



# Installing MacBook Pro 15" Unibody Late 2008 and Early 2009 Upper Case

## Tools used in this guide

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)

## Parts relevant to this guide

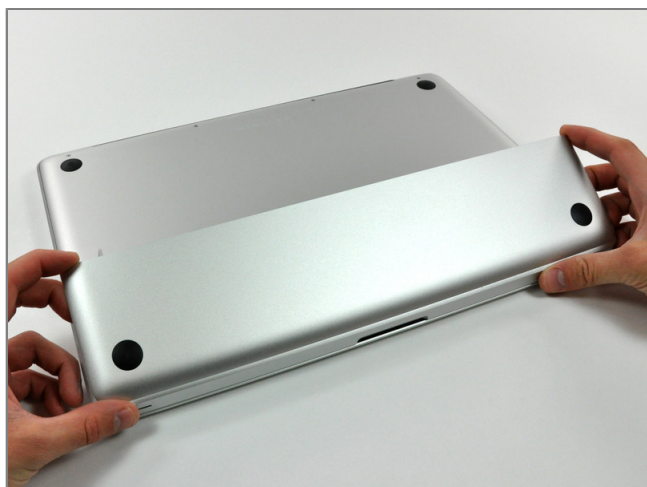
- [MacBook Pro 15" Unibody \(Late 2008/Early 2009\) Upper Case](#) (1)

The ins and outs of replacing your upper case.



### **Step 1 - Access Door**

- With the case closed, place the Unibody top-side down on a flat surface.
- Depress the grooved side of the access door release latch enough to grab the free end. Lift the release latch until it is vertical.



### **Step 2**

- The access door should now be raised enough to lift it up and out of the Unibody.



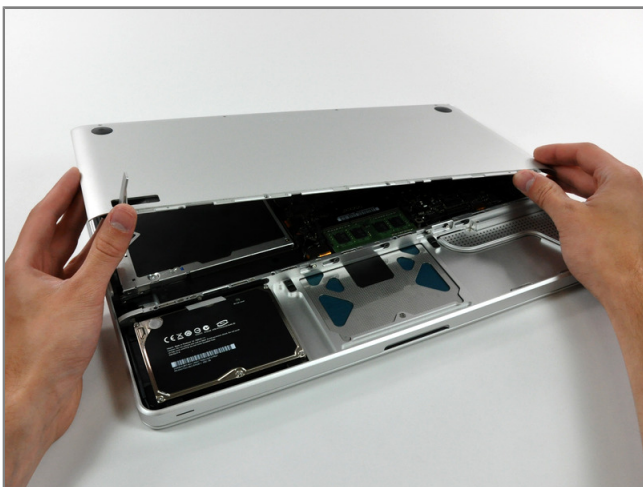
### Step 3 - Battery

- Be sure the access door release latch is vertical before proceeding.
- Grab the translucent plastic tab and pull the battery up and out of the Unibody.
- If the latch is depressed it will lock the battery in place.



### Step 4 - Lower Case

- Remove the following eight screws securing the lower case to the chassis:
  - One 5.4 mm Phillips screw.
  - Three 14 mm Phillips screws.
  - Four 3.5 mm Phillips screws.



### Step 5

- Using both hands, lift and remove the lower case off the upper case.



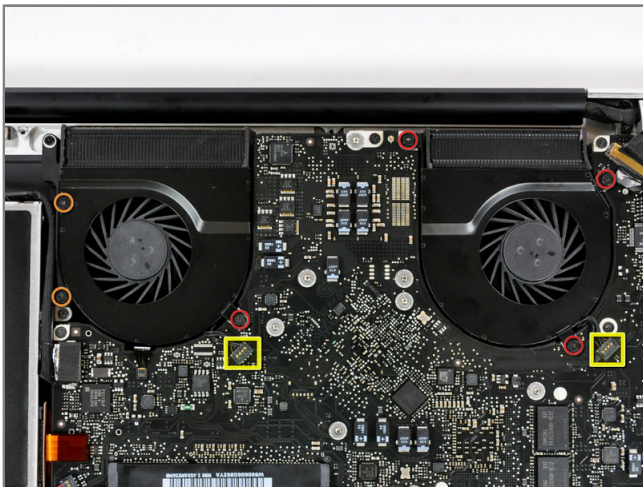
### Step 6 - Mid Wall

- Remove the following 5 screws securing the mid wall to the upper case:
  - Three 10.5 mm Phillips screws.
  - Two 3.7 mm Phillips screws.



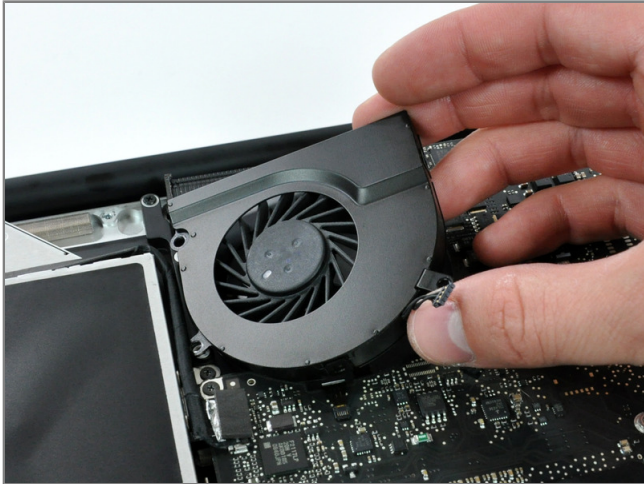
### Step 7

- Lift the mid wall out of the upper case.



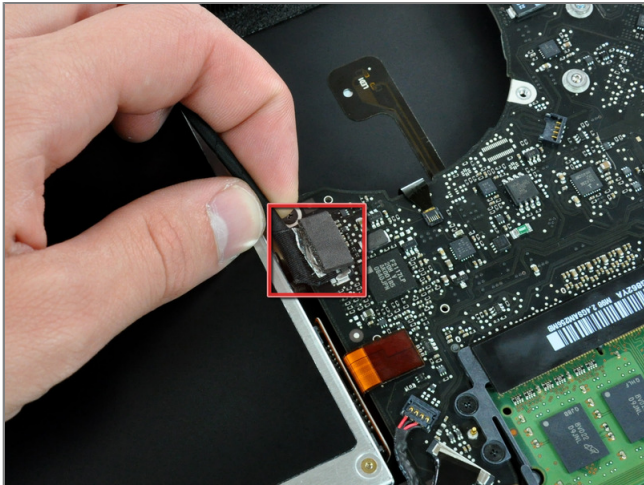
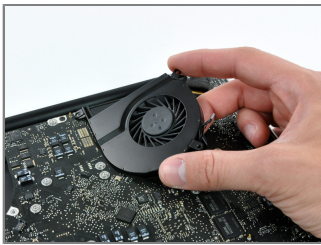
### Step 8 - Logic Board

- Remove the following six screws securing both the right fan and the left fan to the logic board:
  - Four 3.5 mm Phillips screws.
  - Two 3.2 mm Phillips screws.
- Use a spudger to pry both the right fan and left fan connectors straight up off the logic board.



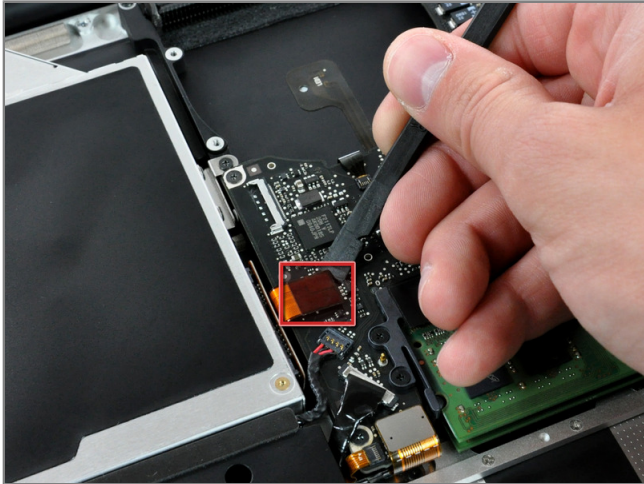
### Step 9

- Lift both fans out of the upper case.



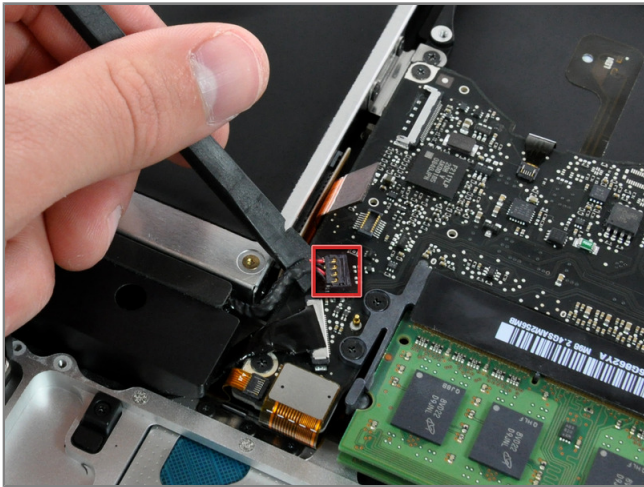
### Step 10

- Disconnect the camera cable by pulling the male end straight away from its socket.



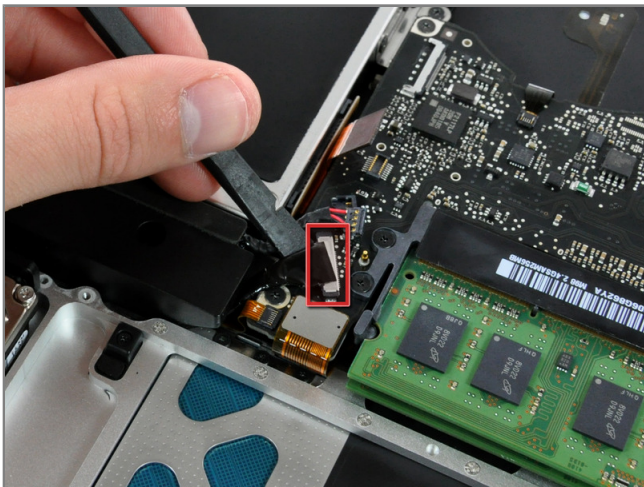
### Step 11

- Use a spudger to pry the optical drive connector straight up off the logic board.



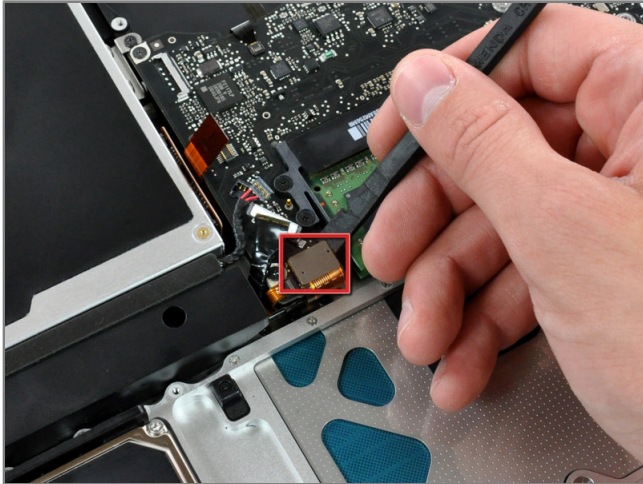
### Step 12

- If necessary, peel off the foam bumper covering the subwoofer connector.
- Using the flat end of a spudger, pry the subwoofer connector straight up off the logic board.
- Be very careful. This connector is delicate, and can be easily broken off the logic board.



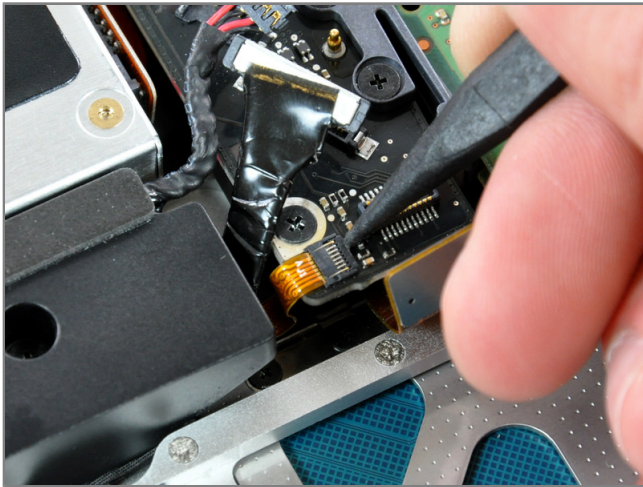
### Step 13

- Use the flat end of a spudger to pry the hard drive cable connector straight up off the logic board.



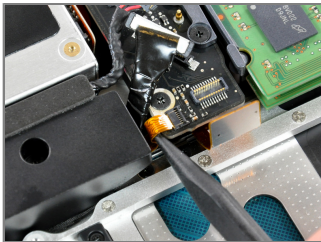
### Step 14

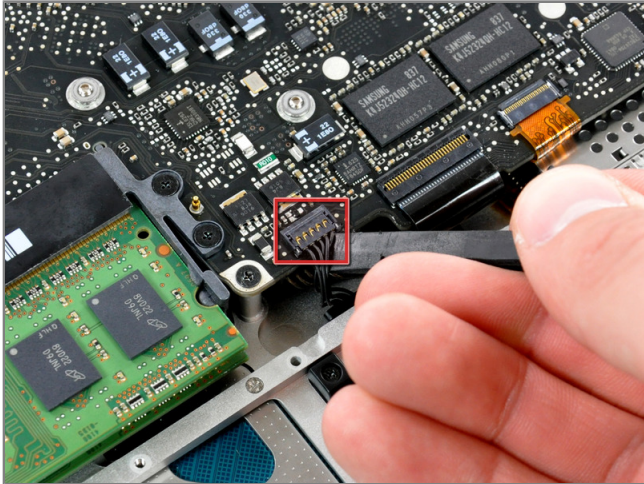
- Use a spudger to pry the trackpad connector straight up off the logic board.



### Step 15

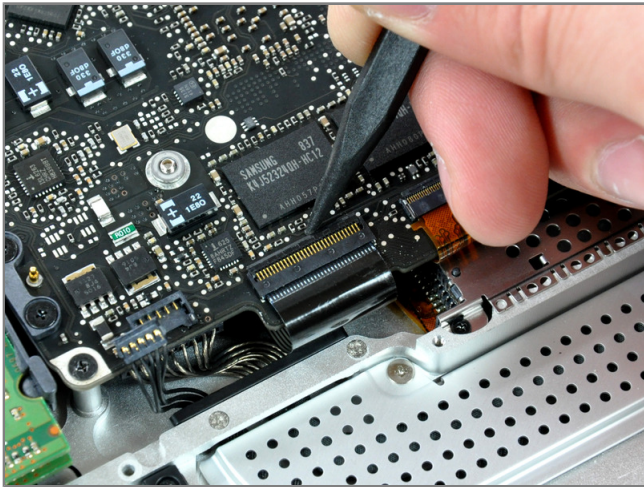
- Using the tip of a spudger, flip up the IR/sleep LED ribbon cable retaining flap.
- Pull the IR/sleep LED ribbon cable straight out of its socket.





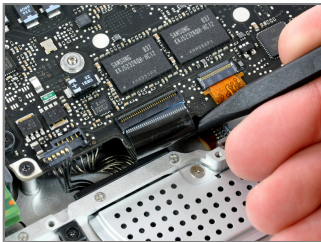
### Step 16

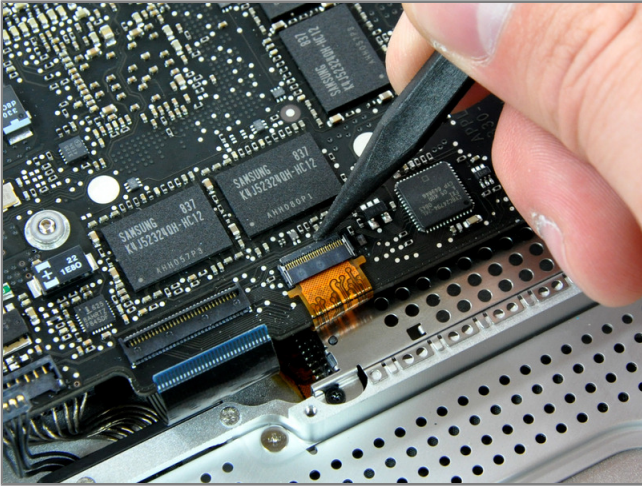
- Using the flat end of a spudger, pry the battery indicator light connector straight up off the logic board.



### Step 17

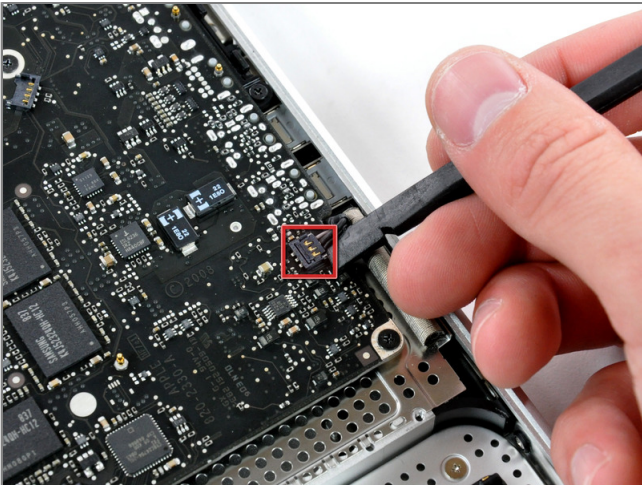
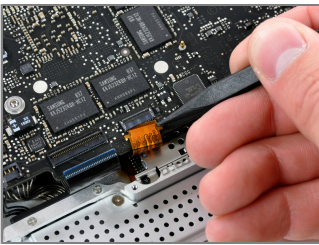
- Using the tip of a spudger, flip up the keyboard ribbon cable retaining flap.
- Pull the keyboard ribbon cable straight out of its socket.





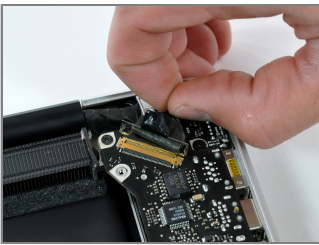
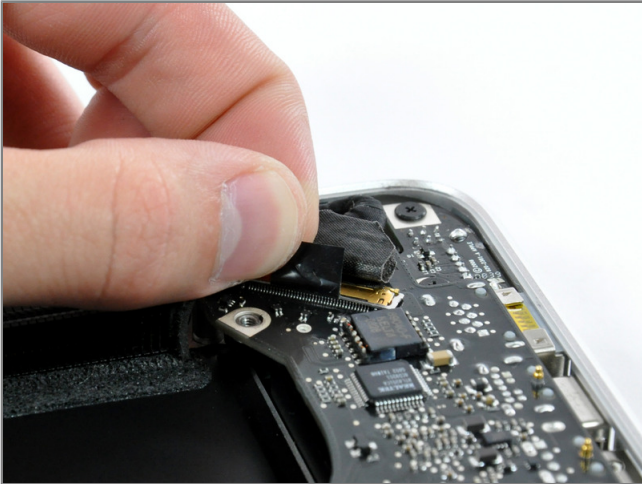
### Step 18

- Using the tip of a spudger, flip up the express card cage ribbon cable retaining flap.
- Pull the express card cage ribbon cable straight out of its socket.



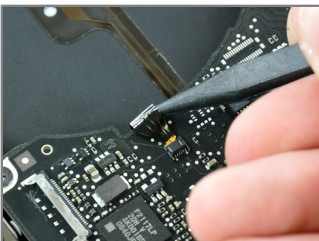
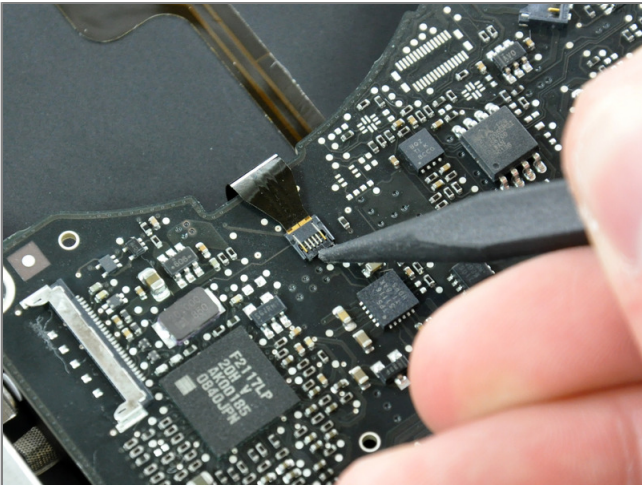
### Step 19

- Using the flat end of a spudger, pry the microphone cable connector straight up off the logic board.



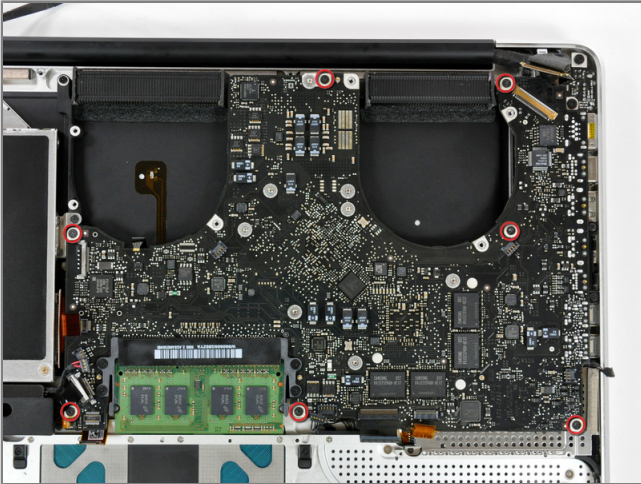
### Step 20

- Grab the plastic pull tab secured to the display data cable lock and rotate it toward the DC-in side of the computer.
- Pull the display data cable connector straight away from its socket.
- When disconnecting the display data cable, do not pull on the black tab secured to the cable lock. We recommend wiggling the cable while applying tension to slowly "walk" the connector out of its socket.



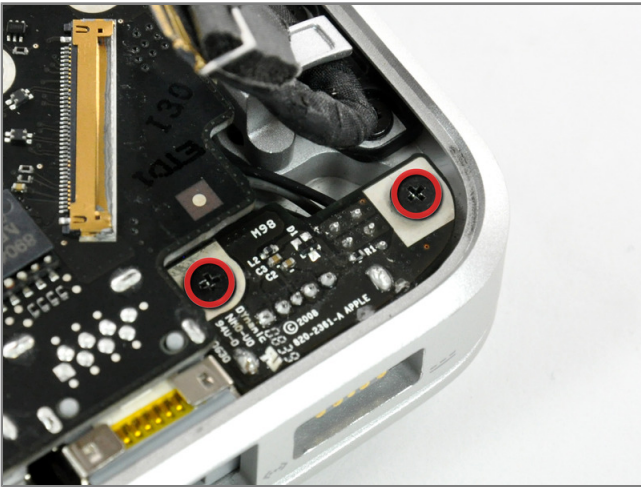
### Step 21

- Locate the keyboard backlight ribbon cable (near the left fan space).
- Using the tip of a spudger, flip up the keyboard backlight ribbon cable retaining flap.
- Pull the keyboard backlight ribbon cable straight out of its socket.



### Step 22

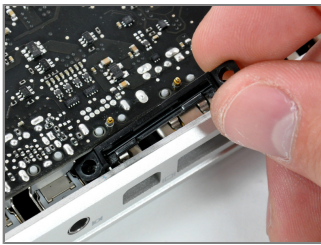
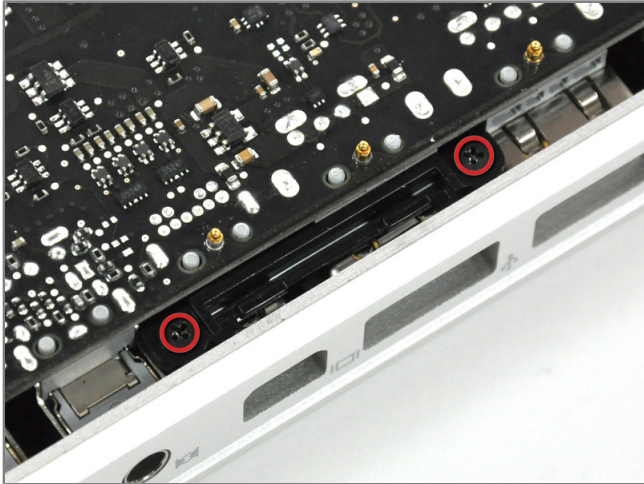
- Remove seven 3.2 mm Phillips screws securing the logic board to the upper case.
- Do not remove the logic board yet! There are connectors attached to the underside of the logic board that must first be disconnected.



### Step 23

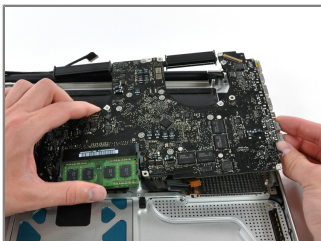
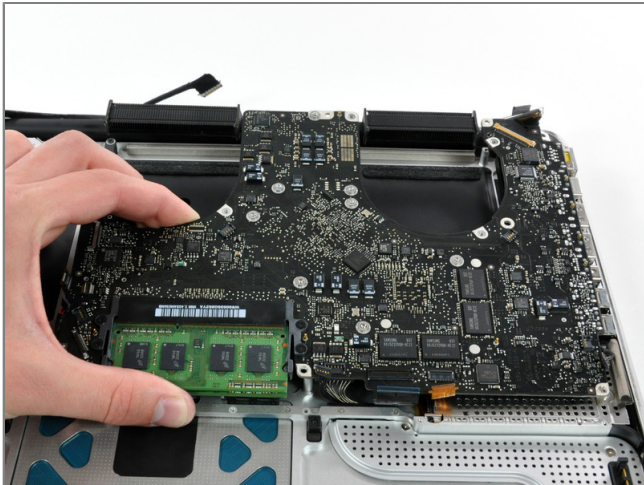
- Remove two 7 mm Phillips screws securing the DC-in board to the upper case.
- Note: This step is not completely necessary, but it will make it easier to disconnect the cable that is connected to the DC-in board.





### Step 24

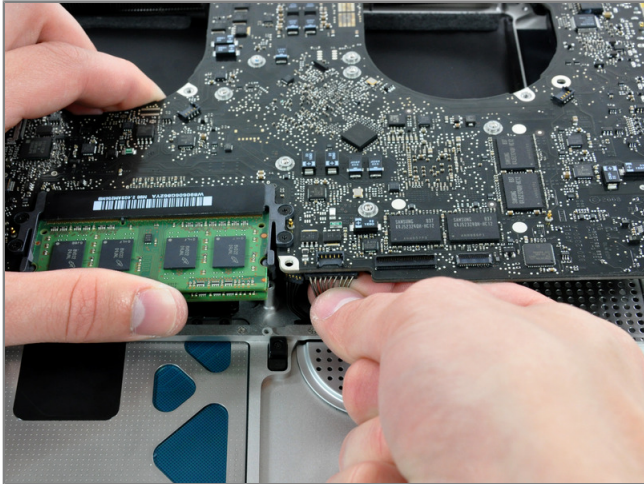
- Remove two 3.5 mm Phillips screws securing the bottom case clip to the upper case.
- Lift the bottom case clip out of the upper case.
- Some MacBook Pro Unibodies do not have a bottom case clip and do not require this step.



### Step 25

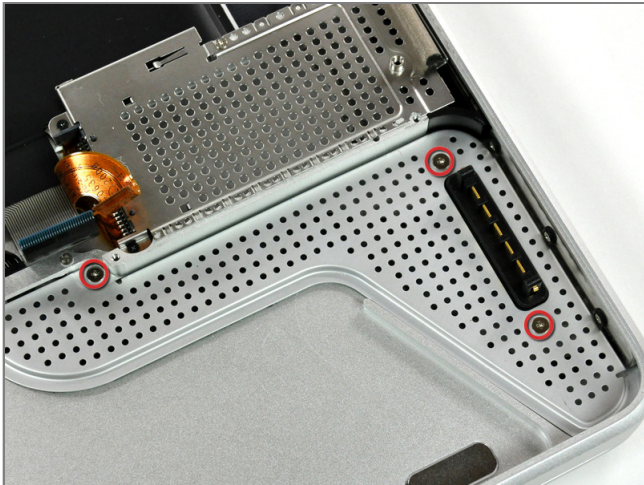
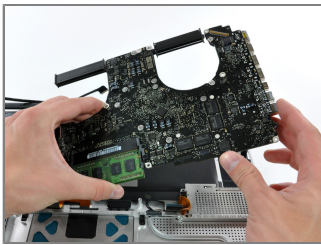
- Carefully lift the logic board assembly from the left side and work it out of the upper case, minding the port side that may get caught during removal.
- Do not entirely remove the logic board yet!
- Ensure that the logic board is free from all connections to the upper case (except the battery connector) before proceeding.





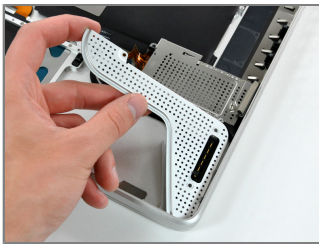
### Step 26

- Lift the logic board enough to grab the battery connector and pull it straight away from its socket on the logic board.
- Lift the logic board assembly out of the upper case.



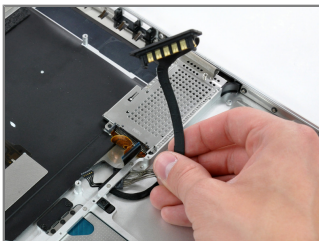
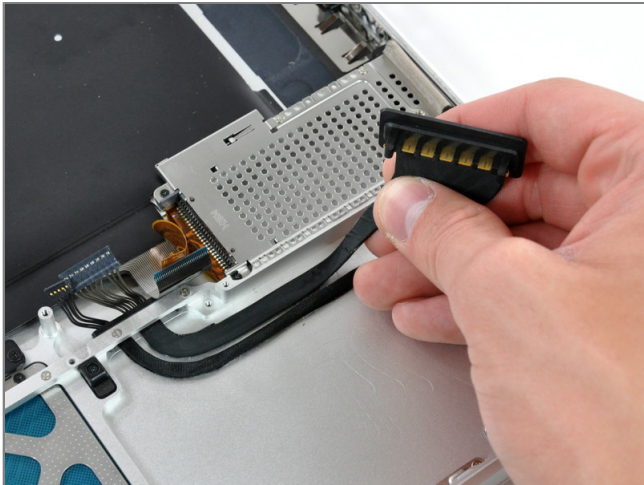
### Step 27 - Battery Connector

- Remove three 2 mm Phillips screws securing the battery connector cover to the upper case.



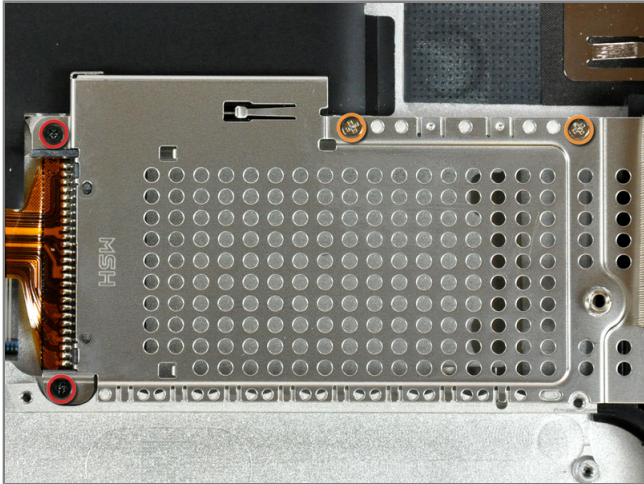
### Step 28

- The battery connector cover is held onto the upper case by a strong adhesive. Use a spudger to loosen the adhesive around the edges of the battery connector.
- Lift the battery connector cover out of the upper case.



### Step 29

- Peel the battery connector cable off the adhesive securing it to the upper case.
- De-route the battery connector cable through the gap in the upper case and remove it from the computer.



### Step 30 - Upper Case

- Remove the following screws securing the ExpressCard Cage to the upper case:
  - Two 4 mm Phillips screws.
  - Two 1.9 mm Phillips screws.
- Lift the the ExpressCard Cage out of the upper case.



### Step 31

- Remove the single Phillips screw securing the hard drive bracket to the upper case.
- This screw is captive to the hard drive bracket.





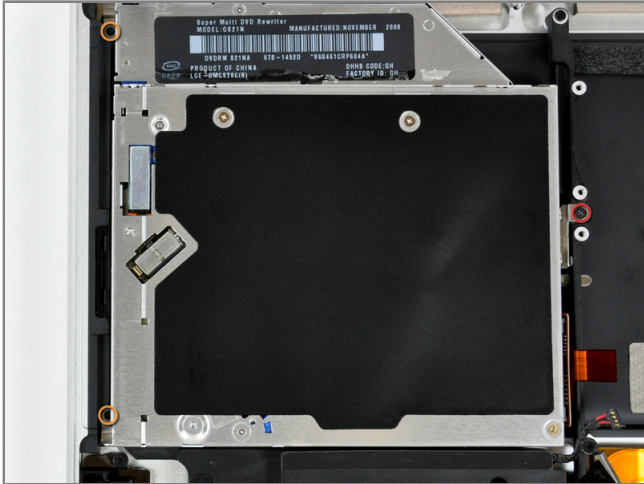
### Step 32

- Lift the hard drive by its pull tab enough to grab and remove the retaining bracket.
- Lift the hard drive out of the upper case, minding the cable attaching it to the computer.



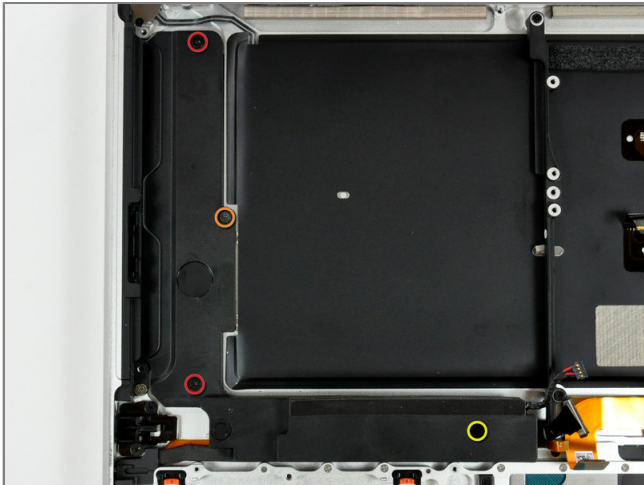
### Step 33

- Remove the hard drive from its cable by pulling the cable connector straight away from the drive.



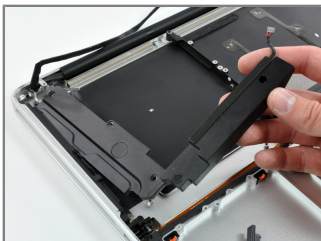
### Step 34

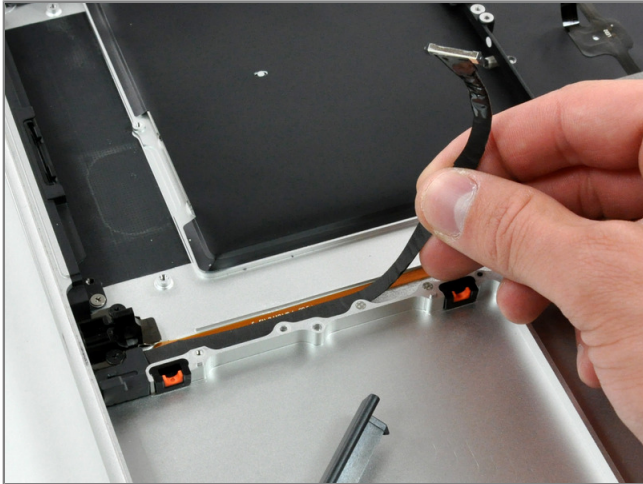
- Remove the following three Phillips screws securing the optical drive to the upper case:
  - One 3.5 mm Phillips screw.
  - Two 2.5 mm Phillips screws.
- Lift the optical drive from its right edge and pull it out of the computer.



### Step 35

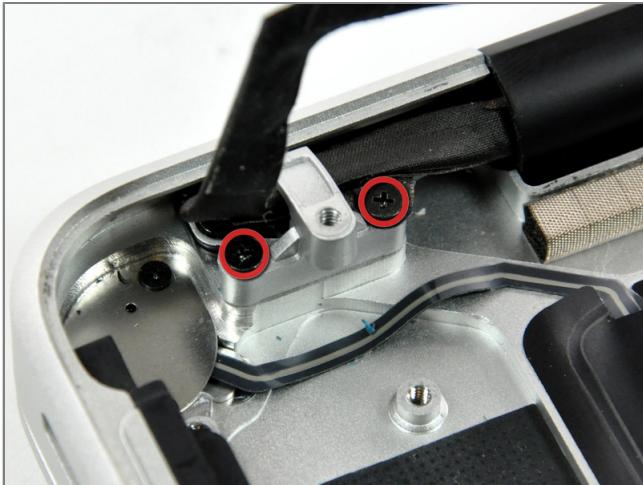
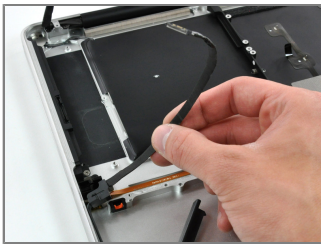
- Remove the following four screws securing the subwoofer and right speaker to the upper case:
  - Two 3.2 mm Phillips screws.
  - One 2.6 mm Phillips screw.
  - One 5 mm Phillips screw.
- Lift the subwoofer and right speaker assembly out of the upper case.





### Step 36

- Peel the hard drive cable from the adhesive securing it to the upper case, and maneuver the plastic retaining block out of the upper case.



### Step 37

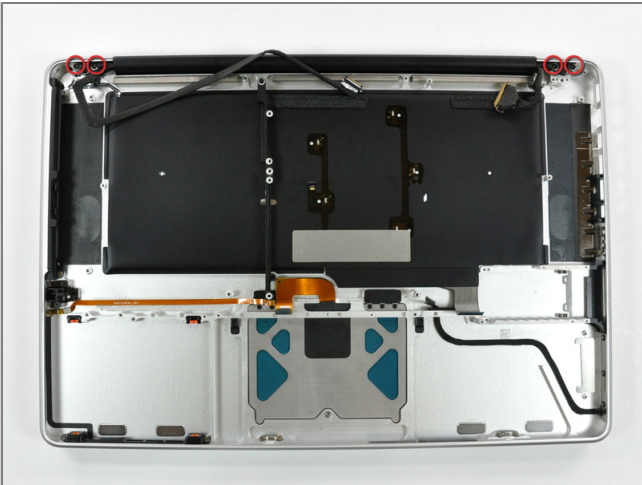
- Remove two 8 mm Phillips screws securing the camera cable bracket to the upper case.
- The rightmost screw may remain captive in the camera cable.
- Separate the camera cable bracket from the camera cable and remove it from the computer.





### Step 38

- Remove the 7 mm Phillips screw from the LVDS cable bracket.
- This screw may remain captive in the LVDS cable.
- Lift the LVDS cable bracket out of the upper case.



### Step 39

- Remove two outer 6 mm Torx screws securing each side of the display to the upper case (4 screws total).
- We intentionally have you leave one screw in each hinge to aid in the following steps.





### Step 40

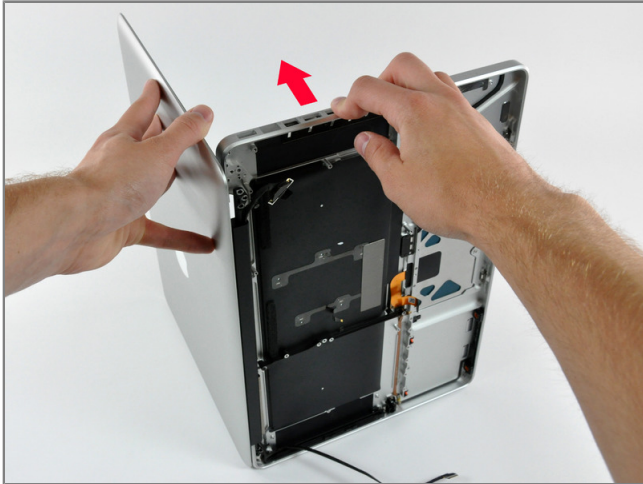
- Open your MacBook Pro so the display is perpendicular to the upper case.
- Place your opened MacBook Pro on a table as pictured.
- While holding the display and upper case together with your other hand, remove the 6 mm Torx screw from the lower display bracket.



### Step 41

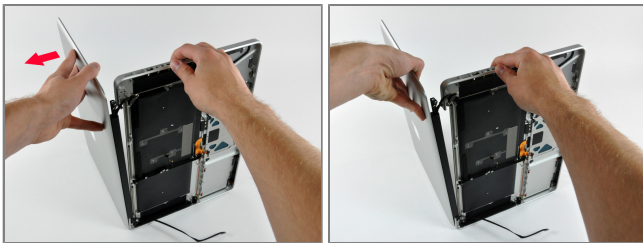
- Be sure to hold the display and upper case together with your other hand. Failure to do so may cause the freed display/upper case to fall, potentially damaging each component.
- Remove the last remaining 6 mm Torx screw securing the display to the upper case.





### Step 42

- Grab the upper case with your right hand and rotate it slightly toward the top of the display so the upper display bracket clears the edge of the upper case.
- Rotate the display slightly away from the upper case.
- Lift the display away from the upper case, minding any brackets or cables that may get caught.



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

This document was last generated on Dec 14, 2010.