



MacBook Pro 13" Unibody Mid 2009 Teardown

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INTRODUCTION


We got our hands on a MacBook Pro 13" Unibody and decided to compare it to a MacBook Unibody -- from the inside! Follow us on [Twitter](#) to get all the latest updates as we're doing the teardown!

TOOLS:

- [Phillips #00 Screwdriver](#) (1)
 - [Spudger](#) (1)
 - [T6 Torx Screwdriver](#) (1)
 - [Y1 Tri-point Screwdriver](#) (1)
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Step 1 — MacBook Pro 13" Unibody Mid 2009 Teardown



- This just in: the new MacBook Pro 13" Unibody!
- We'll be comparing it to the MacBook Unibody throughout the teardown.
 - We have a feeling it will be very similar in most regards.
- Check out our MacBook Unibody [repair guides](#) if you'd like to answer any of your repair-related questions!
-  Would you like to write teardowns like this? Show the world what's inside your gadgets with our new [user-contributed teardown platform](#)!

Step 2



- Contents of the box:
 - User's manual
 - Restore DVDs
 - 60-watt AC adapter
 - AC adapter extension cable
 - Cleaning cloth
 - No video adapter, [as usual](#).

Step 3



- Some comparisons to the MacBook Unibody:
 - No access door for the battery on the bottom.
 - The addition of an SD card slot (and the omission of digital/mic port) is readily apparent.
 - FireWire is back!
 - Computer lock is now on the other side.
 - The SD card sticks out almost .5"! This is a cheeseball design for a MacBook "Pro" if you ask us.

Step 4



- Let's get down to business.
- There's no door latch, going along with the "not user-serviceable battery" theme.
- We had to dig out a Phillips screwdriver for this step.
- A quick flip of the lid and...

Step 5





- ...It's almost exactly the same as our old, "lesser" MacBook Unibody.
- The battery compartment is identical to the one we uncovered in the [MacBook Pro 17" Teardown](#). We'll venture a guess that it looks the same in the updated 15" Pro as well.
- Remove two tri-wing screws and the battery is suddenly replaceable. The sticker comes right off, just as in the 17" Pro -- because it's adhered to just the battery and midwall, not to the optical drive.

Step 6



- 7-hour battery specifications:
 - Model A1322
 - 10.95V
 - 60Wh
 - "This battery contains no mercury (Hg)."

 When working on all machines that have internal batteries, disconnect the battery **first** to cut off power to the entire device.

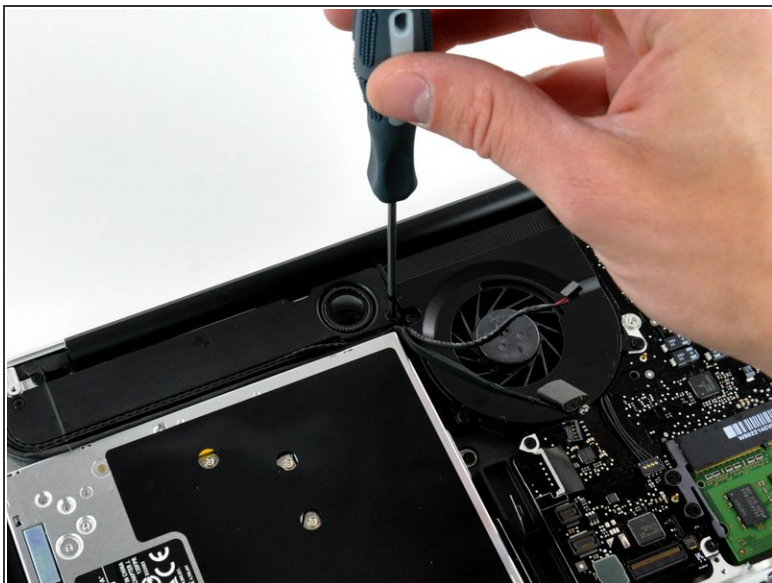
-  Apple does offer [battery replacement service](#) for \$129. If you're not near an Apple Store or service provider, you'll be without your machine 3-4 business days.
- Although the batteries look similar, they're definitely not interchangeable. The MacBook Pro's battery is too large (and different in shape) to fit into the older MacBook Unibody.

Step 7



- Removing the hard drive...
- It's still considered user-replaceable by Apple, but replacement does require removing 10 more screws than on the [MacBook Unibody](#).
- First thing we'd do is replace the 160 GB Hitachi with something [more meaty](#).

Step 8



- The subwoofer comes off after removing two screws.

Step 9



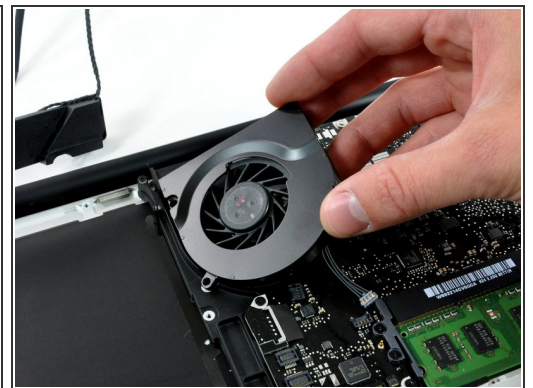
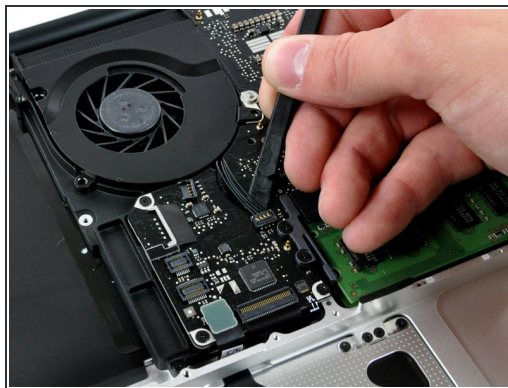
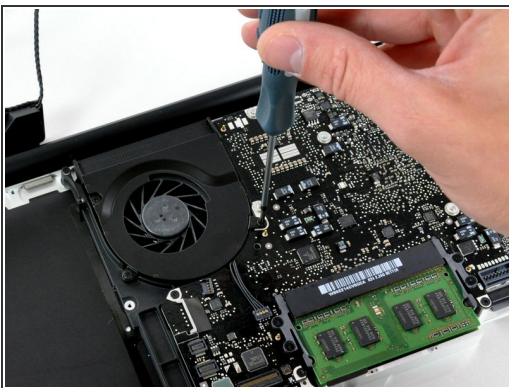
- The optical drive is attached via three Phillips screws.
- The brackets and screw layout are identical to the older MacBook Unibody.

Step 10



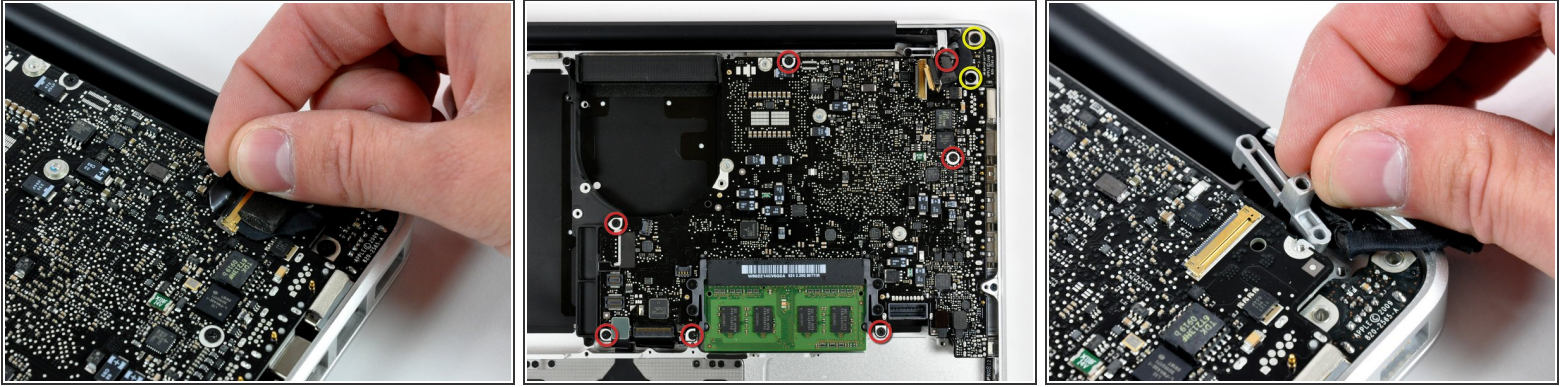
- Removing the optical drive exposes the right speaker.
- It's held in place by adhesive. A quick pry with the spudger will loosen it.

Step 11



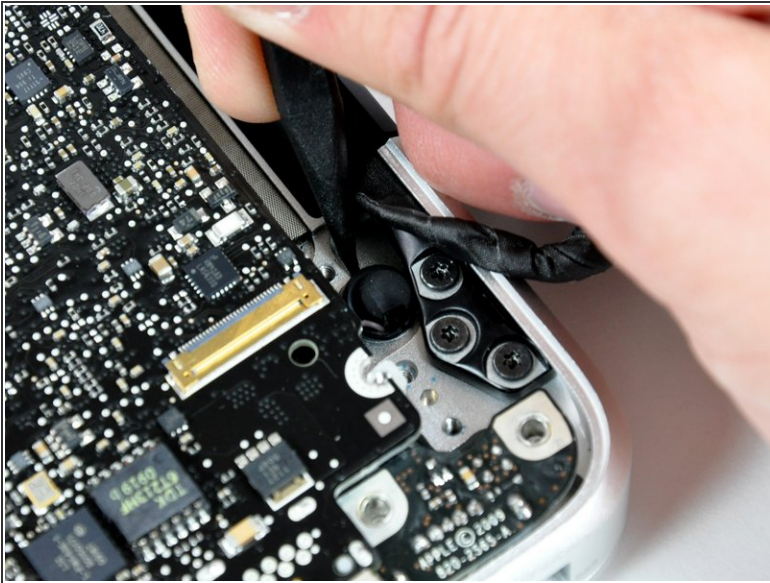
- A connector, three Phillips screws, and bam -- the fan's out!

Step 12



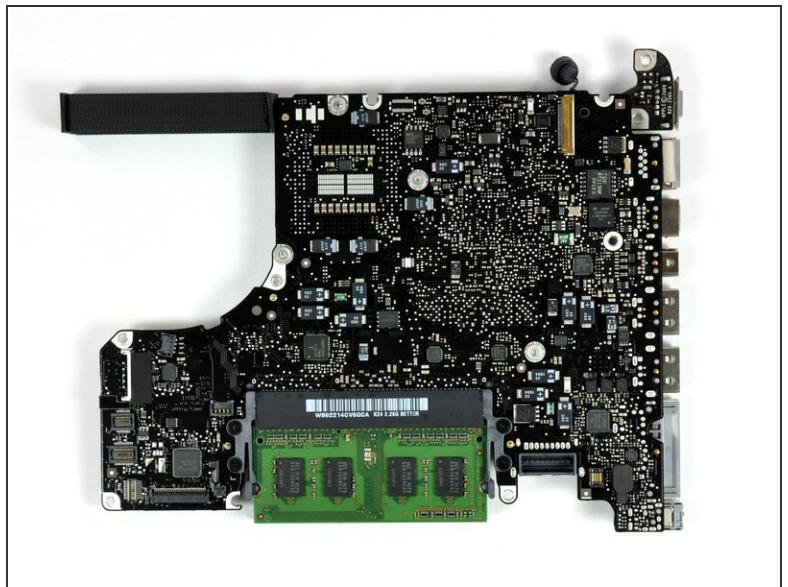
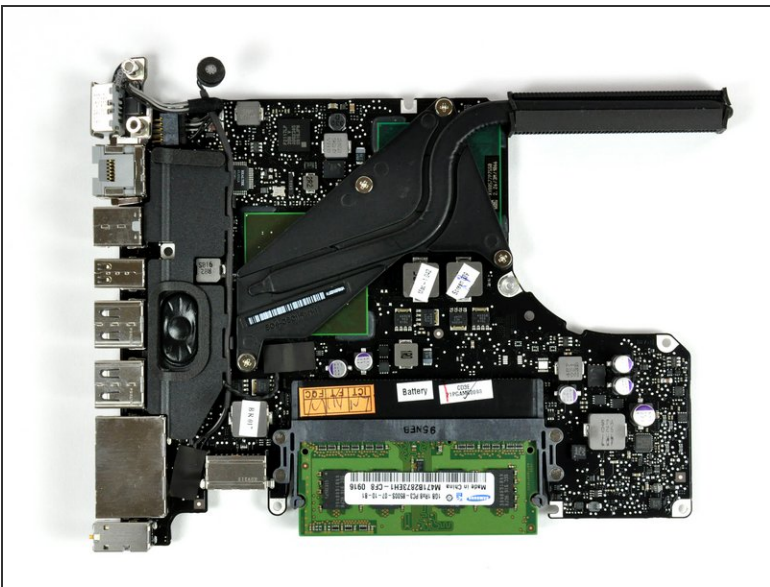
- Disconnect the LVDS connector.
- Remove 7 motherboard screws.
- Remove 2 DC-in screws.
- Disconnect trackpad, keyboard, and battery level indicator cables.
- Remove LVDS cable retaining bracket.
- And the logic board is almost out...

Step 13



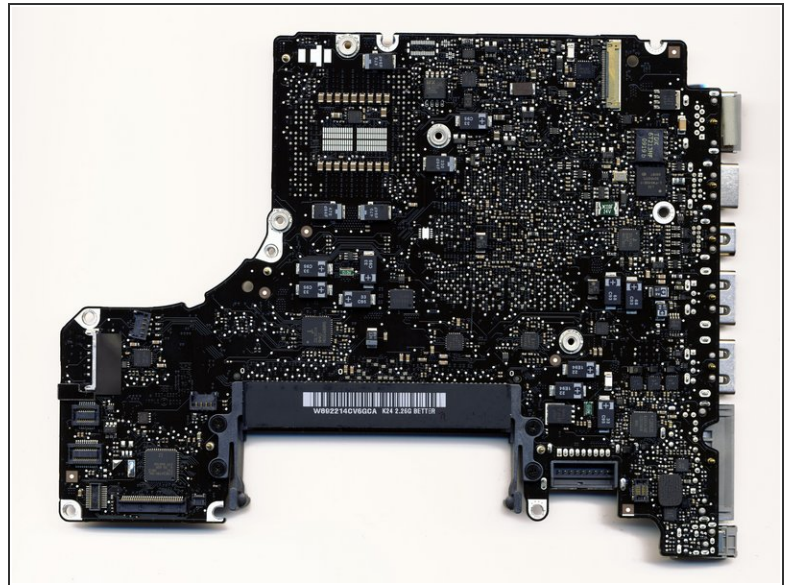
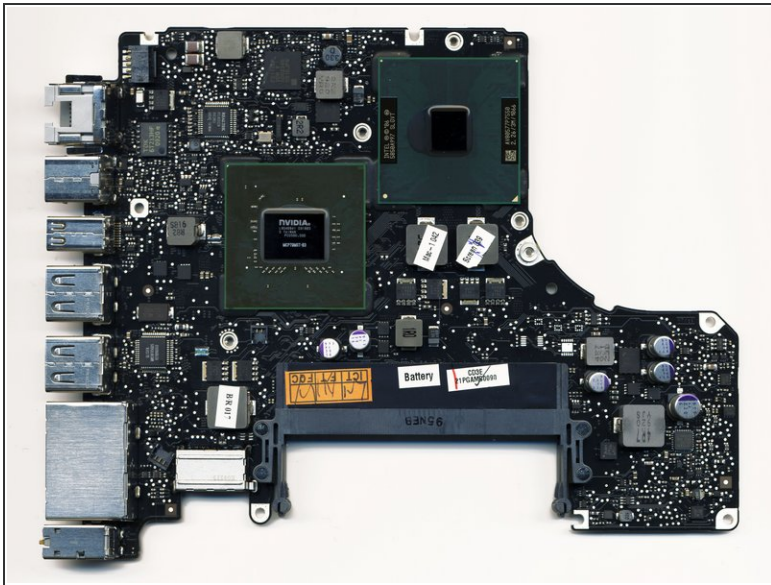
- Pop out the microphone from its cave.
- The logic board is finally free!

Step 14



- A couple of images of the logic board, before we strip it naked...
- Like the MacBook Unibody, the heat sink comes out along with the logic board.

Step 15



- Both sides of the logic board.
- Hi-res pictures of the [front](#) and [back](#).

⚠ Not for the faint of heart -- full-size images (5 MB a pop!): [front](#) and [back](#).

Step 16



- And here's the whole enchilada for you to enjoy.

