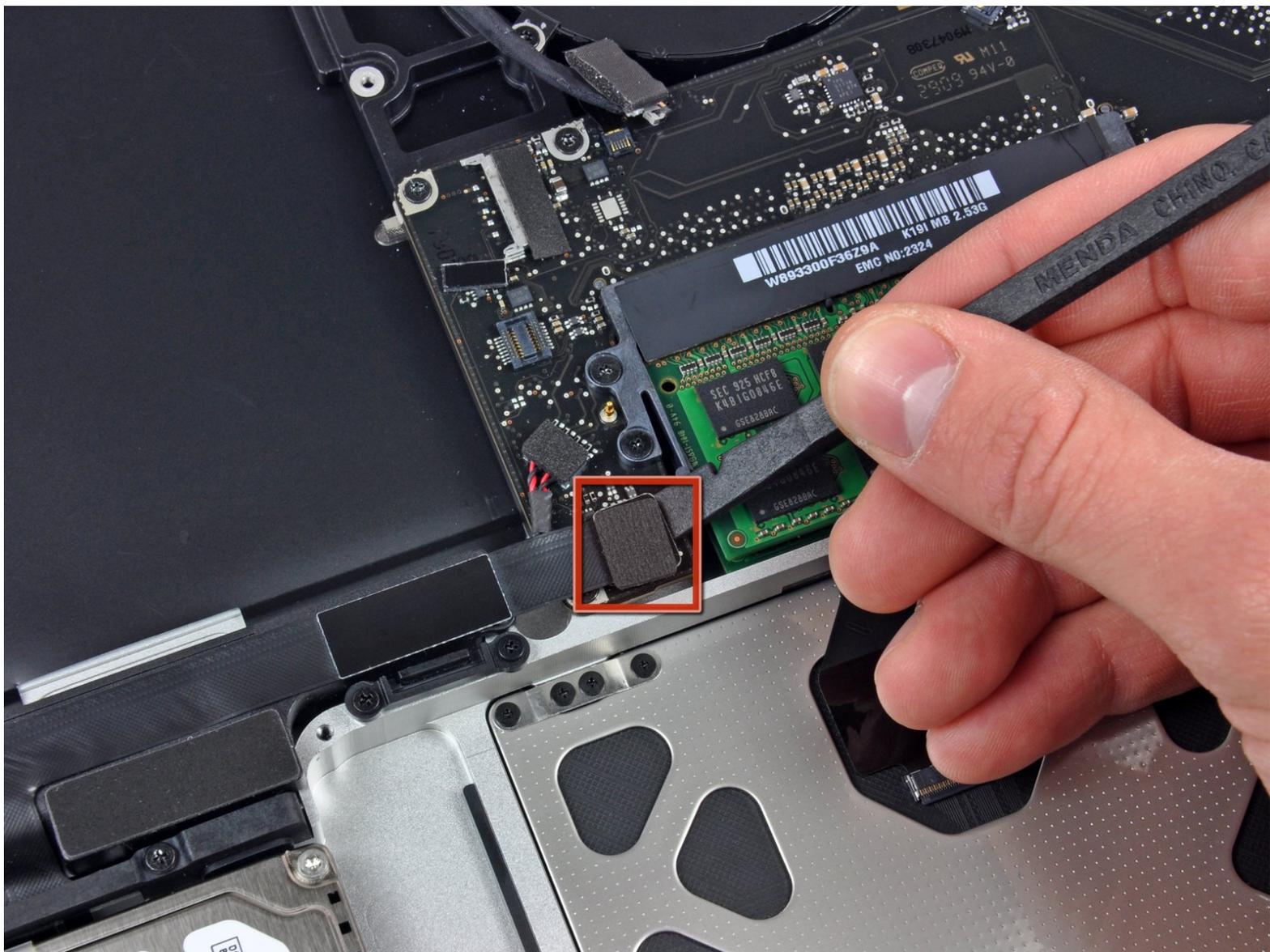




# MacBook Pro 15" Unibody 2.53 GHz Mid 2009 Subwoofer & Right Speaker Replacement

Written By: Walter Galan



## INTRODUCTION

Is the right side of your MacBook Pro mute? Use this guide to replace the subwoofer & right speaker assembly.

### TOOLS:

- [P6 Pentalobe Screwdriver 2009 MacBook Pro Battery](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)

### PARTS:

- [MacBook Pro 15" Unibody \(Mid 2009\) Subwoofer/Right Speaker](#) (1)

## Step 1 — Lower Case



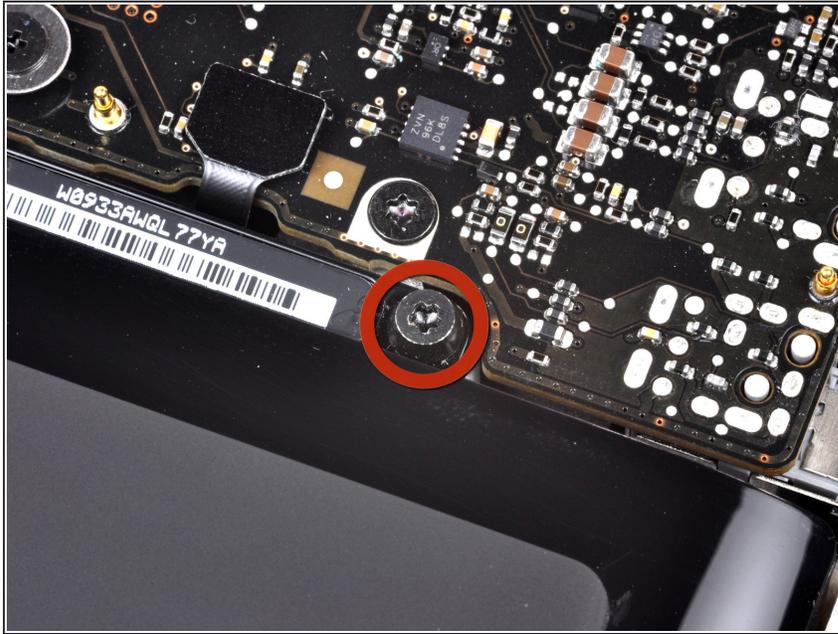
- Remove the following ten screws securing the lower case to the upper case:
  - Seven 3 mm Phillips screws.
  - Three 13.5 mm Phillips screws.

## Step 2



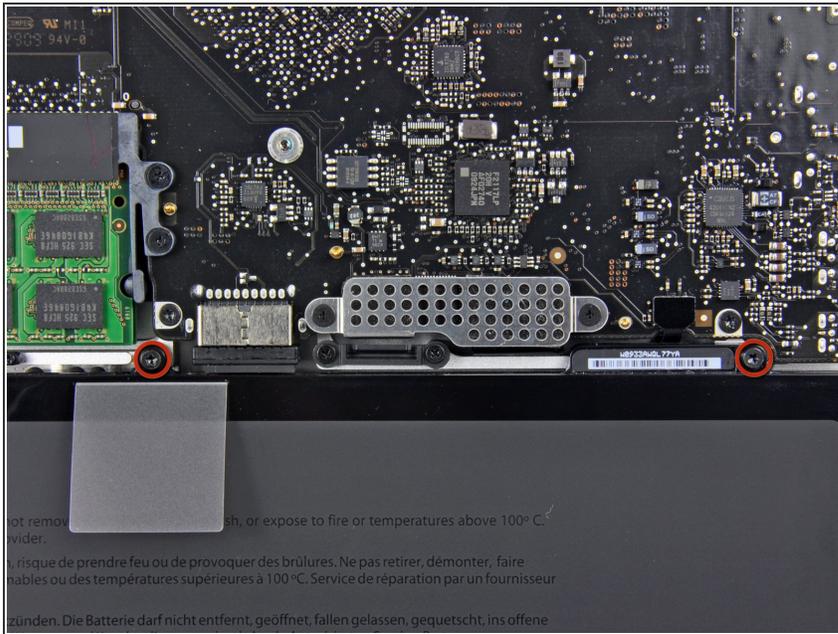
- Using both hands, lift the lower case near the vent to pop it off two clips securing it to the upper case.
- Remove the lower case and set it aside.

## Step 3 — Battery



- Three Pentalobe screws secure the battery to the upper case. They can be removed with [this special driver](#).
- ⓘ If you don't have a Pentalobe driver, a 1.5 mm flathead screwdriver can be used in a pinch. Be sure the head of your flathead screwdriver fits snugly across two of the five "points" of the screw head before trying to break the screw free, as a loose fit will easily strip the screw head.
- ⓘ If the head of your screwdriver fits too loosely, find a bigger bit and file it down until it fits snugly before proceeding.
- ⓘ You do not necessarily have to follow steps 3-7 to remove the battery in order to replace the hard drive. However, it is recommended to remove all power sources from electronics before working on them.

## Step 4



- Remove the two exposed five-point Pentalobe screws along the top edge of the battery.

## Step 5



- Use the tip of a spudger to bend back the finger of the "Warning: Do not remove the battery" sticker while you remove the five-point Pentalobe screw hidden underneath.

## Step 6



- Lift the battery by its plastic pull tab and slide it away from the long edge of the upper case.

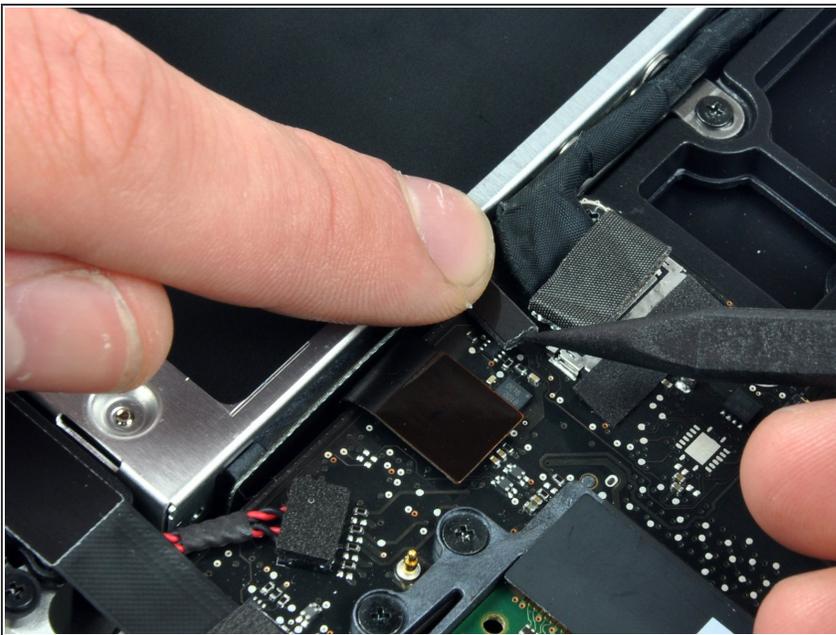
 Do not try to completely remove the battery just yet.

## Step 7



- Tilt the battery back enough to access the battery cable connector.
- Pull the battery cable connector away from its socket on the logic board and remove the battery from the upper case.
- ☞ If you're installing a new battery, you should [calibrate](#) it as soon as possible.

## Step 8 — Optical Drive

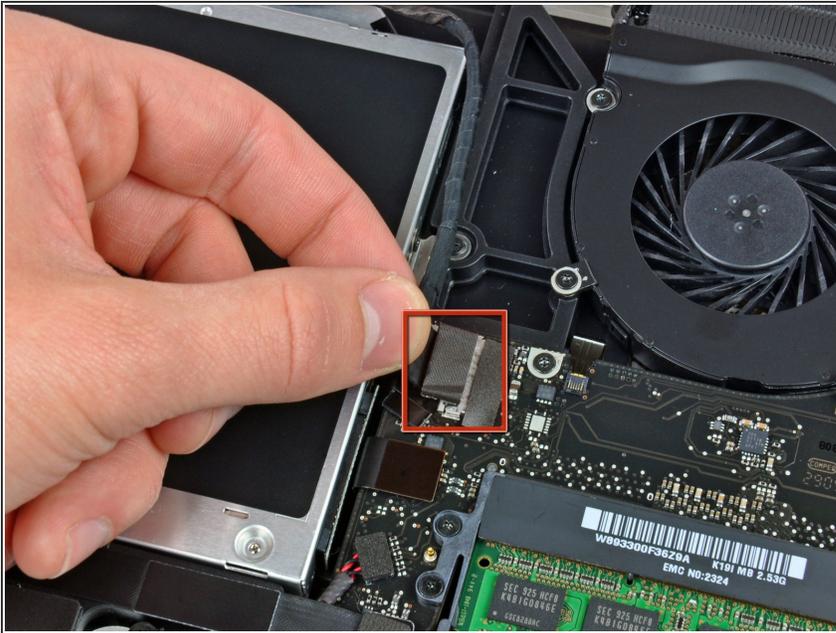


- ⚠ Apple sticks a small strip of clear plastic with adhesive applied to one side to the logic board behind the camera cable connector to keep it in its socket. When moving it out of the way, be sure not to break any surface-mount components off the logic board.

- Hold the end of the cable retainer down with one finger while you use the tip of a spudger to slightly lift the

other end and rotate it away from the camera cable connector.

## Step 9



- Disconnect the camera cable by pulling the male end straight away from its socket.
- ⓘ Pull the connector parallel to the face of the logic board, not straight up.

## Step 10



- Peel the camera cable off the adhesive securing it to the optical drive.

## Step 11



- i** This step is only required if you have an anti-glare display. If you have a glossy display, skip this step.
- Disconnect the Bluetooth cable by pulling the male end straight away from its socket.
- !** Pull the connector parallel to the face of the logic board, not straight up.
- Use the flat end of a spudger to pry the Bluetooth antenna cable from its socket on the board.

## Step 12



- i** This step is only required if you have an anti-glare display.

  - Remove the two 8 mm Phillips screws securing the Bluetooth/camera cable retainer to the upper case.
- i** One of the screws may remain captive in the Bluetooth/camera cable ground loop. If replacing the display, be sure to transfer this screw to the new unit.

  - Lift the Bluetooth board/cable retainer assembly out of the upper case.

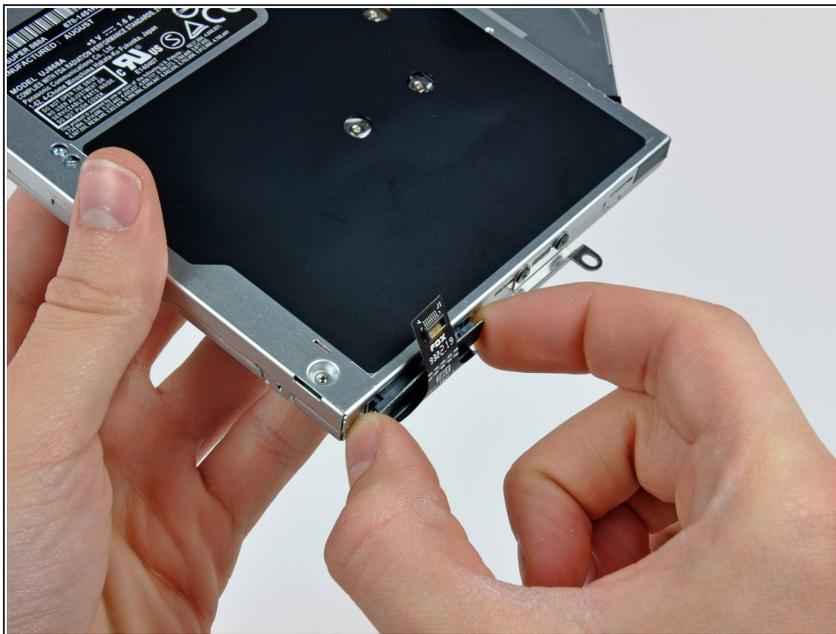


## Step 15



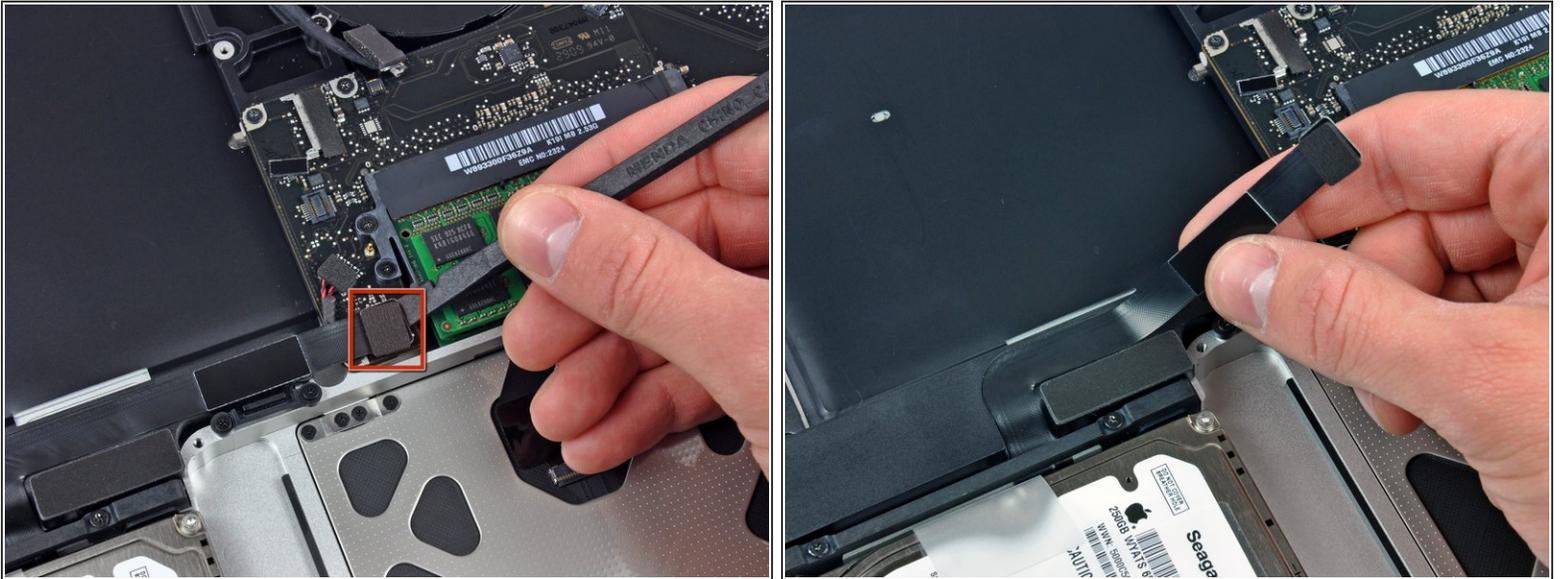
- Lift the optical drive from its left edge and pull it out of the computer.
- ⚠ When reassembling, be careful that the SATA cable doesn't get stuck underneath the logic board.

## Step 16



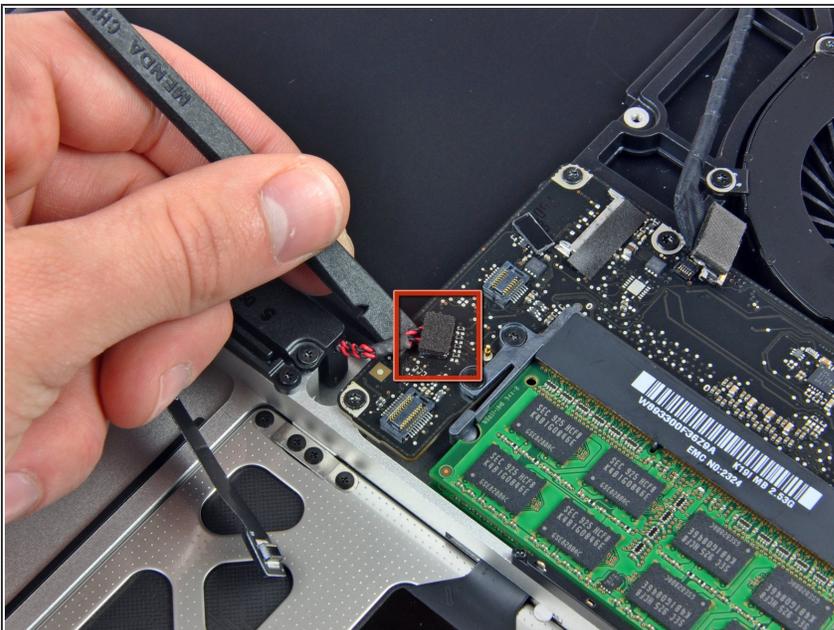
- Débranchez le connecteur du câble du lecteur optique de celui-ci.

## Step 17 — Subwoofer & Right Speaker



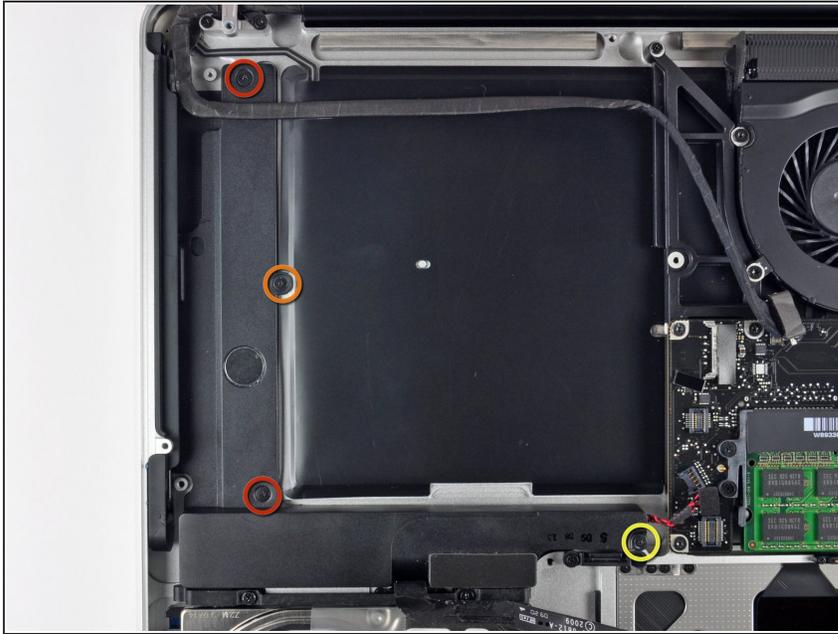
- Use the flat end of a spudger to pry the hard drive/IR sensor cable connector up off the logic board.
- Peel the hard drive cable up from the channel within the subwoofer and right speaker.

## Step 18



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

## Step 19



- 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.

## Step 20



- Lift the subwoofer and right speaker assembly out of the upper case.

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