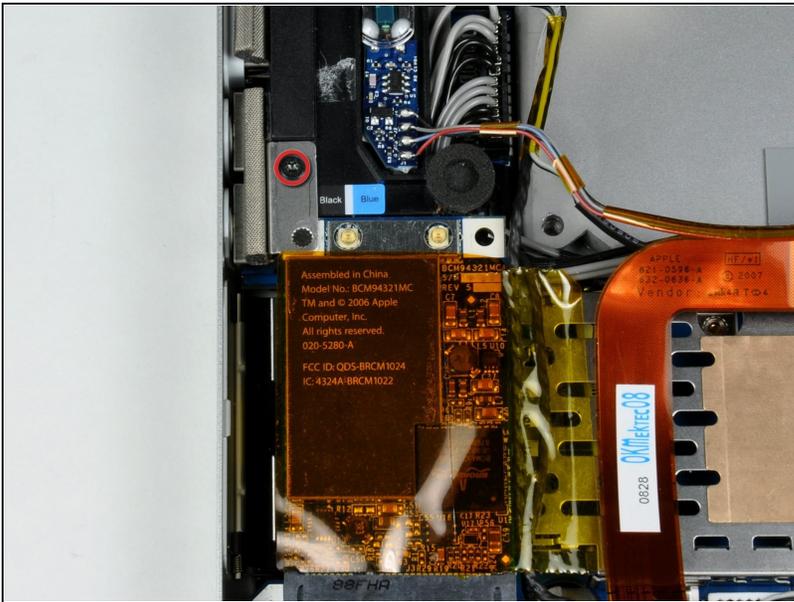
- Disconnect the two antenna cables attached to the Airport Extreme card.
- ✦ Apple was kind enough to include a label showing where each color antenna cable plugs in - just make sure to look at this when reconnecting the antenna cables.
- ⓘ If you have a MacBook Pro 15" Core 2 Duo A1226, there are three antenna cables on the Airport card.

Step 24



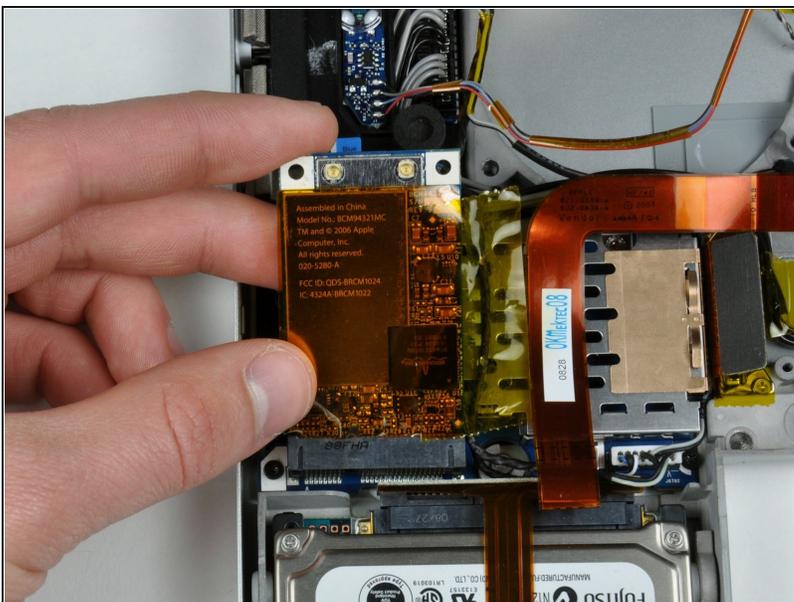
- Deroute the Airport antenna cables from their channel in the left speaker.

Step 25



- Remove the single black T6 Torx screw located just above the Airport Extreme card.

Step 26



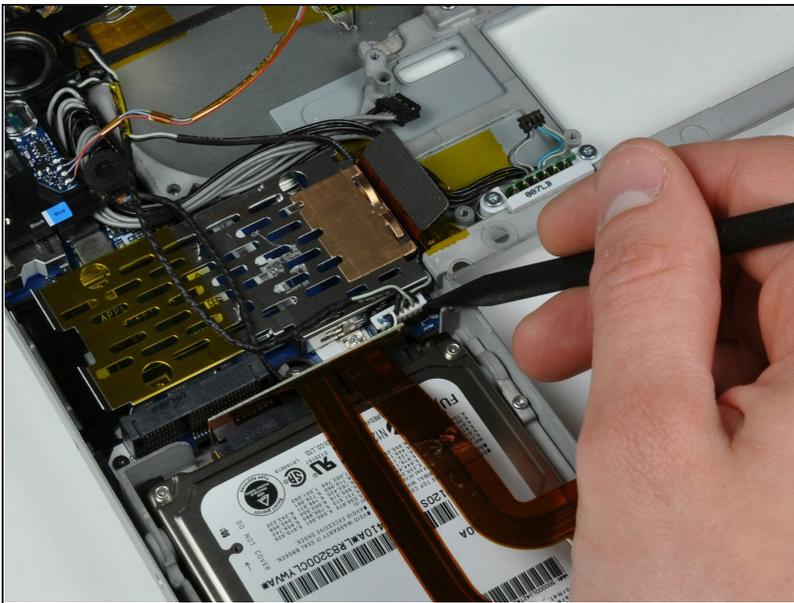
- Lift the small silver metal retaining bracket up and out of the computer.
- Lift the Airport Extreme card up and slide it out of its connector.

Step 27



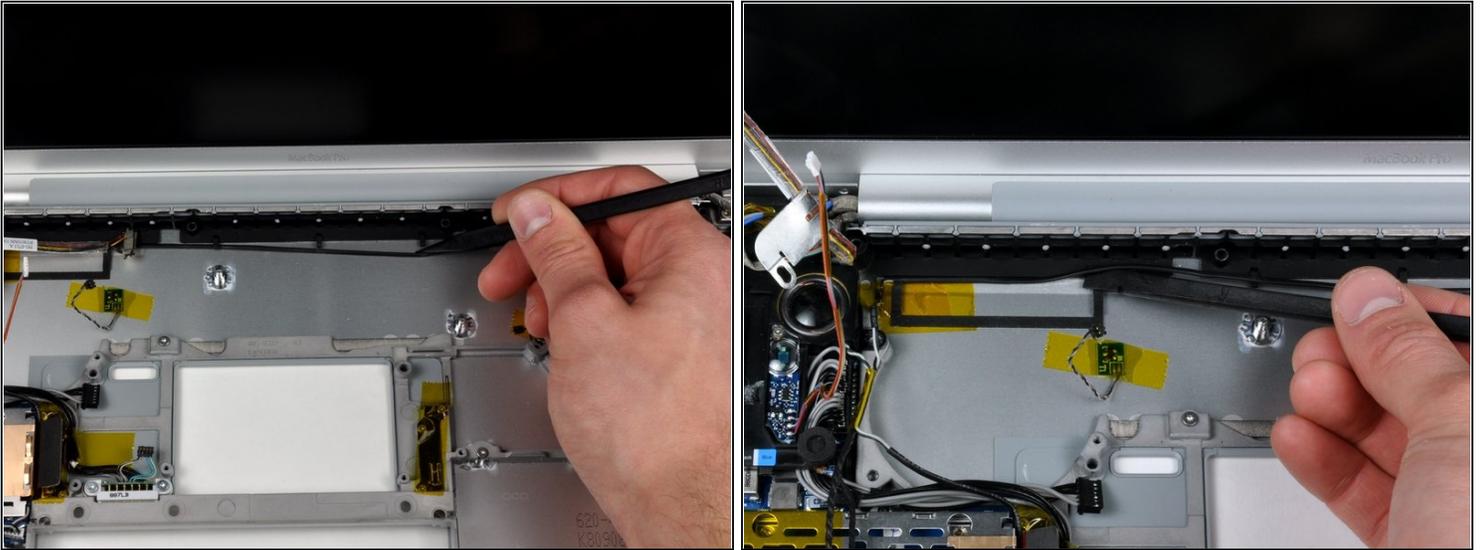
- Peel up the orange hard drive cable from above the ExpressCard cage.

Step 28



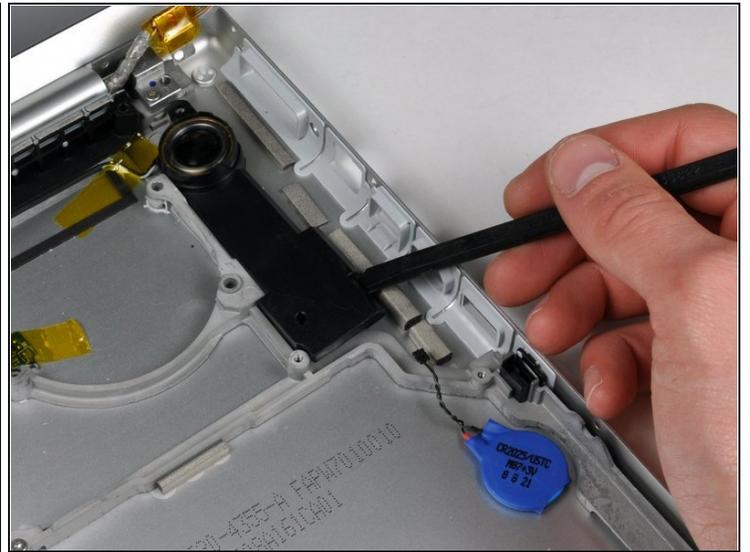
- Disconnect the speaker cable from the corner of the left I/O board.

Step 29



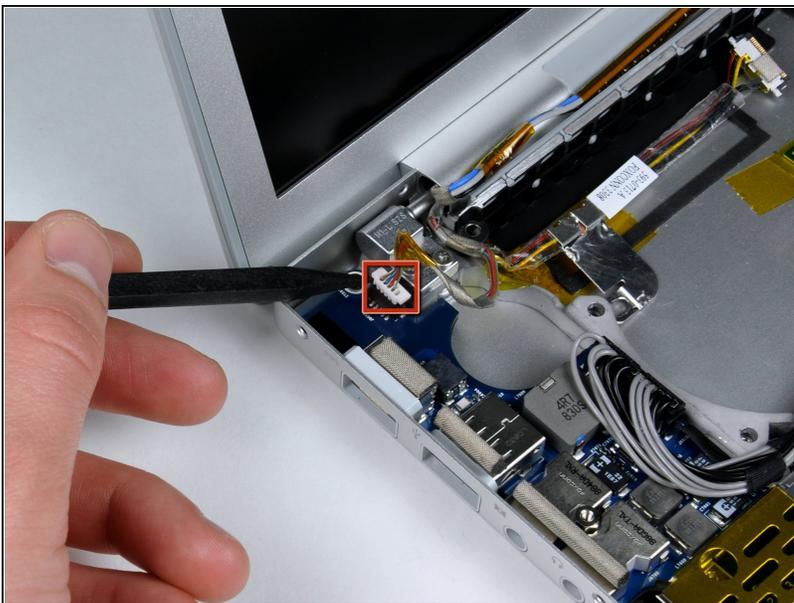
- Carefully peel up the black adhesive tape securing the speaker cable along the rear edge of the lower case.
- Continue to free the speaker cable from the black tape until it is free from all three sections of tape.

Step 30



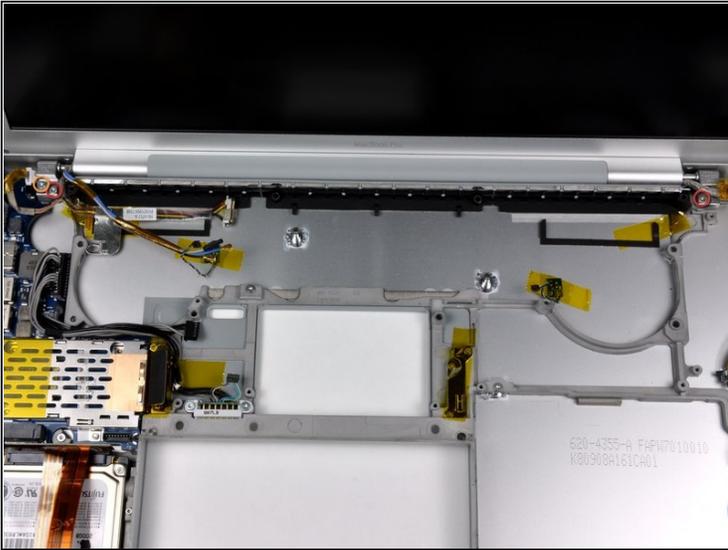
- Remove the single black T6 Torx screw securing the right speaker to the lower case.
- Use a spudger to pry up the right speaker from the lower case.
- Remove the speakers from the computer.

Step 31



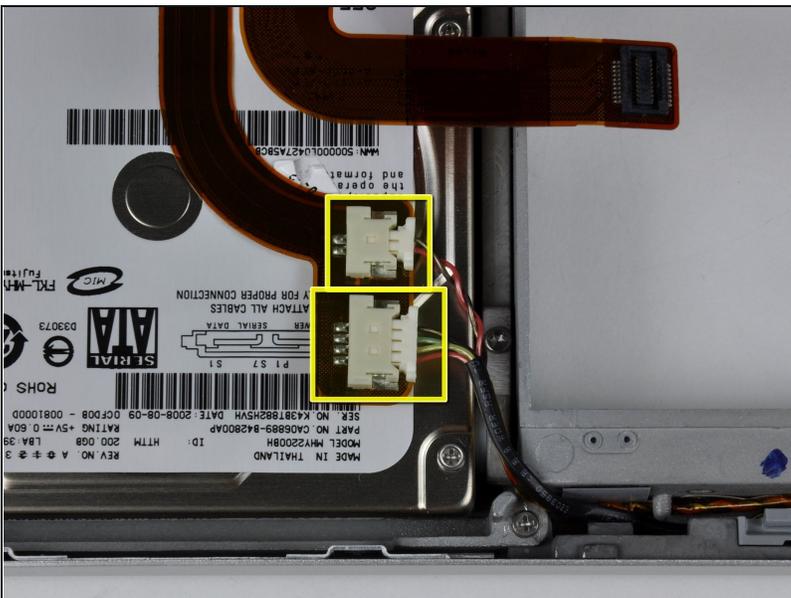
- Use a spudger to disconnect the inverter cable from the corner of the left I/O board.

Step 32



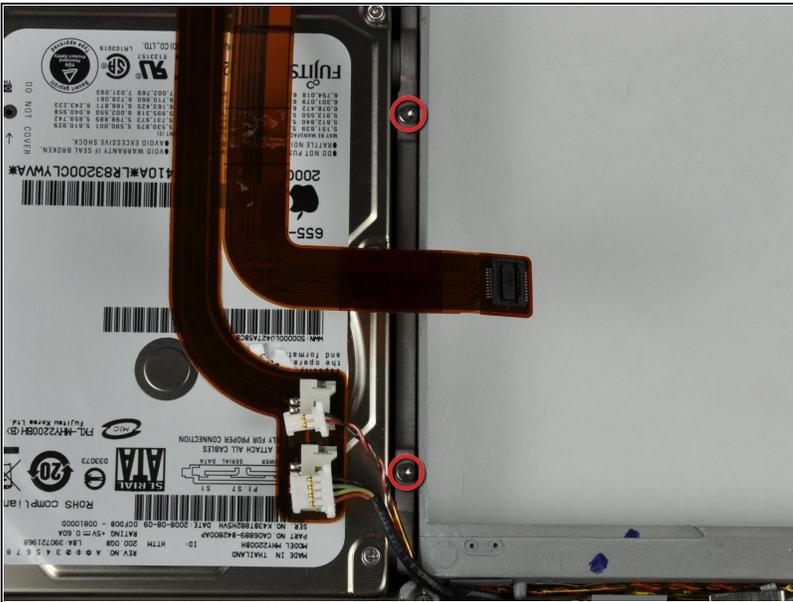
- Support the display with one hand while removing the following 3 screws:
 - Two 9.5 mm silver T6 Torx screws with threads on only part of the shaft on the inside of the display hinges.
 - One 9.5 mm silver T6 Torx screw with threads on the entire shaft on the outside of the left hinge.
- Grasp the display assembly on both sides and lift it up and out of the computer.

Step 33



- Disconnect the IR and sleep light cables from their connectors above the hard drive, removing tape as necessary.

Step 34



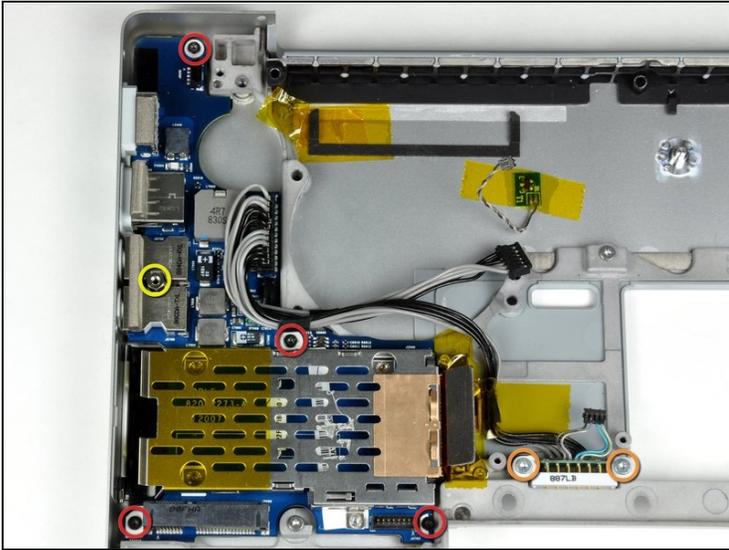
- Remove the two silver T6 Torx screws securing the hard drive retaining bracket to the lower case.

Step 35



- Lift the hard drive retaining bracket up and out of the computer.
- Lift the hard drive up from the right side and remove it and the attached cable from the computer.

Step 36



- Remove the following 7 screws/standoffs:
 - Four black T6 Torx screws securing the left I/O board to the lower case.
 - Two silver T6 Torx screws securing the battery connector to the lower case.
 - One 4 mm standoff located between the audio jacks.
- Lift the left I/O board up from the right side and slide it out of the computer.

Step 37



- Peel up the orange Kapton tape covering the right thermal sensor. Repeat the same procedure for the left thermal sensor.
- Use a spudger to pry the right thermal sensor off the lower case. Repeat the same procedure for the left thermal sensor.
- Use a spudger to pry up the PRAM battery off the lower case.
- Lower case remains.

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