



# MacBook Pro 13" Unibody Mid 2009 Upper Case Replacement

Replace the upper case in your Mid 2009 MacBook Pro 13" Unibody.

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## INTRODUCTION

Replacing the upper case requires the removal of nearly every component in your MacBook Pro. You will also need to transfer your old trackpad over to your new upper case.

### TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [T6 Torx Screwdriver](#) (1)
- [Tri-point Y0 Screwdriver](#) (1)

### PARTS:

- [MacBook Pro 13" Unibody \(Mid 2009/Mid 2010\) Upper Case](#) (1)

## Step 1 — Lower Case



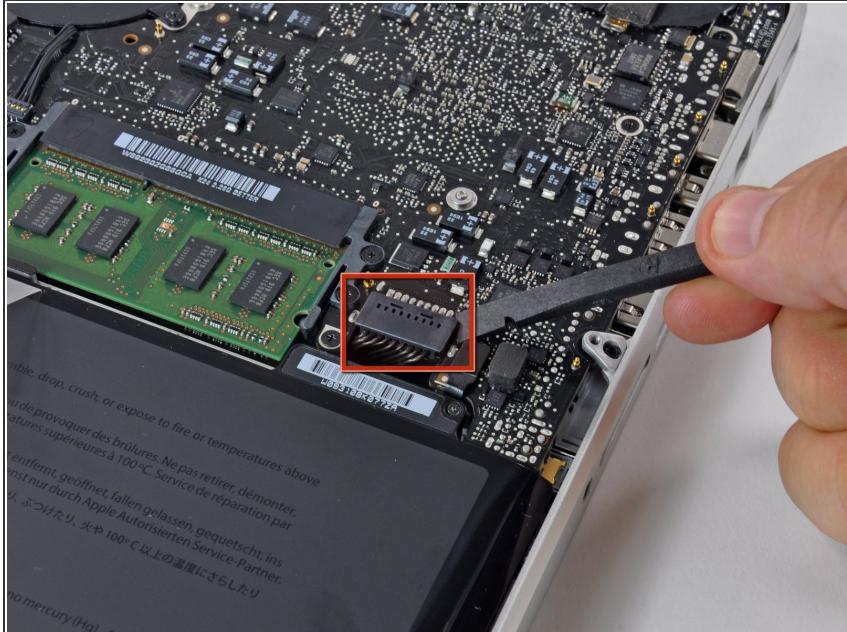
- Remove the following 10 screws securing the lower case to the MacBook Pro 13" Unibody:
  - Seven 3 mm Phillips screws.
  - Three 13.5 mm Phillips screws.

## Step 2



- Slightly lift the lower case and push it toward the rear of the computer to free the mounting tabs.

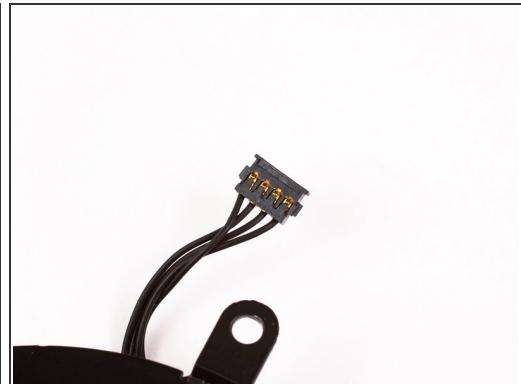
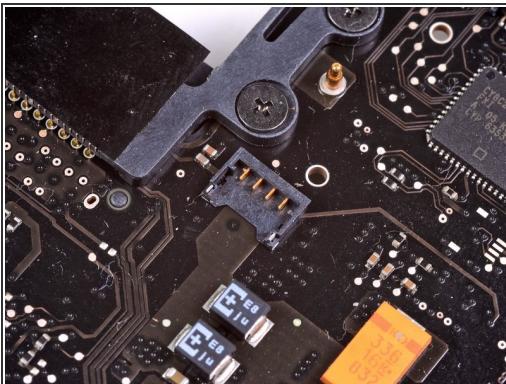
## Step 3 — Battery



 For precautionary purposes, we advise that you disconnect the battery connector from the logic board to avoid any electrical discharge.

- Use the flat end of a spudger to lift the battery connector up out of its socket on the logic board.

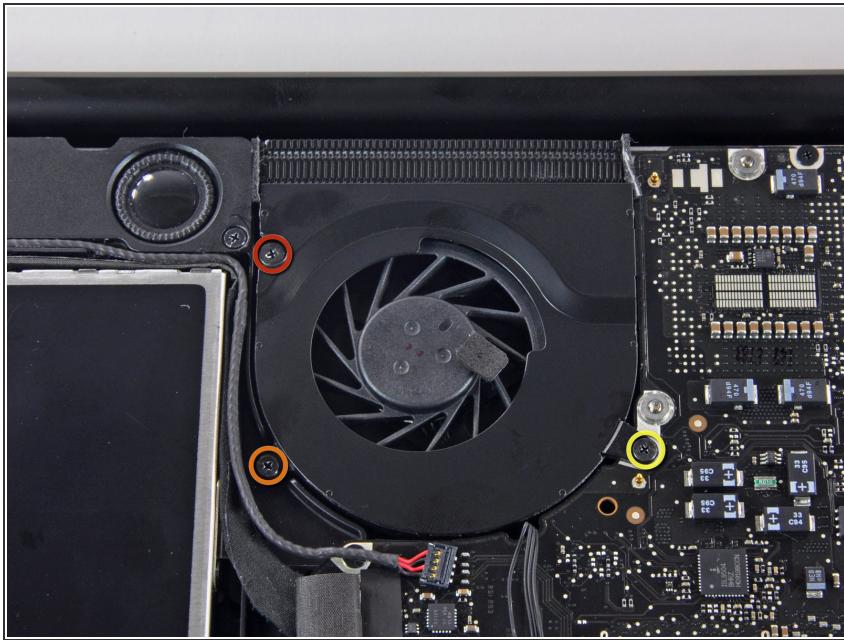
## Step 4 — Fan



- Use a spudger to pry the fan connector out of its seat, and straight up off the logic board.
-  It is useful to twist the spudger axially from beneath the fan cable wires to release the connector.

**⚠** The fan socket and the fan connector can be seen in the second and third pictures. Be careful not to break the plastic fan socket off the logic board as you use your spudger to lift the fan connector straight up and out of its socket. The layout of the logic board shown in the second picture may look slightly different than your machine but the fan socket is the same.

## Step 5



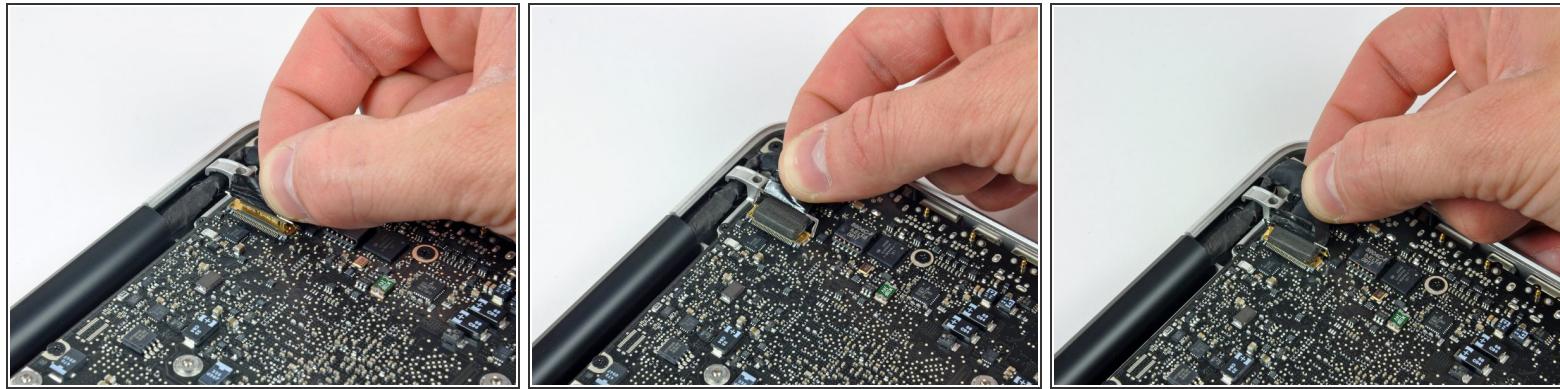
- Remove the following three screws securing the fan to the upper case:
  - One 6.5 mm Phillips.
  - One 5.5 mm Phillips.
  - One 4.5 mm Phillips.

## Step 6



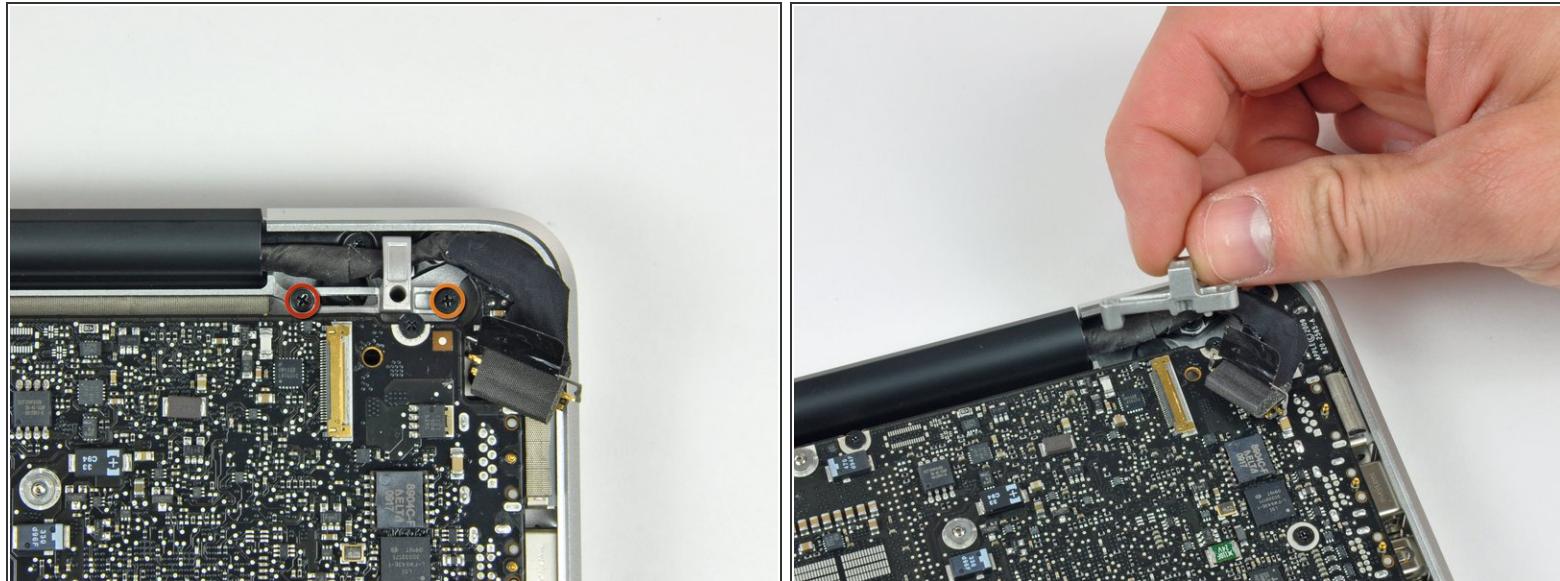
- Lift the fan out of the upper case.

## Step 7 — Logic Board



- 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, towards the DC-in side of the computer.

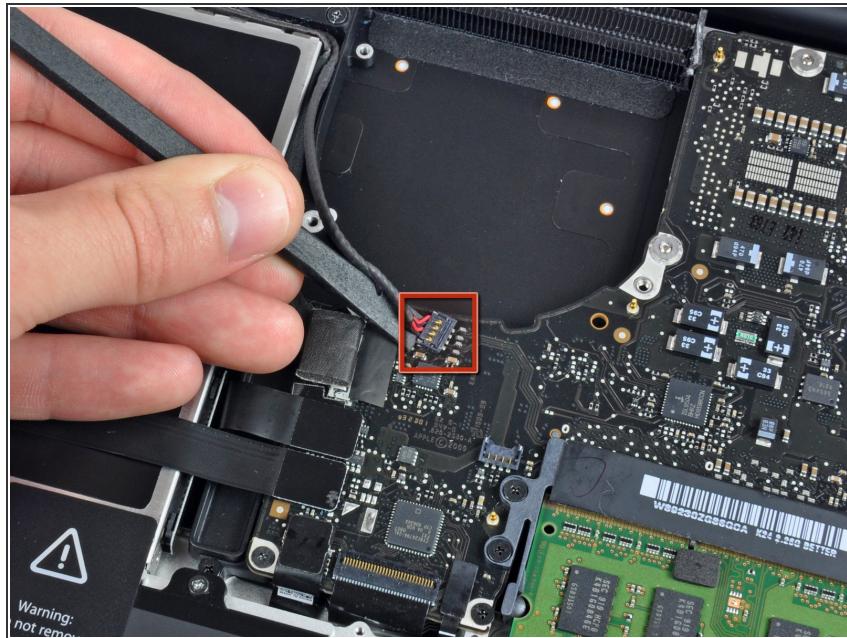
## Step 8



- Remove the following two screws securing the display data cable bracket to the upper case:
  - One 7 mm Phillips.
  - One 5 mm Phillips.
- Lift the display data cable bracket out of the upper case.

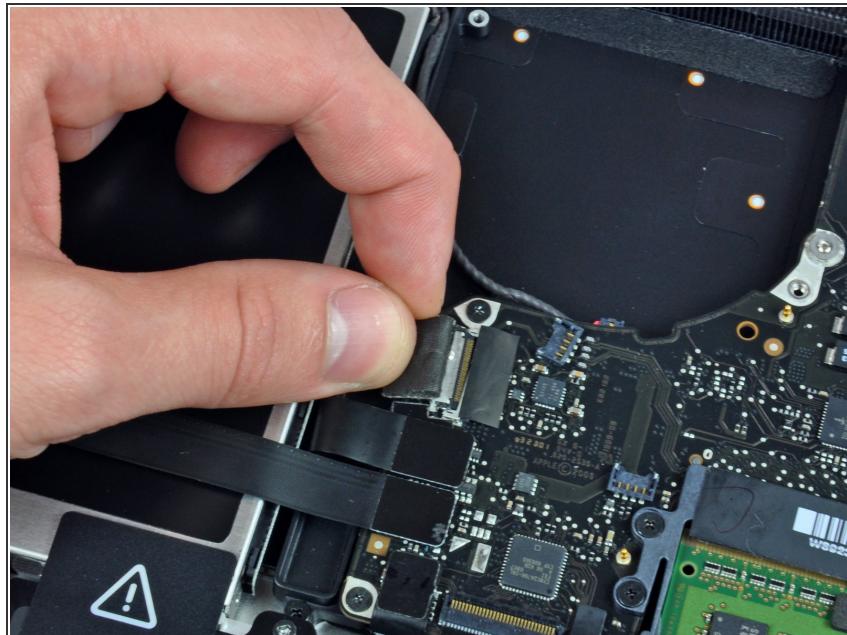
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## Step 9



- Use the flat end of a spudger to pry the subwoofer and right speaker connector up off the logic board.

## Step 10



⚠ In this step you will disconnect the camera cable. Most machines will have a small self adhesive plastic retainer stuck to the logic board to keep the connector in place. Before disconnecting the cable, be sure this retainer is moved out of the way.

- Pull the camera cable connector toward the optical drive to disconnect it from the logic board.

**i** This socket is metal and easily bent.

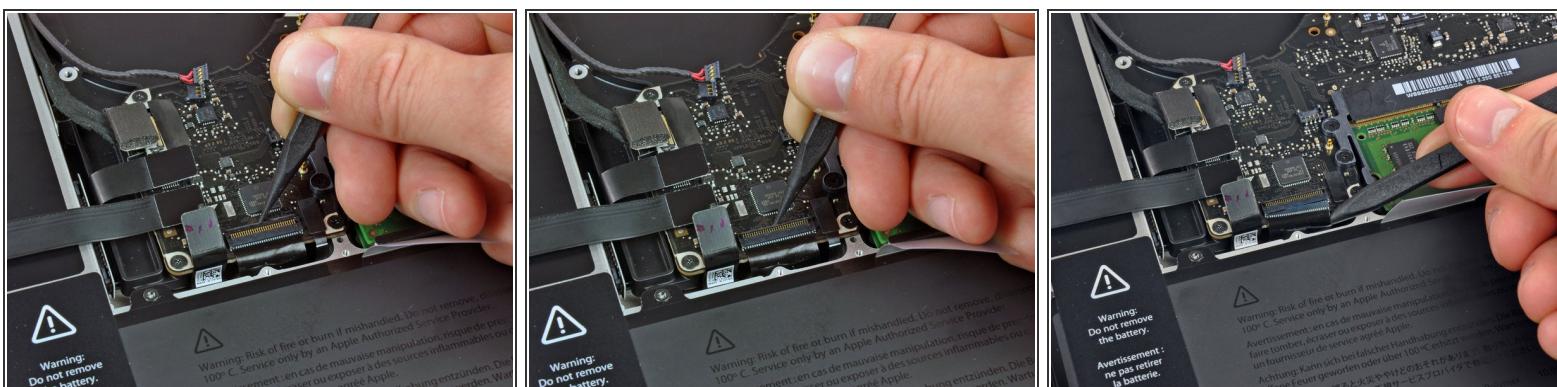
Be sure to align the connector with its socket on the logic board before mating the two pieces.

## Step 11



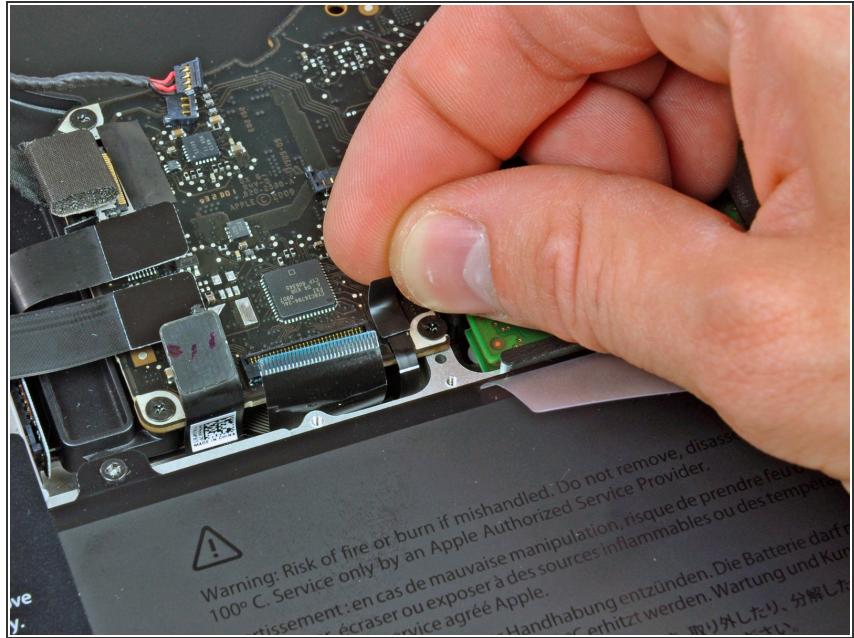
- Use the flat end of a spudger to pry the optical drive, hard drive, and trackpad cable connectors up off the logic board.

## Step 12



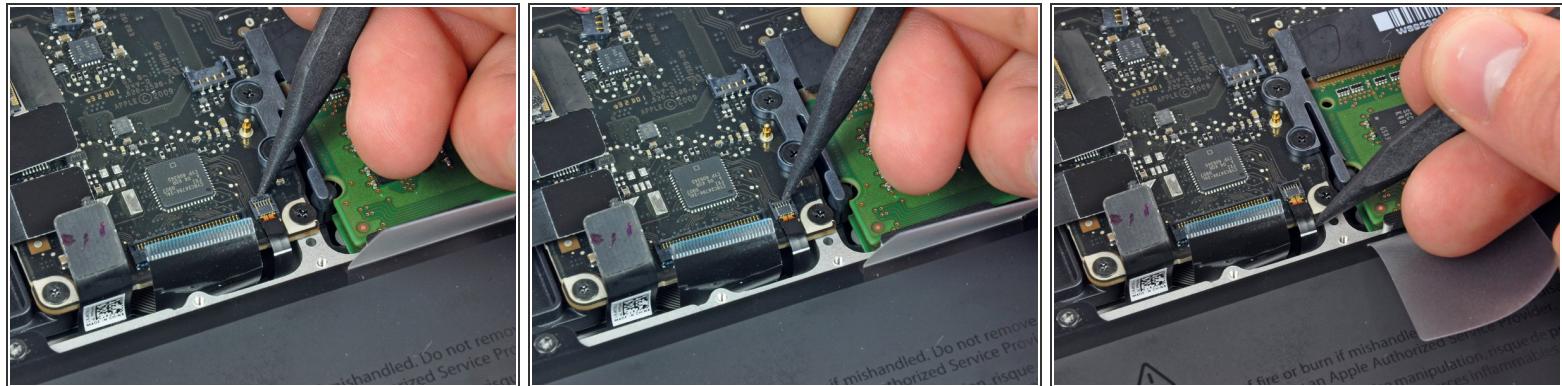
- Use your fingernail or the tip of a spudger to flip up the cable retaining flap on the ZIF socket for the keyboard ribbon cable.
- Use your spudger to slide the keyboard ribbon cable out of its socket.

## Step 13



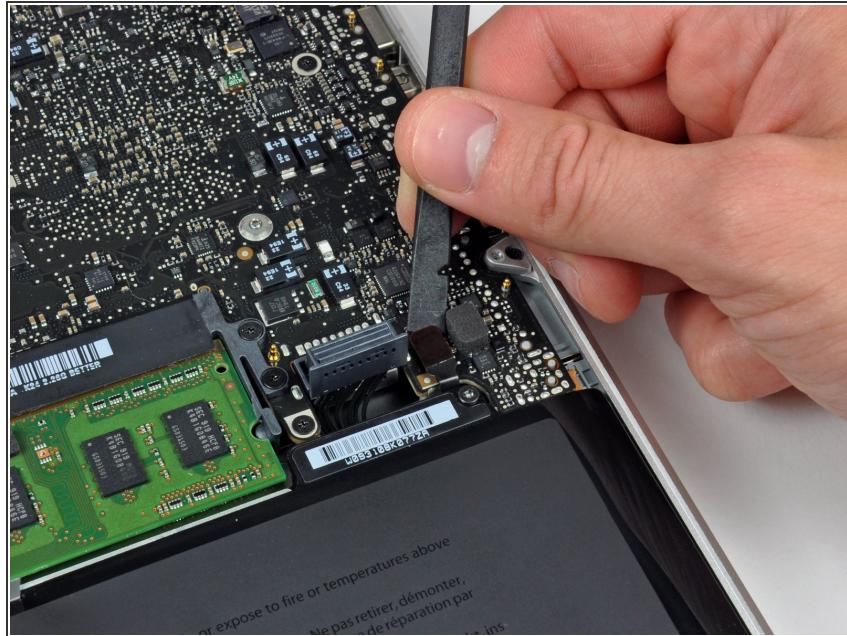
- Peel the small strip of black tape off the keyboard backlight ribbon cable socket.

## Step 14



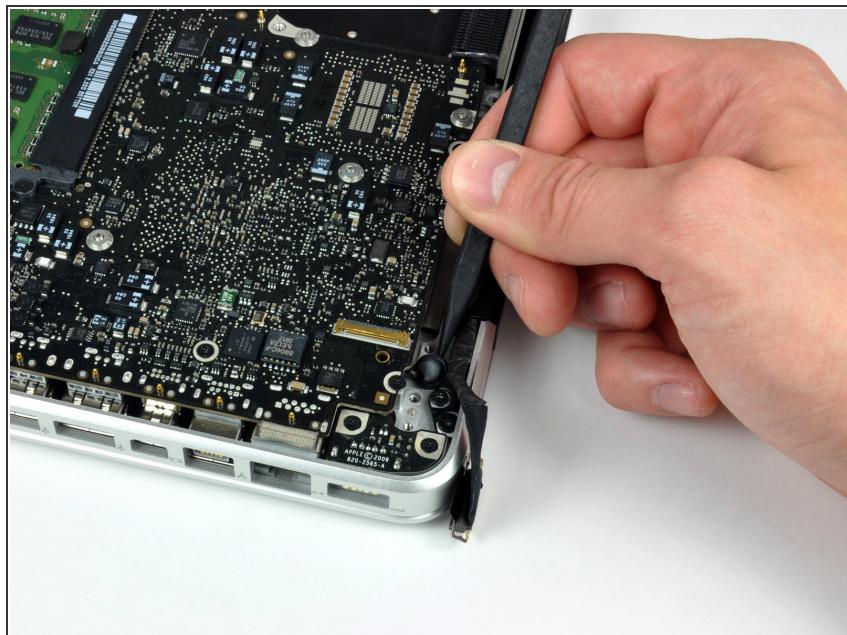
- Use the tip of a spudger to flip up the cable retaining flap on the ZIF socket for the keyboard backlight ribbon cable.
- Use your spudger to slide the keyboard backlight ribbon cable out of its socket.

## Step 15



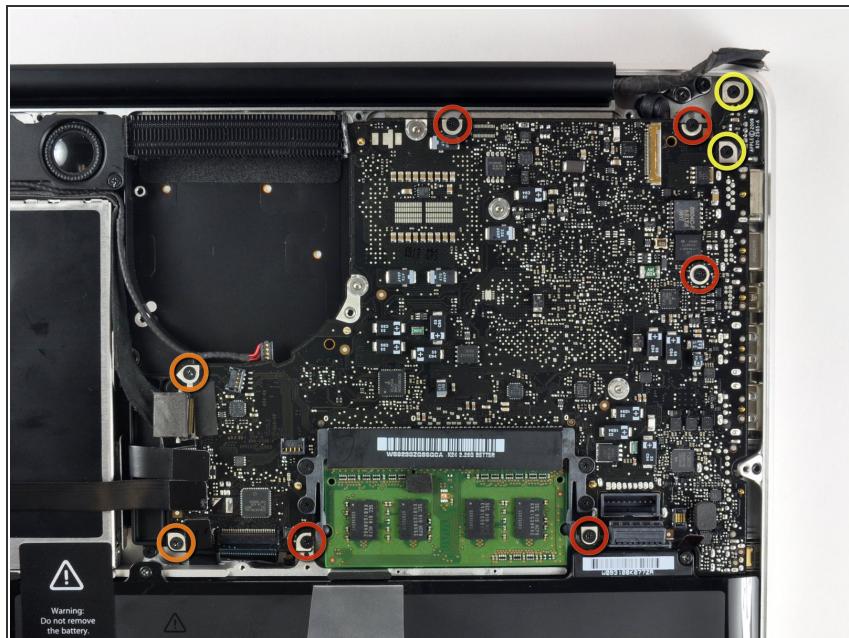
- Use the flat end of a spudger to pry the battery indicator cable connector up off the logic board.

## Step 16



- Use the tip of a spudger to pry the microphone off the adhesive attaching it to the upper case.

## Step 17



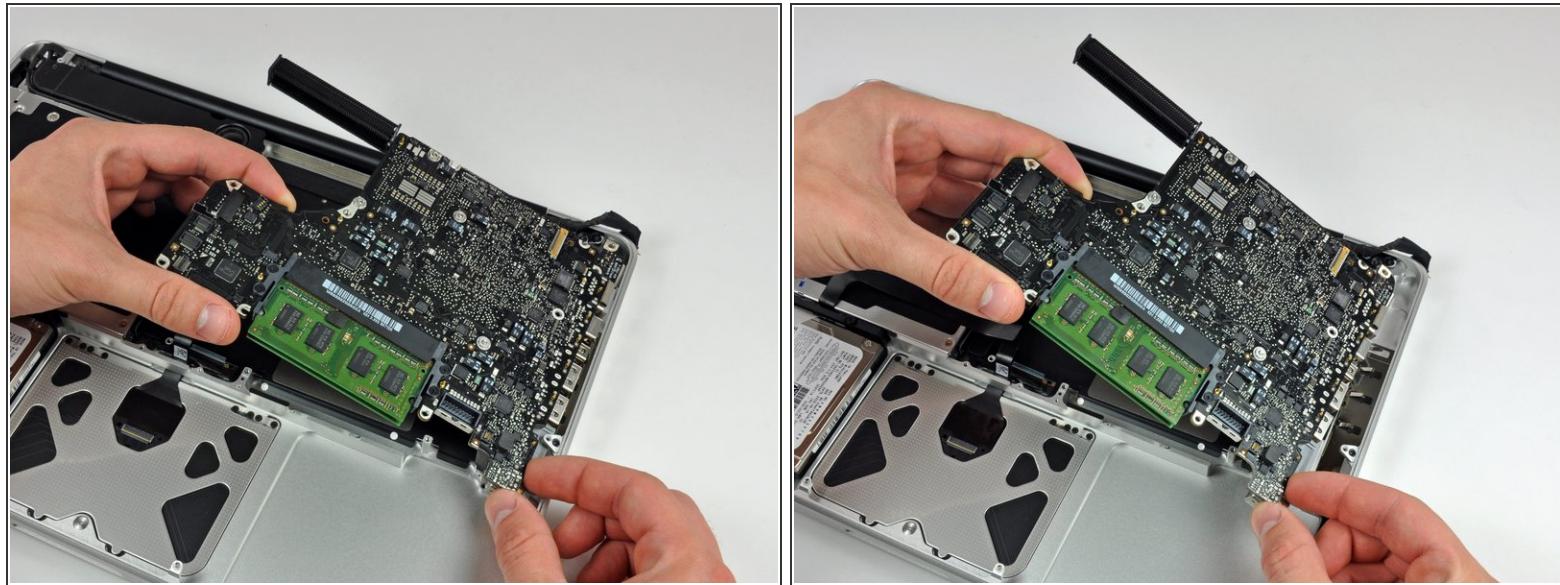
- Remove the following screws:
  - Five 3.1 mm Phillips.
  - Two 3.9 mm Phillips.
  - Two 7 mm Phillips from the DC-in board.

## Step 18



- Remove the following Tri-point screws securing the battery to the upper case:
  - One 5.5 mm Tri-point screw.
  - One 13.5 mm Tri-point screw.
- Lift the battery out of the upper case.

## Step 19



- Lift the logic board from its left edge and raise it until the ports clear the side of the upper case.
- Pull the logic board away from the side of the upper case and remove it, minding the DC-in board that may get caught.

**⚠** Be careful not to rip out the fragile connector plug of the microphone assembly.

## Step 20 — Upper Case



- Remove two Phillips screws securing the hard drive bracket to the upper case.
- The screws remain captive to the bracket.
- Lift the the retaining bracket out from the upper case.

## Step 21



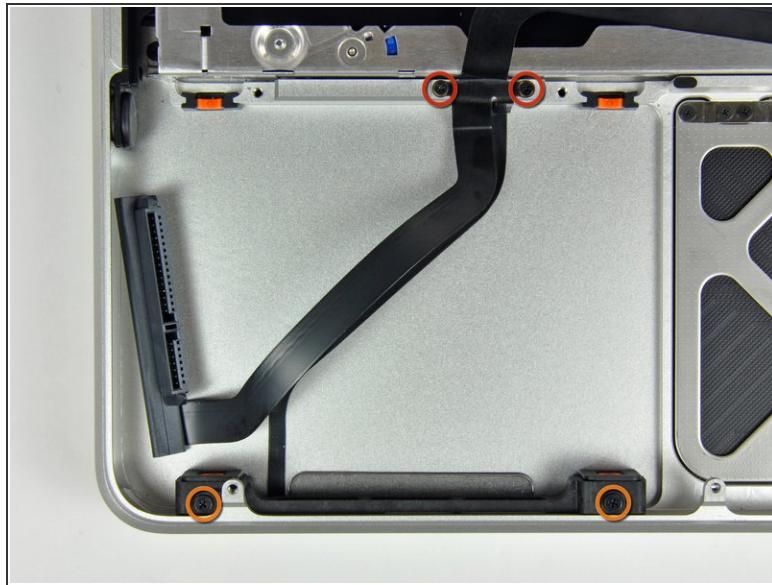
- Lift the hard drive from its free edge and pull it out of the chassis, minding the cable attaching it to the computer.

## Step 22



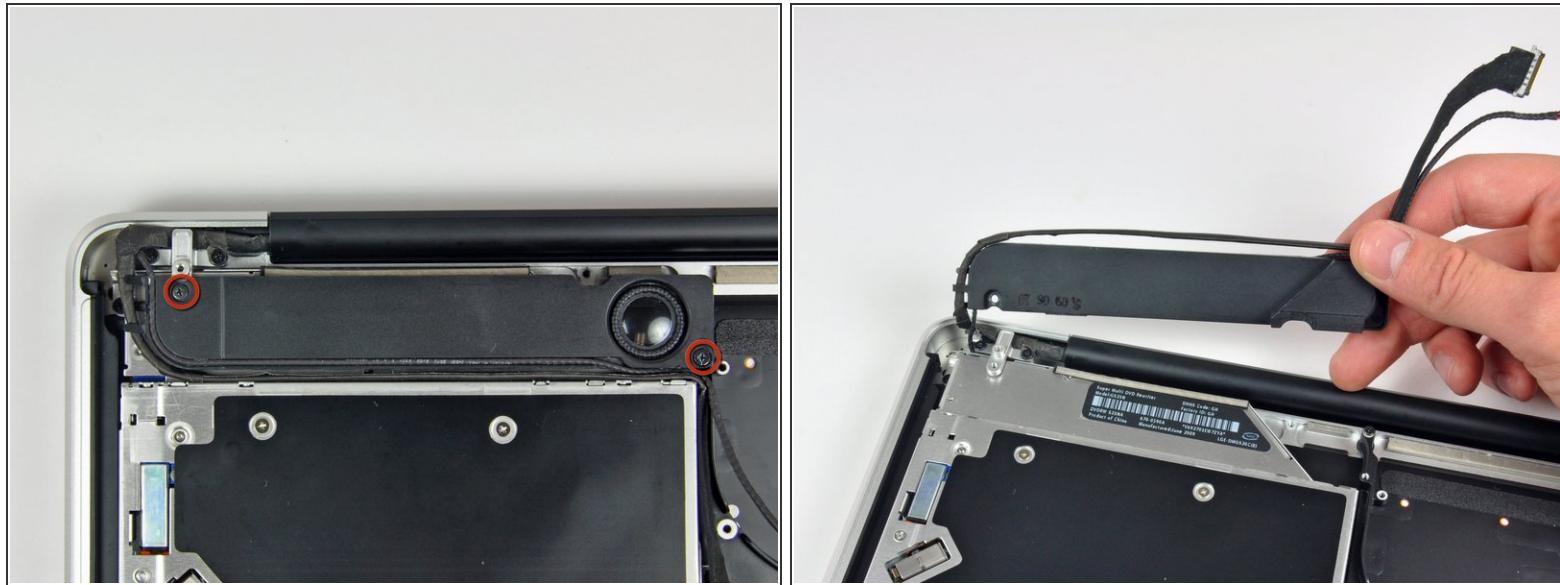
- Disconnect the hard drive by pulling the hard drive cable connector away from the drive.

## Step 23



- Remove the following four screws securing the hard drive and IR sensor cable to the upper case:
  - Two 1.5 mm Phillips screws.
  - Two 4 mm Phillips screws.
- Slide the hard drive and IR sensor bracket away from the edge of the upper case.
- Carefully peel the hard drive and IR sensor cable from the upper case.

## Step 24



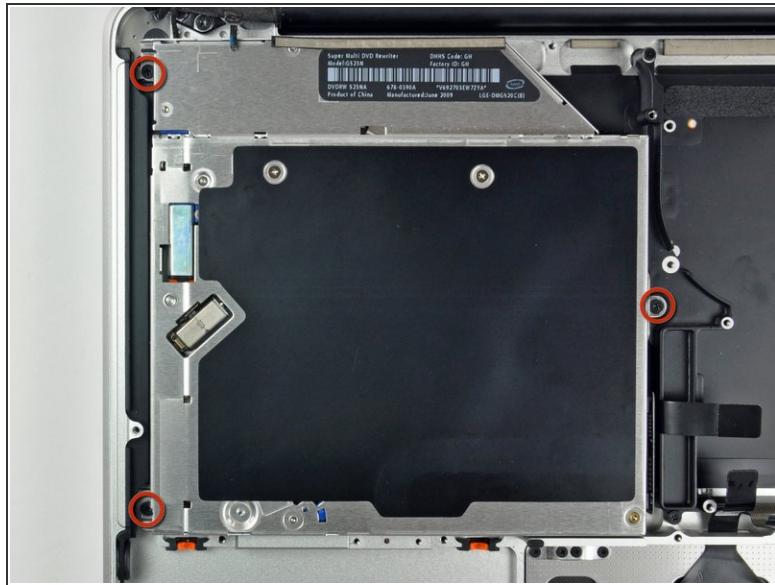
- Remove the two Phillips screws securing the subwoofer to the upper case.  
*(i)* The longer ( 8.2 mm ) of the two screws is on the right. The shorter ( 5 mm ) of the two screws is on the left.
- ⚠ The subwoofer is still connected to the right speaker, so don't completely remove it just yet.
- Lift the subwoofer off the optical drive, and set it above the computer.

## Step 25



- Remove the two 9.2 mm Phillips screws securing the camera cable bracket to the upper case.
- *(i)* The innermost screw may remain captive in the camera cable.
- *(i)* If you have the Mid 2010 version, your camera cable bracket may look slightly different, but the procedure is the same.
- Lift the camera cable bracket out of the upper case.

## Step 26



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

## Step 27



- Peel back the small piece of black tape covering the right speaker cable.

Be careful, as the power button ribbon cable is directly under this piece of tape.

## Step 28



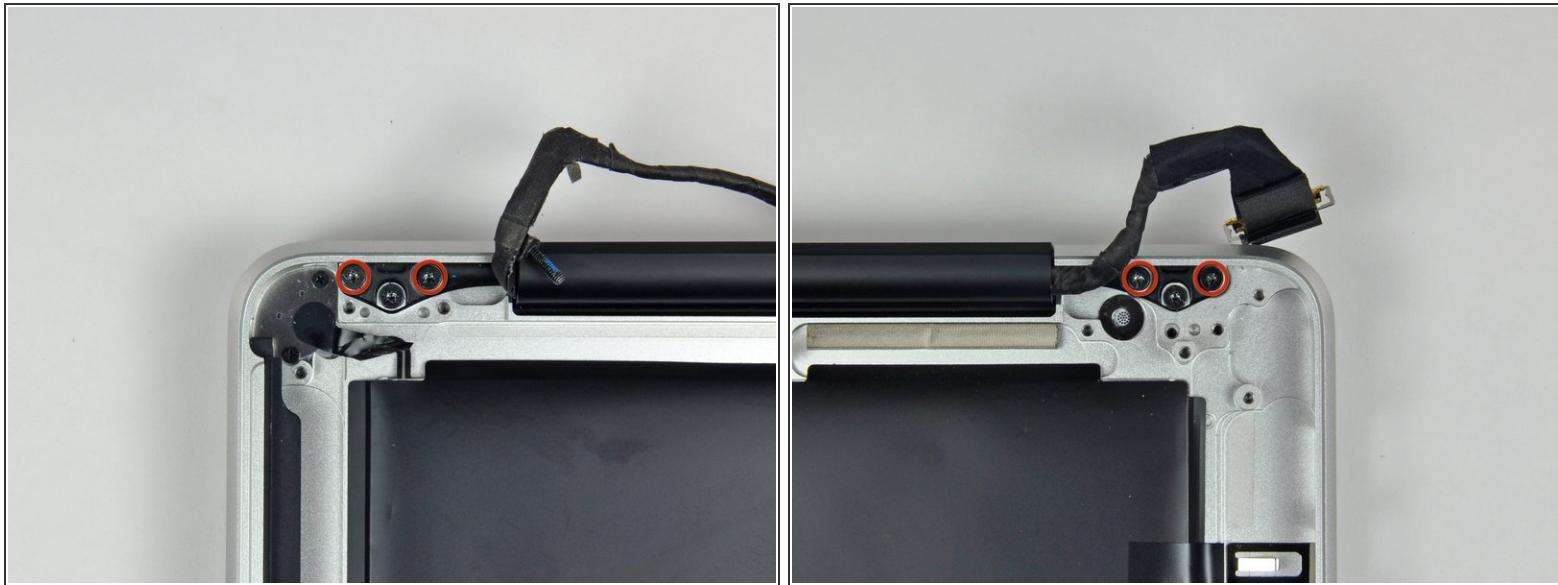
- Use the tip of a spudger to pry the right speaker up off the adhesive securing it to the upper case.

## Step 29



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

## Step 30



- Remove the two outer 6 mm Torx screws securing each side of the display bracket to the upper case (4 screws total).
- When re-assembling, back out the inner 6 mm Torx screws about a quarter turn and gently align the display and upper case before inserting the outer 6 mm Torx screws. After the display and case are aligned, tighten the inner 6 mm Torx screws, then insert and tighten the outer 6 mm Torx screws.

## Step 31



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

## Step 32



⚠ Be sure to hold the display and upper case together with your left hand. Failure to do so may cause the freed display/upper case to fall, potentially damaging each component.

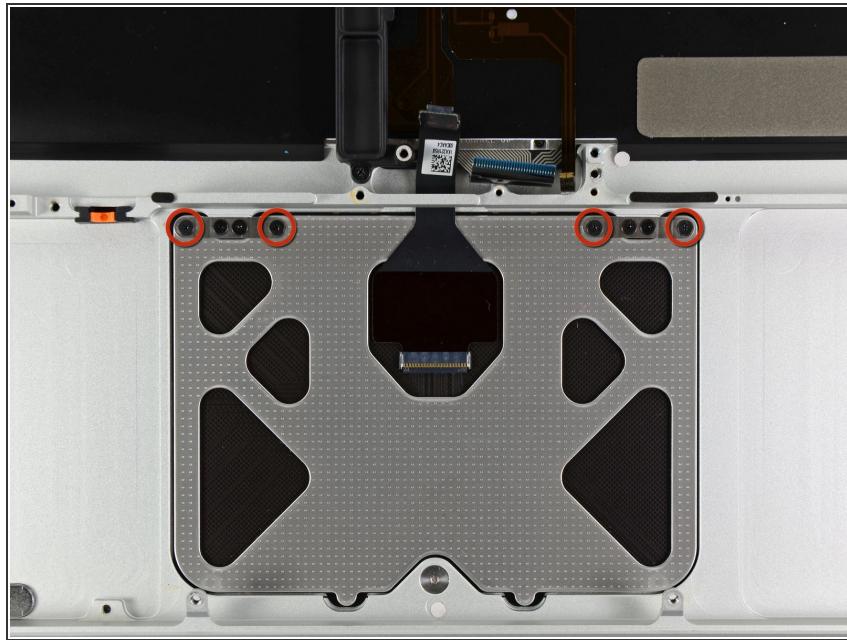
- Remove the last remaining 6 mm Torx screw securing the display to the upper case.

## Step 33



- 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 up and away from the upper case, minding any brackets or cables that may get caught.

## Step 34 — Upper Case



- Remove the four 1.2 mm Phillips screws highlighted in red.

## Step 35



- Carefully dislodge the edge of the trackpad closest to the keyboard from its recess in the upper case by pushing it away from the brackets attached to the upper case.
- De-route the trackpad cable through its slot cut into the upper case.

## Step 36



- Pull the trackpad away from the outer edge of the upper case.
- Remove the trackpad and set it aside.

## Step 37



*(i)* In the following steps, you will be working on your new upper case.

- Use a T6 Torx screwdriver to loosely install the 1.1 mm set screw included with your new upper case into its tapped hole near the middle of the trackpad opening on your new upper case.

 Only tighten it about one turn for now.

## Step 38



- Carefully insert the cable from your old trackpad through its slot cut into your new upper case.
- Use one hand to hold the trackpad cable in place as you insert the two retaining tabs on the outer edge of the trackpad under the lip on the upper case.
- Pull the trackpad cable as you seat the trackpad into its void in your new upper case.

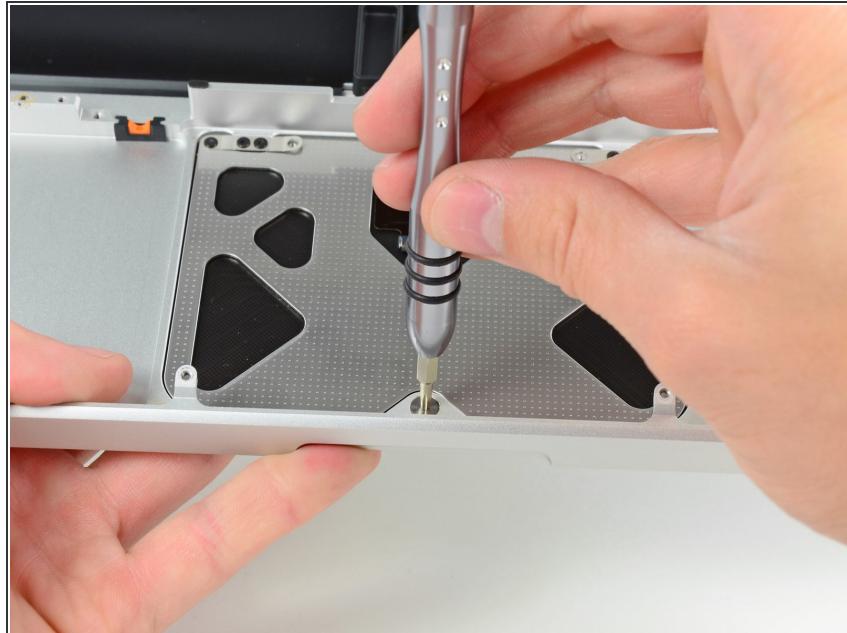
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## Step 39



- Insert a 1.2 mm Phillips screw into each of the outer holes drilled into the trackpad (two screws total).
  - ⚠ You'll install the rest in a bit.
  - ⓘ Tighten the screws, then back them out about a quarter turn to aid in aligning your trackpad during the next few steps.

## Step 40



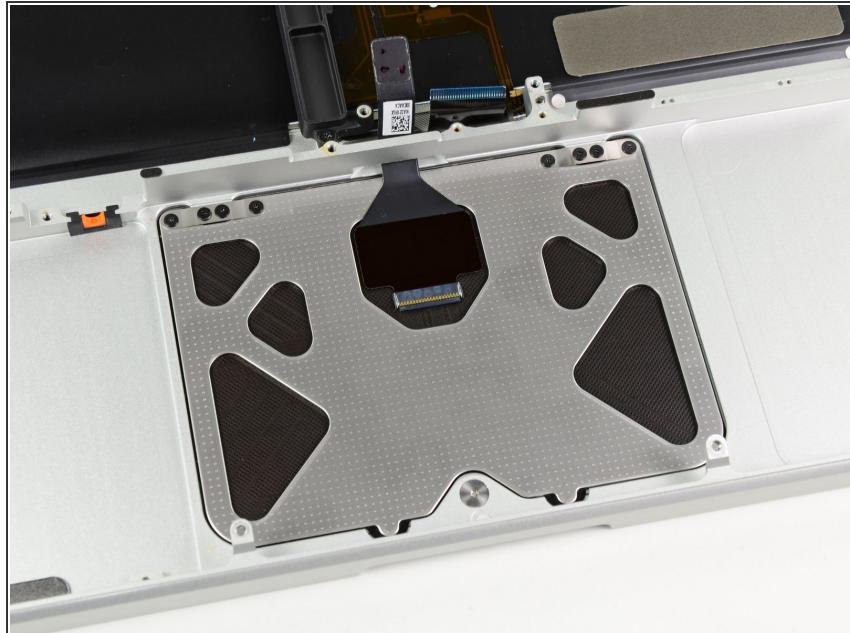
- While continually trying to click your trackpad, gently tighten the T6 Torx set screw until the clicks return to their factory "feel."
  - ⓘ You can tell when the screw is tightened just right by the noise it makes when the trackpad clicks. If the set screw is too loose, the trackpad will have excessive play before it clicks. If it is too tight, the trackpad will click too easily and won't make the characteristic loud mouse clicking noise.

## Step 41



- Next, flip your upper case over so the keyboard side is facing up.
- Align the trackpad so it is centered in its hole cut into the upper case.

## Step 42



- Tighten the outer two screws along the inner edge of the trackpad and check the alignment of it on the outer side of the upper case.
- If its alignment looks good, install the rest of the Phillips screws along the inner edge of the trackpad.
- Before reassembling your machine, verify that the set screw is still installed in a position so the mouse will click correctly.

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