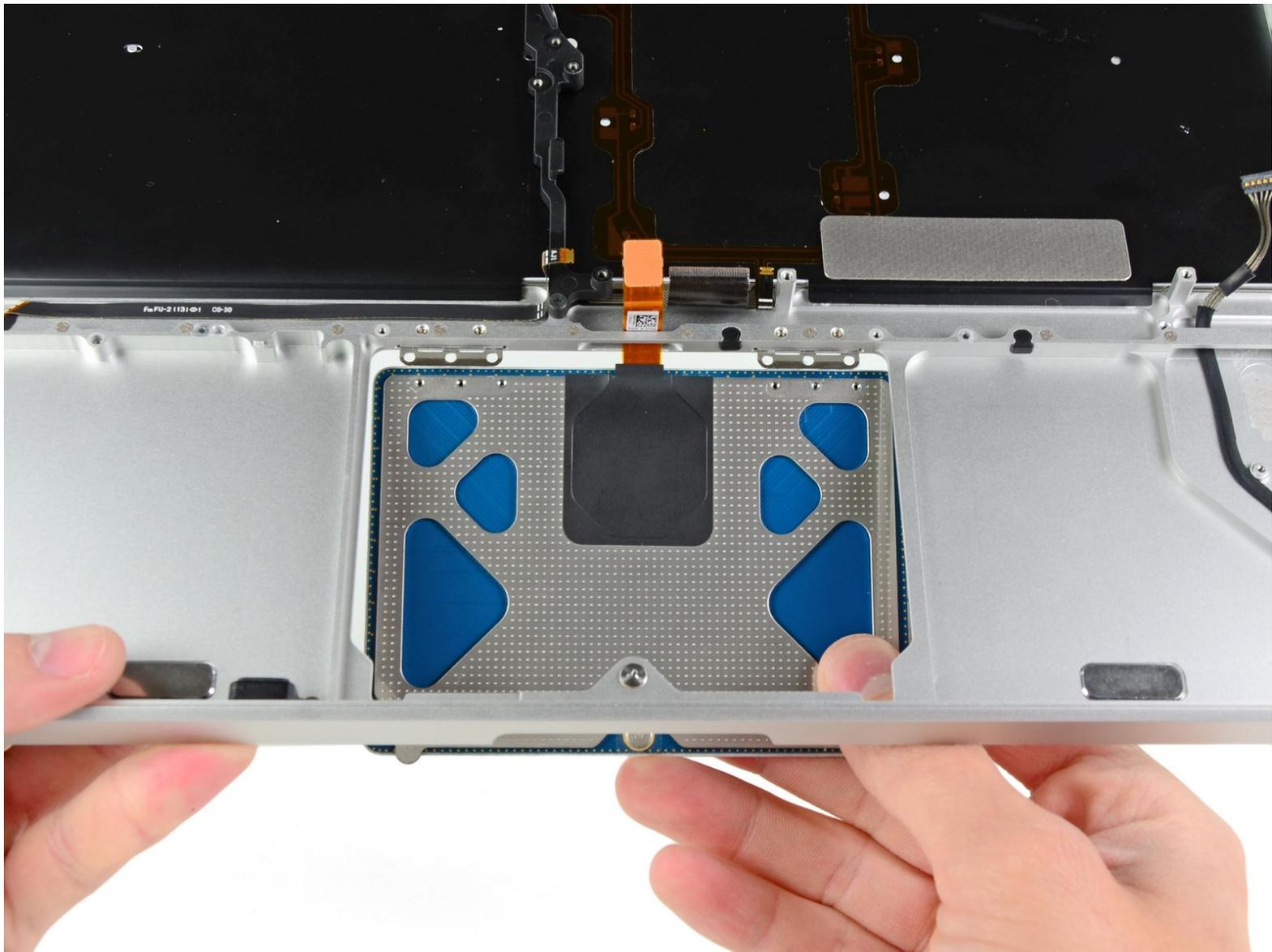




MacBook Unibody Model A1278 Upper Case Replacement

Transfer over your trackpad and replace the upper case on your MacBook Unibody Model A1278.

Written By: Andrew Bookholt



INTRODUCTION

Use this guide to replace your upper case. The end of this guide details how to transfer the trackpad to your new upper case.

TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [T6 Torx Screwdriver](#) (1)
- [Tri-point Y0 Screwdriver](#) (1)
- [Tri-point Y00 Screwdriver](#) (1)

PARTS:

- [MacBook Unibody \(Model No. A1278\) Upper Case \(Non-Backlit\)](#) (1)
- [MacBook Unibody \(Model No. A1278\) Upper Case \(Backlit\)](#) (1)

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



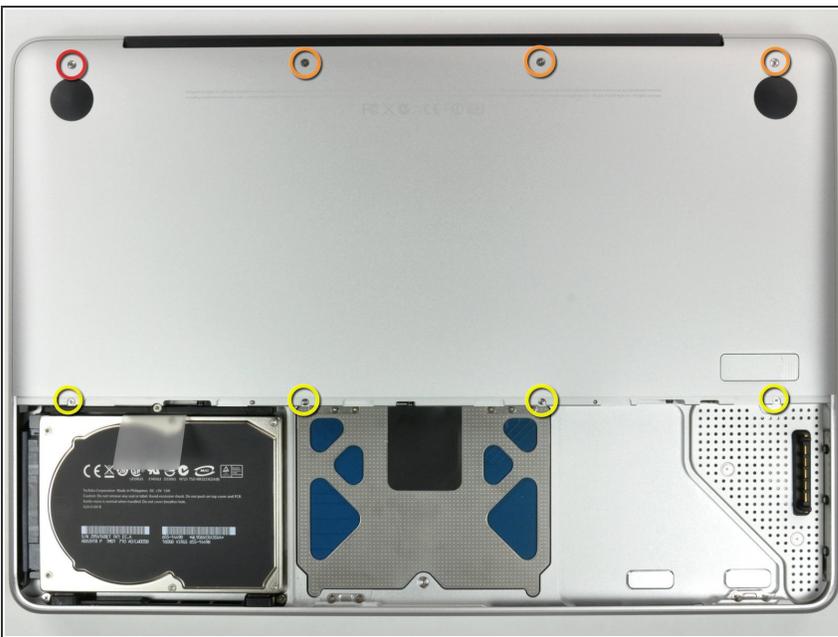
- The access door should now be raised enough to lift it up and out of the Unibody.

Step 3 — Battery



- ⓘ Be sure the access door release latch is vertical before proceeding.
- Grab the white plastic tab and pull the battery up and out of the Unibody.

Step 4 — Lower Case



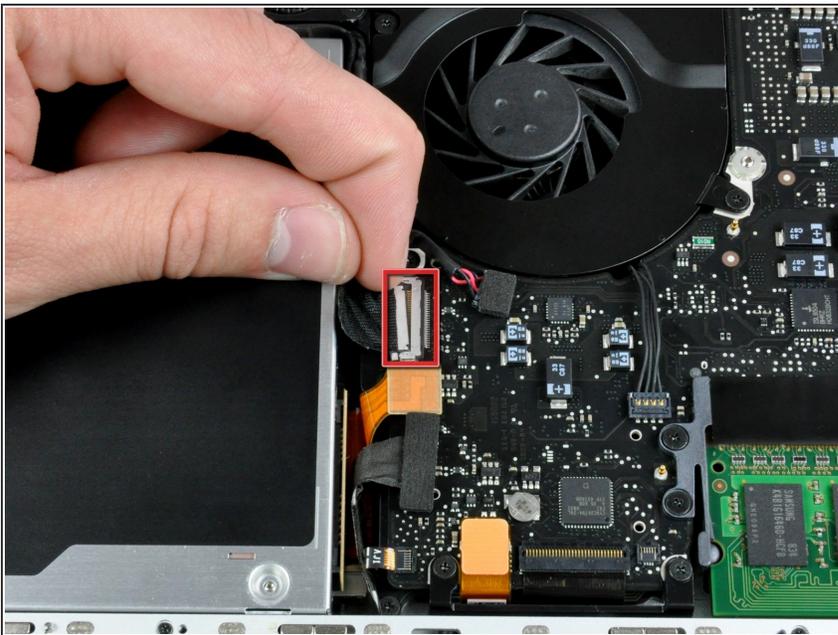
- Remove the following eight screws securing the lower case to the chassis:
 - One 3 mm Phillips screw.
 - Three 13.5 mm Phillips screws.
 - Four 3.5 mm Phillips screws.

Step 5



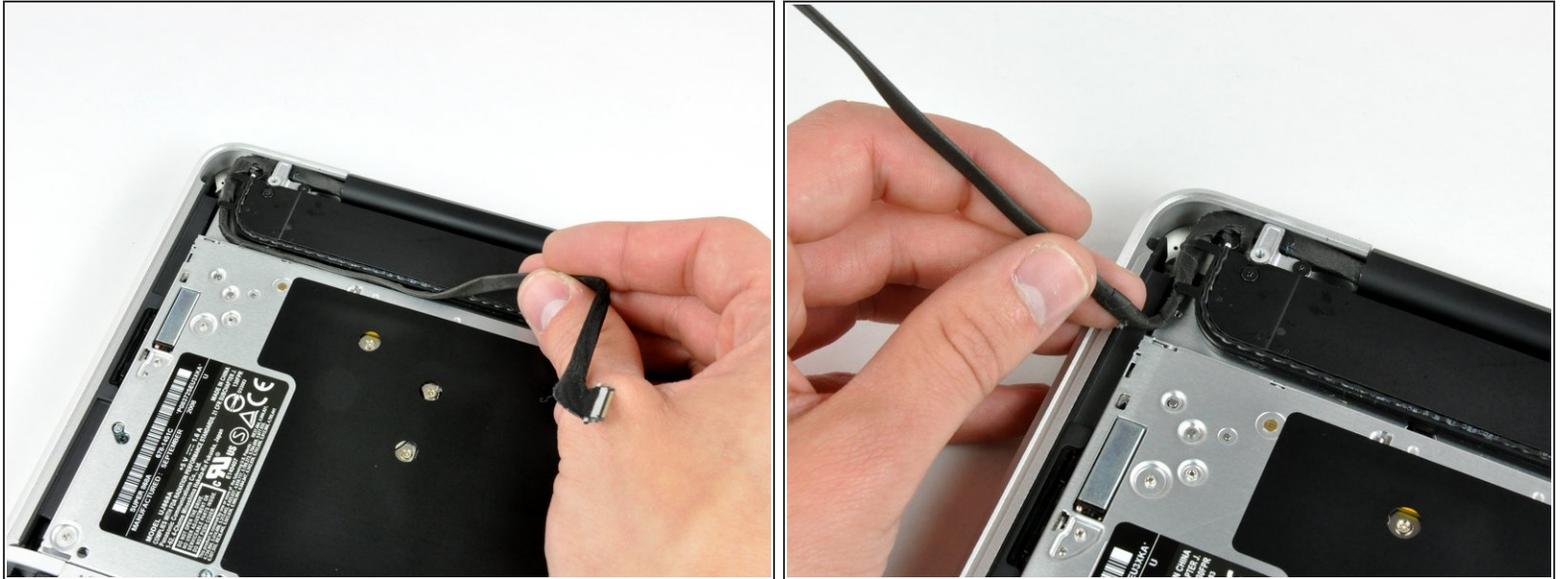
- Using both hands, lift and remove the lower case off the upper case.

Step 6 — Display Assembly



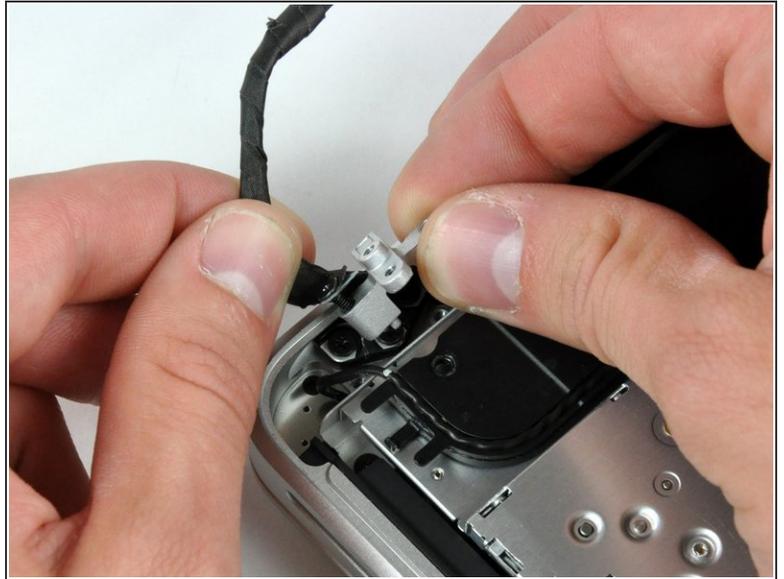
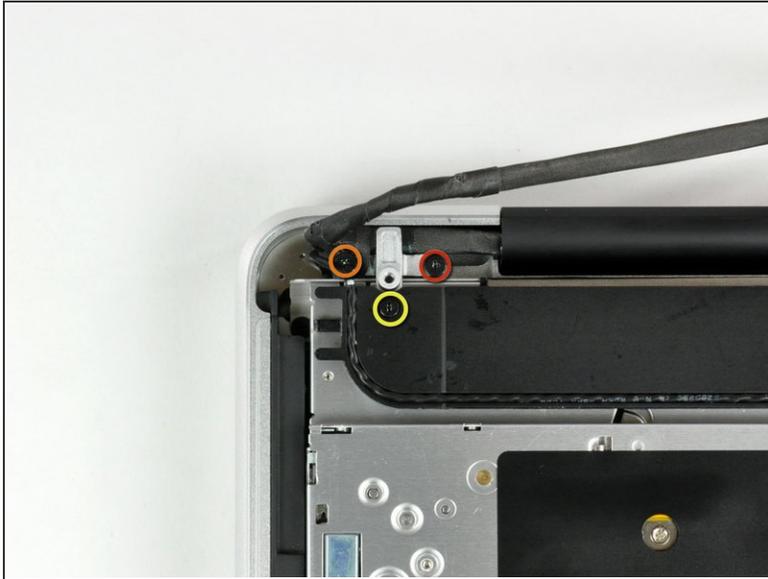
- Disconnect the camera cable by pulling the male end straight away from its socket.
- ⚠ Be careful not to pull up on the cable as you remove it from the socket.

Step 7



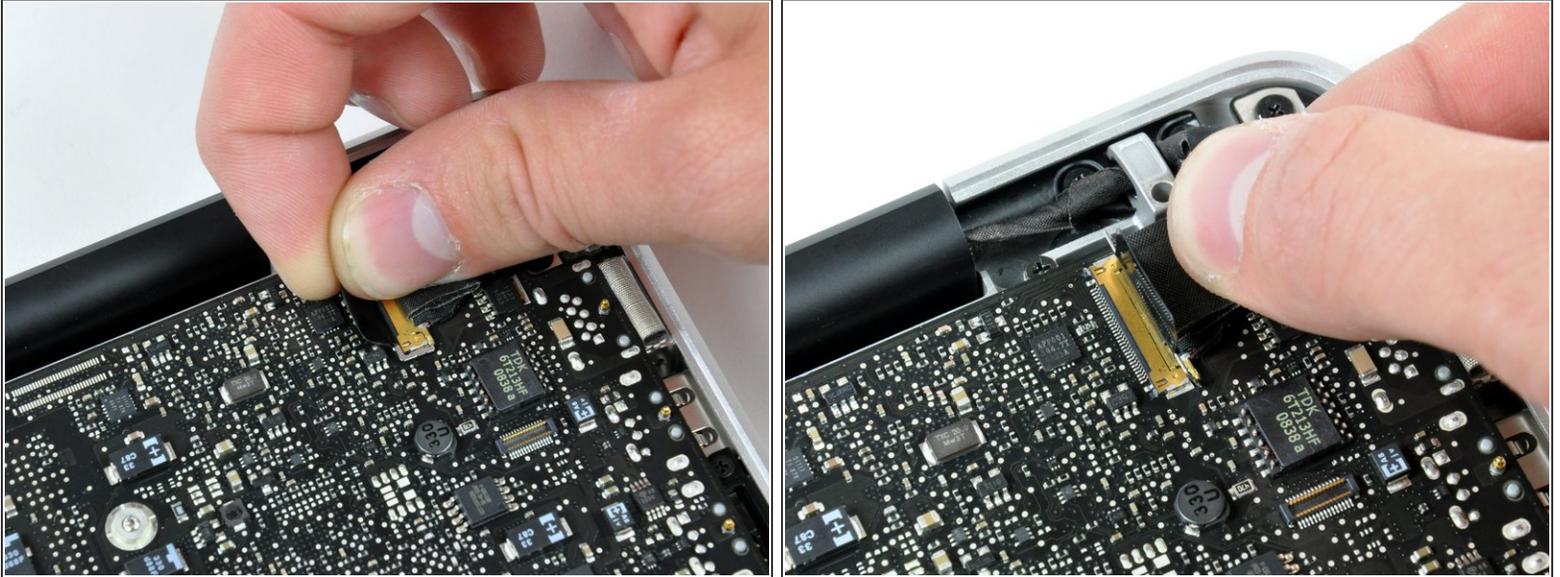
- De-route the camera data cable from the channel in the optical drive.

Step 8



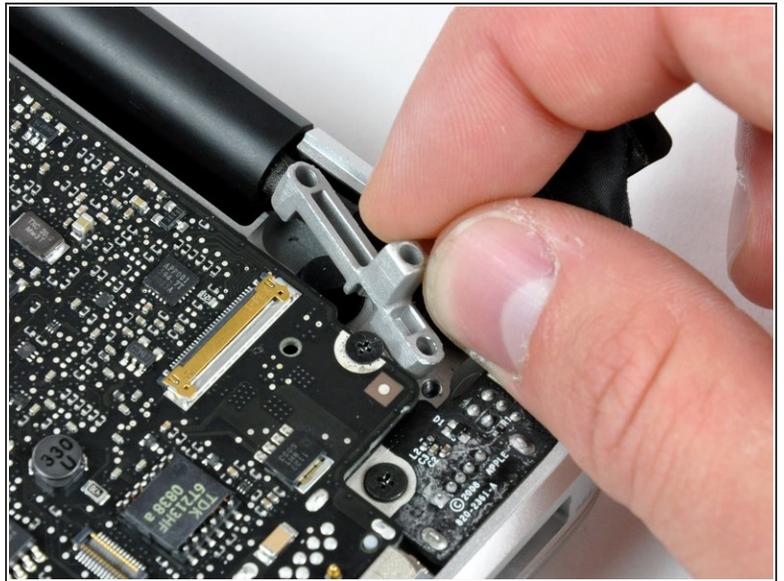
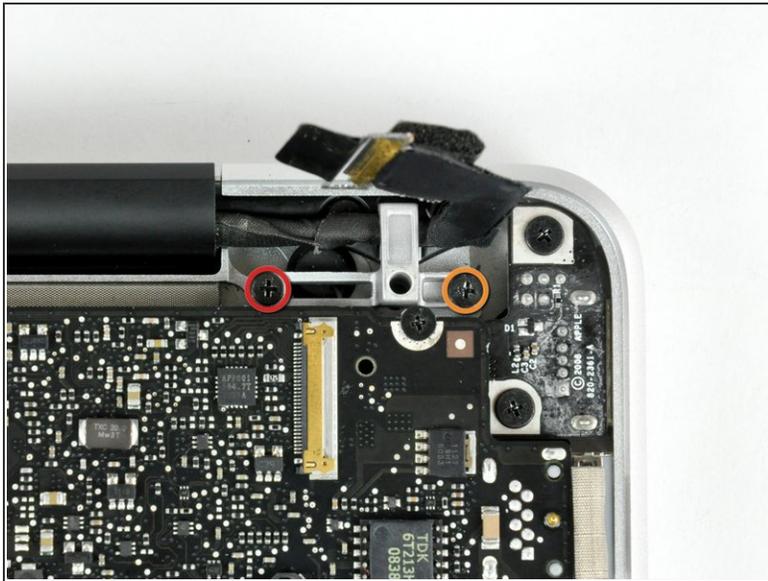
- Remove the following screws securing the camera data cable and right speaker to the upper case:
 - One 9.9 mm partially threaded Phillips screw
 - One 9.6 mm threaded Phillips screw
 - One 4 mm Phillips screw
- Slide the camera cable bracket out from under the subwoofer and remove it from the computer.
- ⓘ The iSight cable has an eyelet through which passes the left-most screw in these pictures.

Step 9



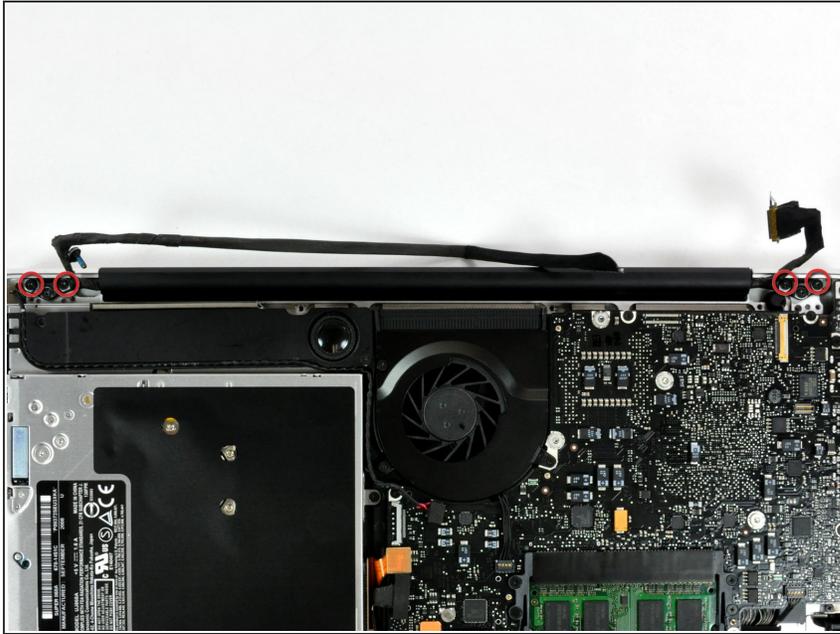
- Grab the plastic pull tab secured to the display data cable lock and rotate it toward the DC-in side of the computer.
- Pull the display data cable connector straight away from its socket.
- ⓘ Make sure to pull the connector straight away and not straight up from its socket.

Step 10



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

Step 11



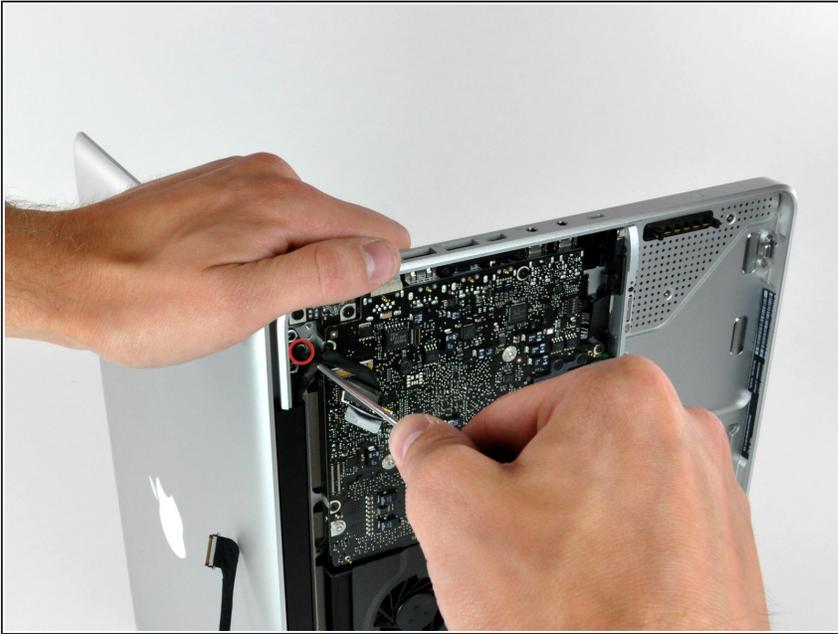
- Remove the two outer 6 mm Torx screws securing each side of the display to the upper case (4 screws total).

Step 12



- 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.

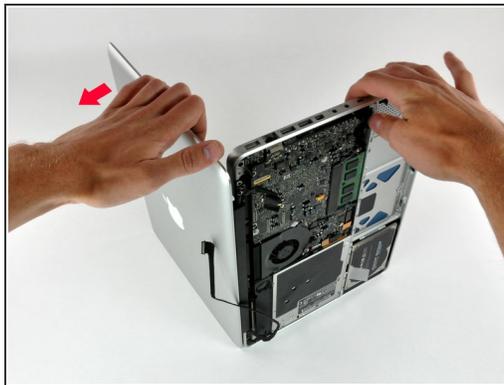
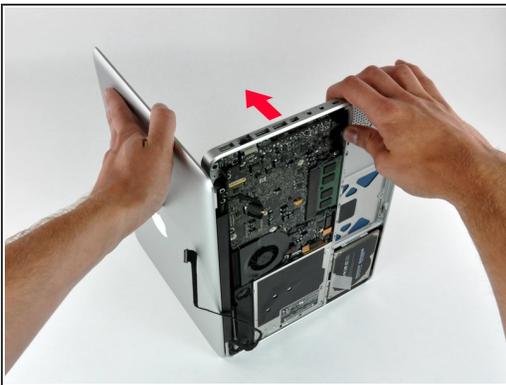
Step 13



⚠ 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.

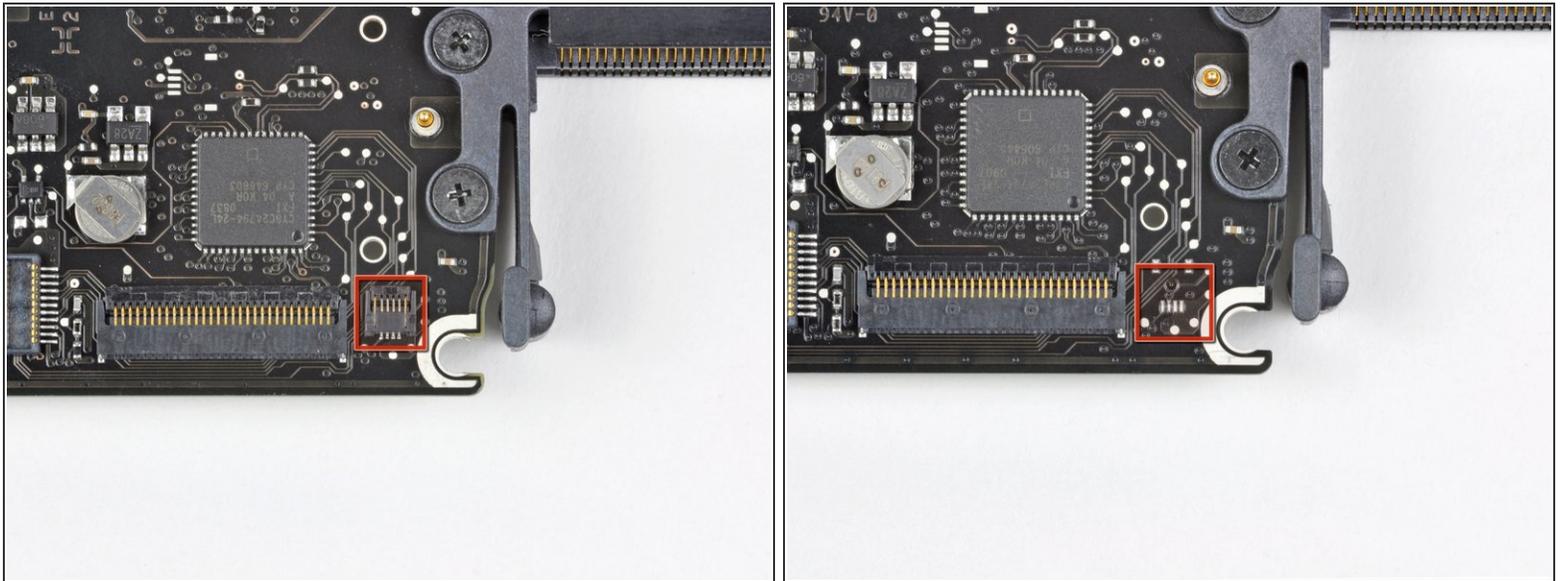
- Remove the last remaining 6 mm Torx screw securing the display to the upper case.

Step 14



- 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.

Step 15 — Upper Case



- ⚠** Some 2.0 GHz A1278 MacBook Unibody logic boards do not have the necessary socket installed to accept the keyboard backlight ribbon cable attached to the upper case. The first and second pictures show logic boards with and without the socket installed, respectively. If your logic board does not have the backlight ribbon cable socket installed, the keyboard **will** work but the keys **will not** light up.
- i** If your logic board does not have the socket installed to accept the keyboard backlight ribbon cable and you are installing a backlit upper case, simply tuck the keyboard backlight ribbon cable out of the way when you reinstall the logic board into the upper case.

Step 16



- Remove the single Phillips screw securing the hard drive bracket to the chassis.
- ☑ This screw is captive to the hard drive bracket.

Step 17



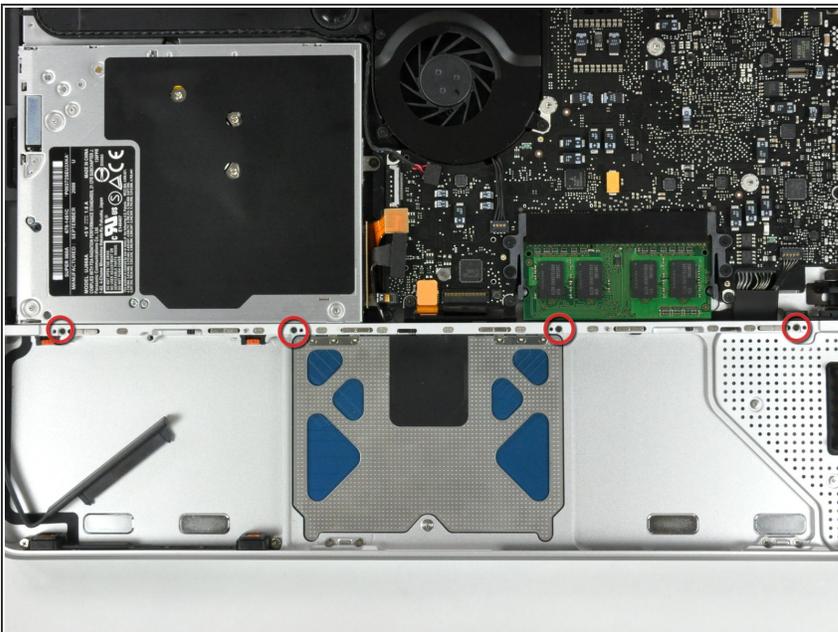
- Lift the hard drive by its pull tab enough to grab and remove the retaining bracket.
- Lift the hard drive out of the chassis, minding the cable attaching it to the computer.

Step 18



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

Step 19



- Remove the four 10.3 mm Phillips screws securing the mid wall to the upper case.

Step 20



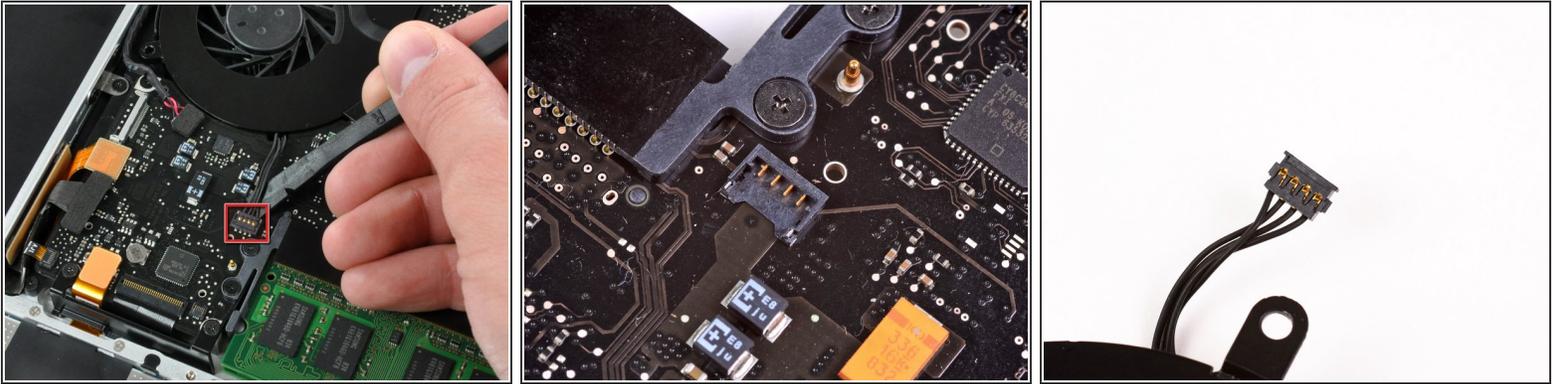
- Lift the mid wall out of the upper case.

Step 21



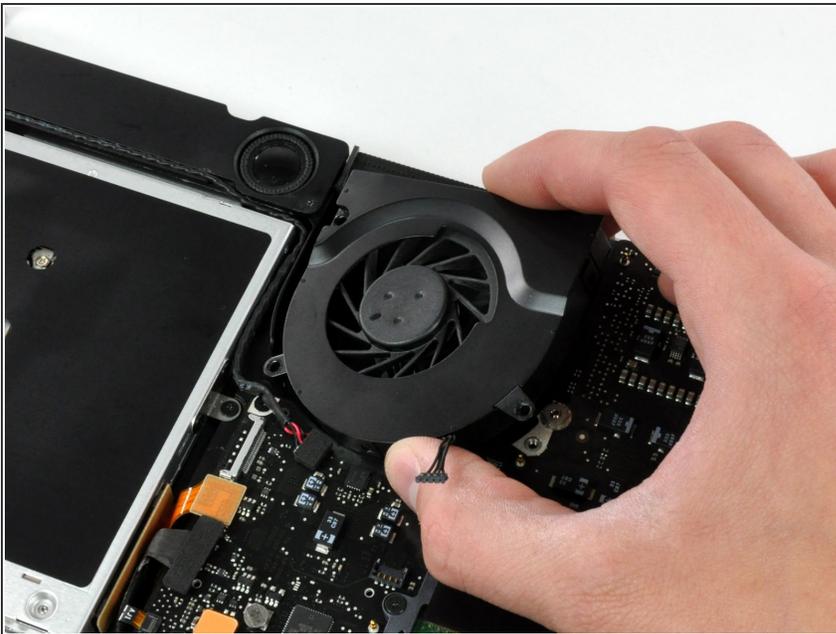
- Remove the following three screws securing the fan to the upper case:
 - Two 5 mm Phillips screws.
 - One 7 mm Phillips screw.

Step 22



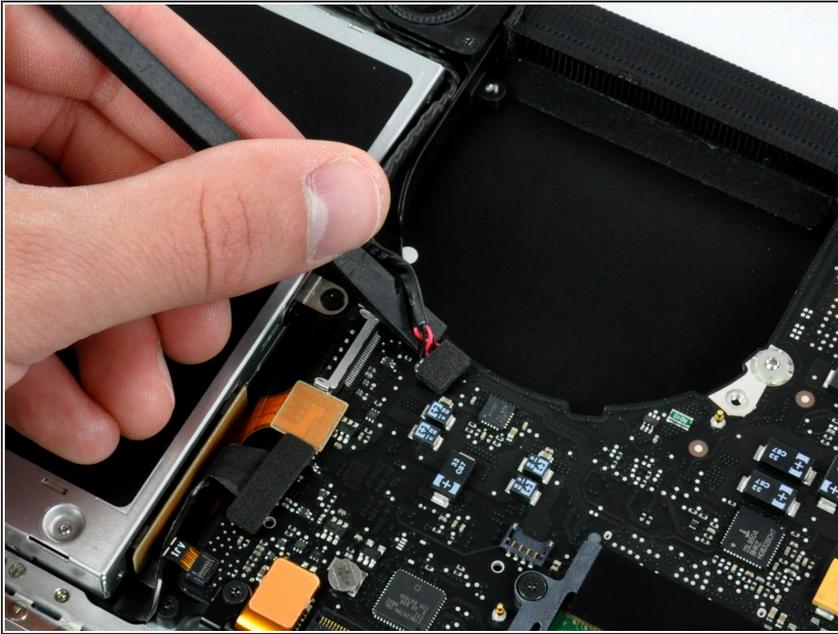
- Use a spudger to pry the fan connector straight up and out of its socket on the logic board.
- ⓘ It is useful to twist the spudger axially from beneath the fan cable wires to release the connector.
- ⚠ The fan socket and the fan connector can be seen in the second and third pictures. Be careful not 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 23



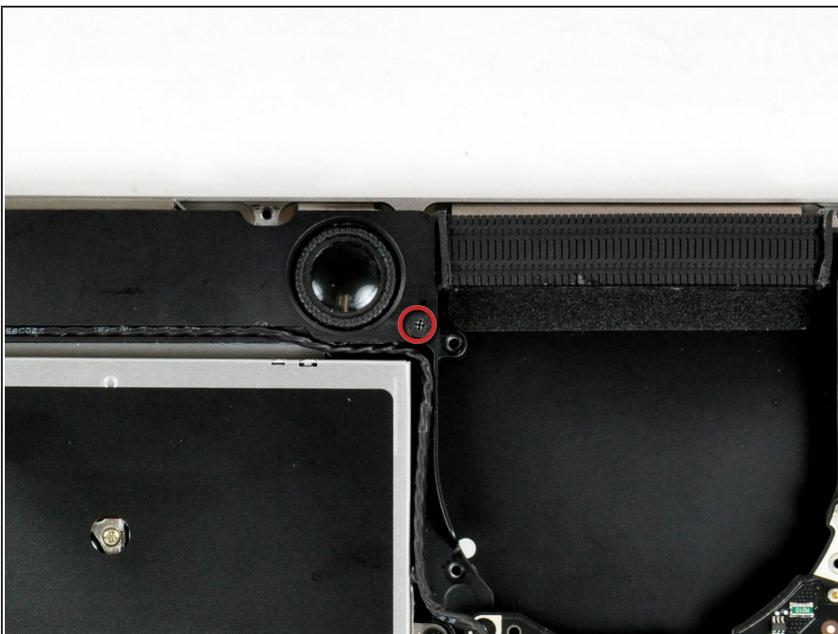
- Lift the fan out of the upper case.

Step 24



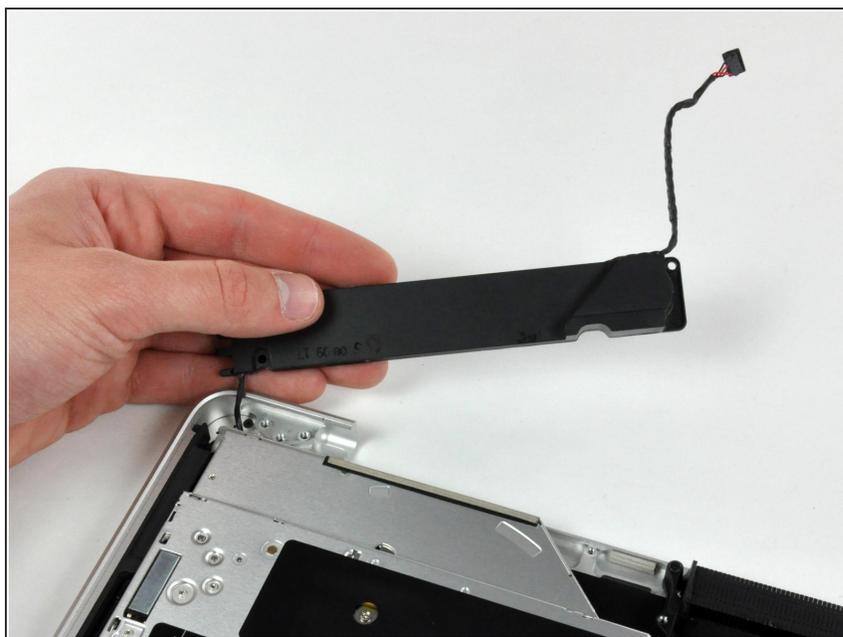
- Using the flat end of a spudger, pry the subwoofer connector straight up off the logic board.

Step 25



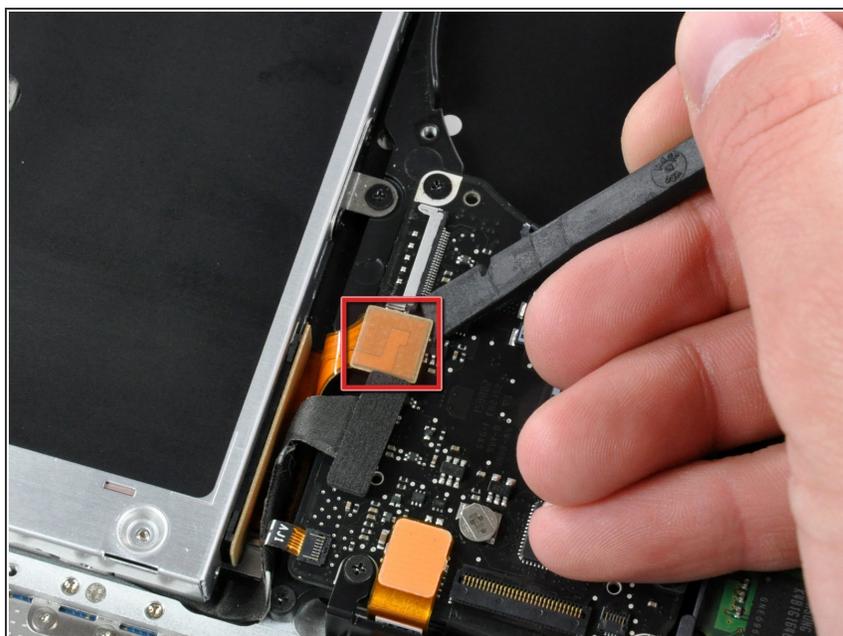
- Remove the single Phillips screw securing the subwoofer to the upper case.

Step 26



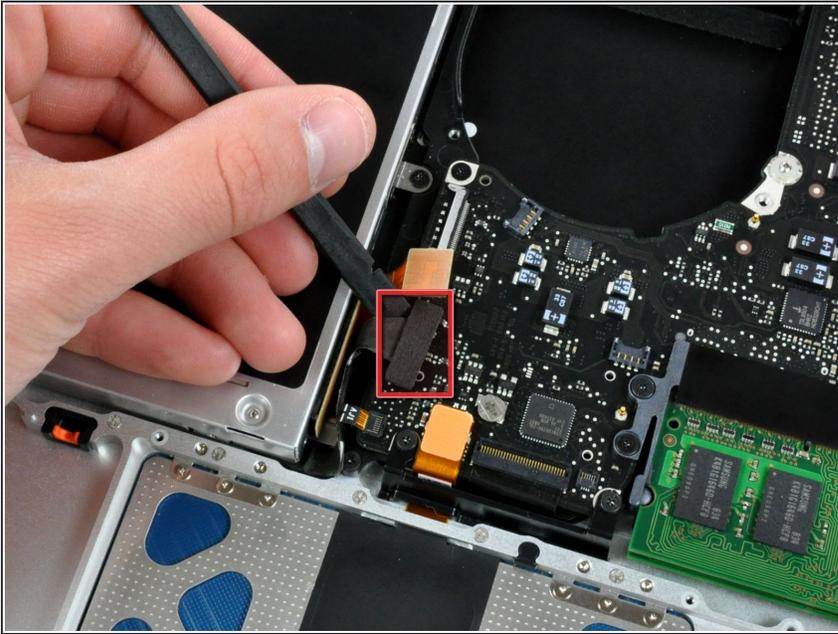
- ⓘ The subwoofer is still connected to the right speaker, so don't completely remove it just yet.
- Lift the subwoofer off the optical drive, and set it above the computer.

Step 27



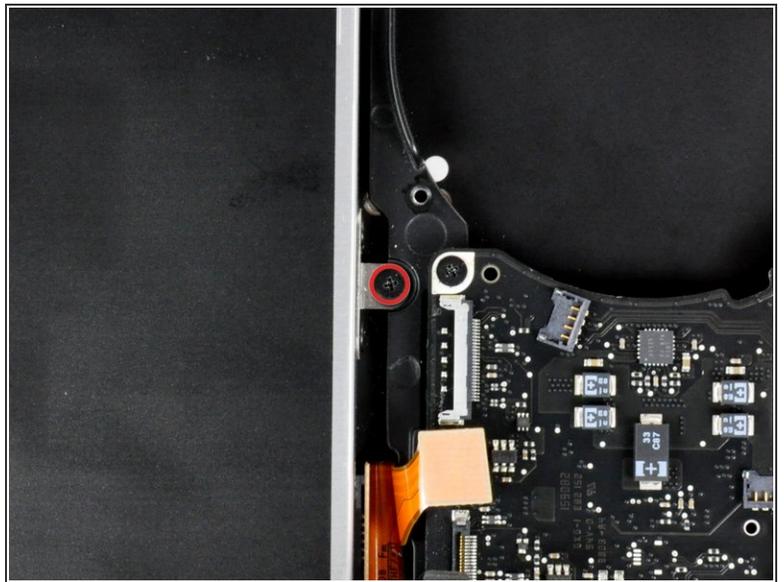
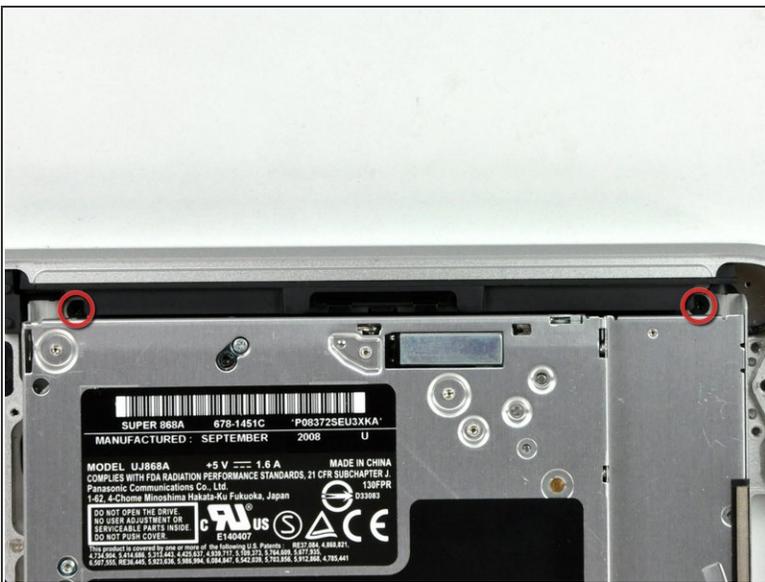
- Use a spudger to pry the optical drive connector straight up off the logic board.

Step 28



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

Step 29



- Remove the three 2.5 mm Phillips screws securing the optical drive to the upper case.

Step 30



- Lift the optical drive from its right edge and pull it out of the computer.

Step 31



- 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.

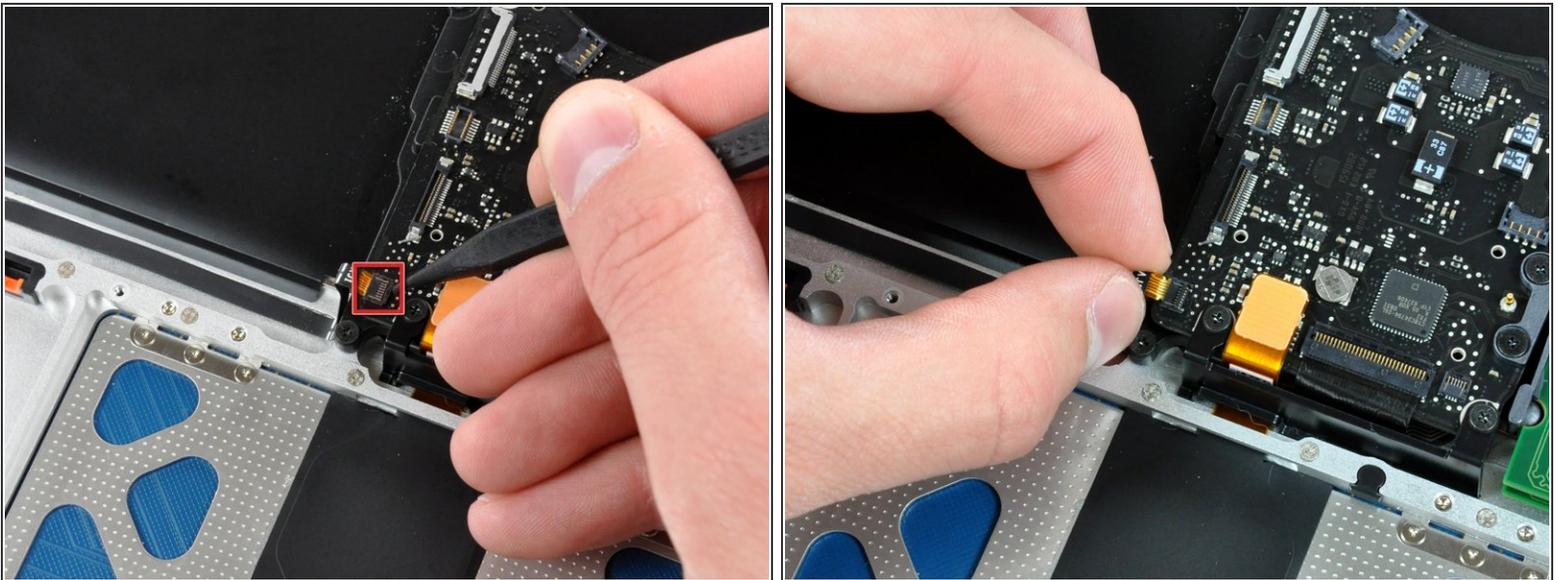
i The hard drive cable and the plastic retaining block are attached together.

Step 32



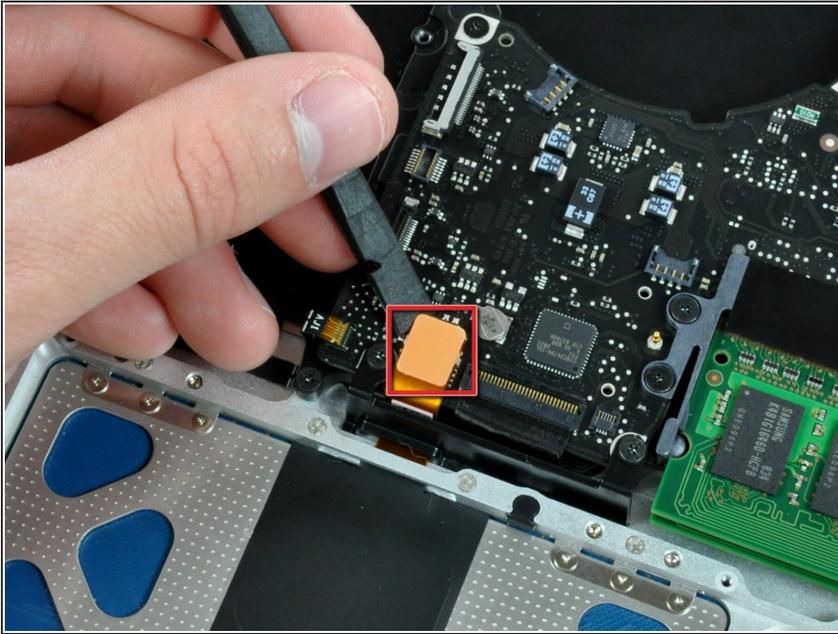
- Peel back the small piece of black tape covering the right speaker cable.
- Use the tip of a spudger to pry the right speaker up off the adhesive securing it to the upper case.
- Lift the subwoofer and right speaker assembly out of the upper case.

Step 33



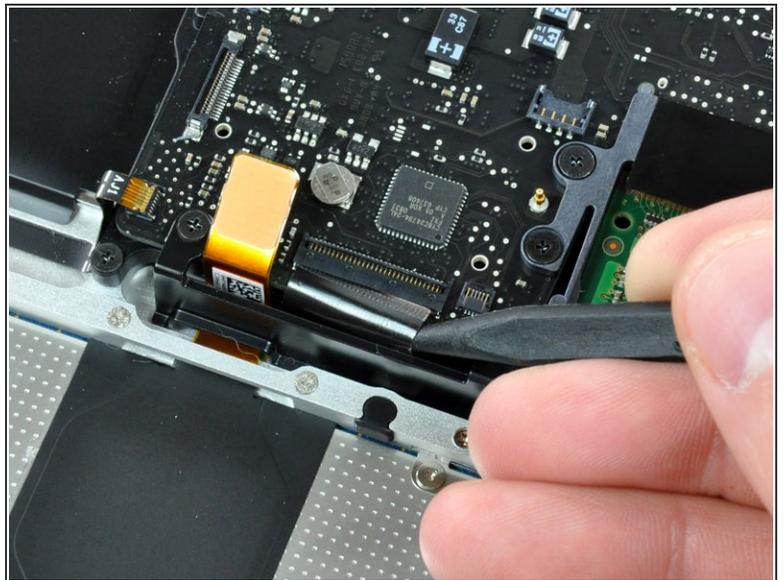
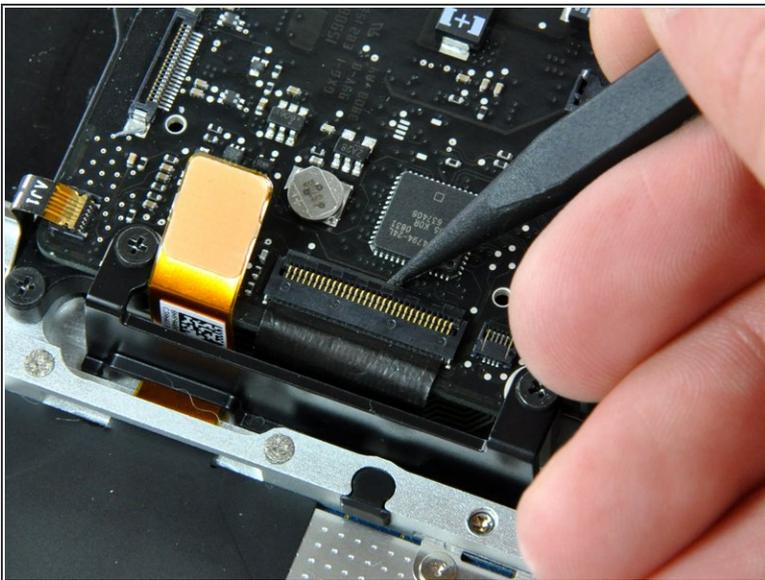
- Use the tip of a spudger to flip up the locking lever to release the IR sensor ribbon cable from its socket.
- Pull the IR sensor ribbon cable straight away from the logic board.

Step 34



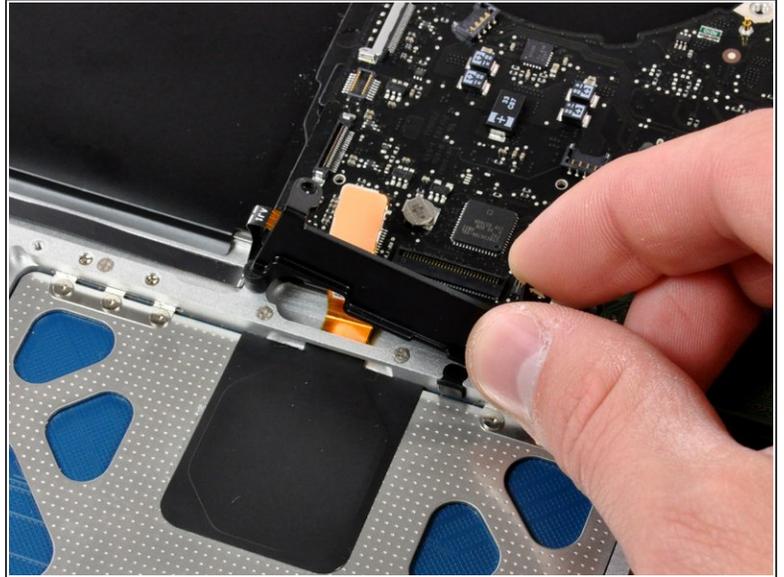
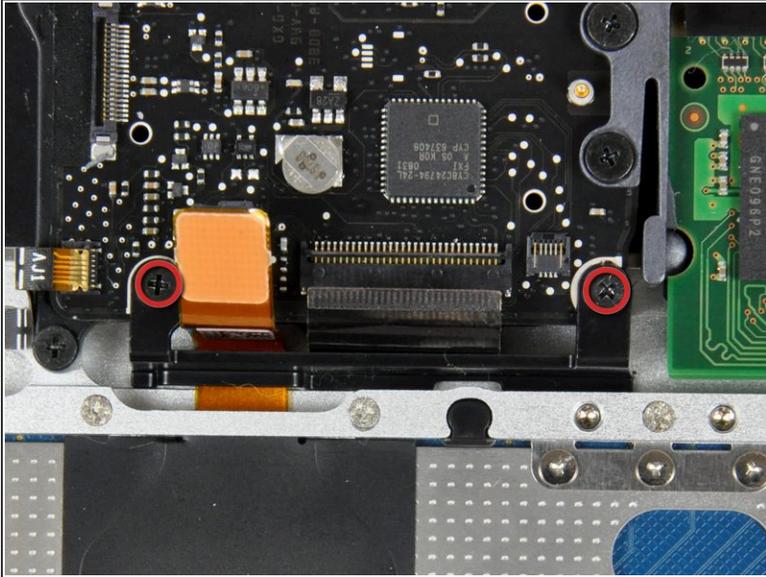
- Use the flat end of a spudger to pry the trackpad connector straight up off the logic board.

Step 35



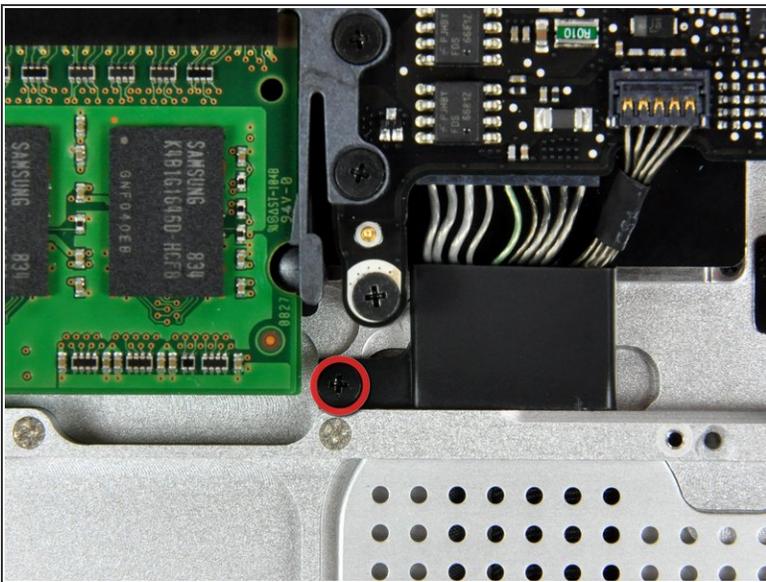
- Using the tip of a spudger, flip up the keyboard ribbon cable retaining flap.
- Pull the keyboard ribbon cable straight out of its socket.

Step 36



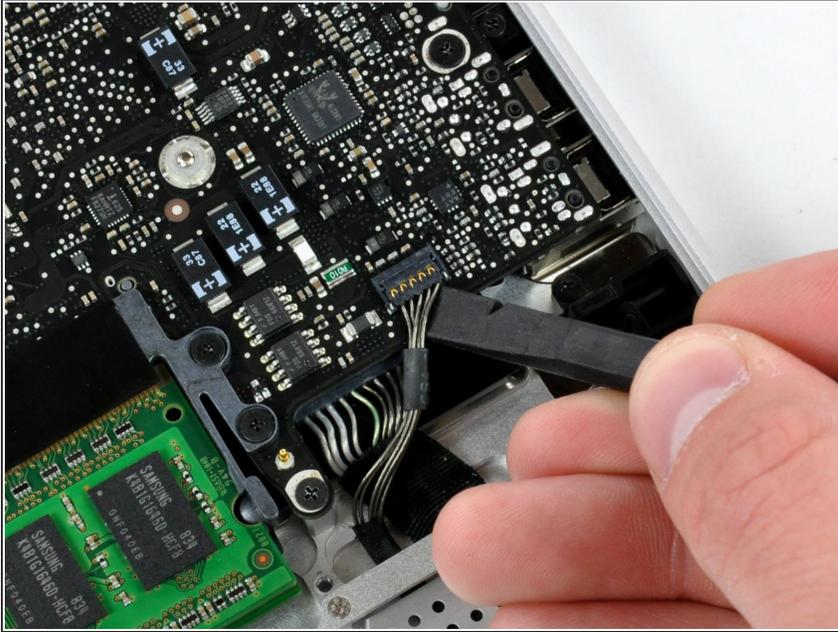
- Remove the two 5 mm Phillips screws securing the keyboard flex bracket to the upper case.
- Lift the keyboard flex bracket out of the upper case.

Step 37



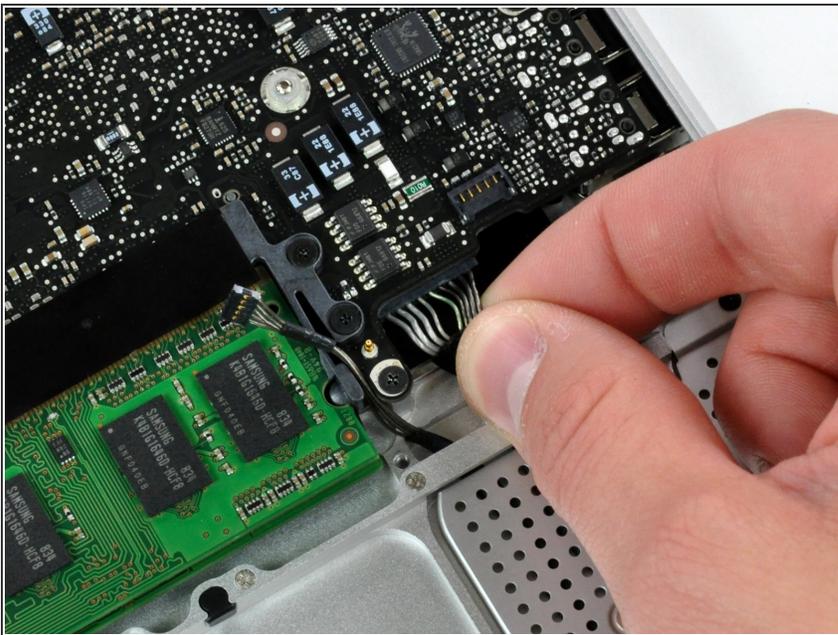
- Remove the single Phillips screw securing the battery cable cover to the upper case.
- Remove the battery cable cover from the upper case.

Step 38



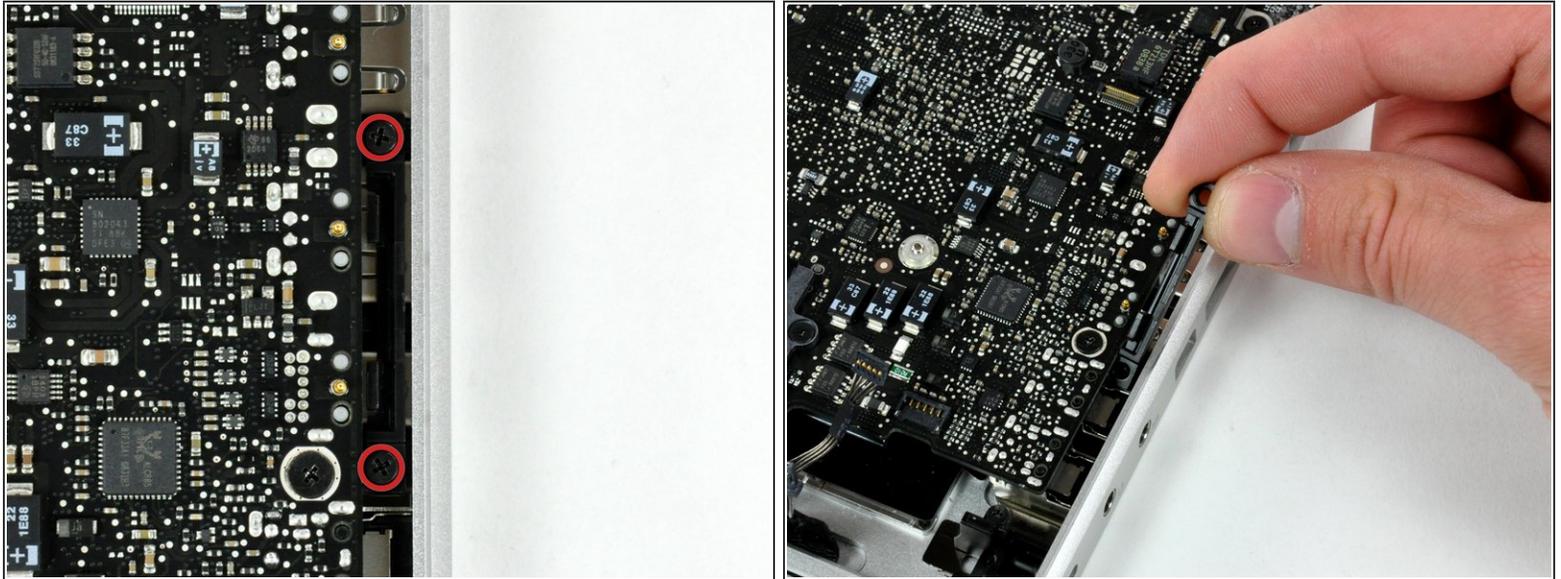
- Use a spudger to pry the battery level indicator cable connector straight up off the logic board.

Step 39



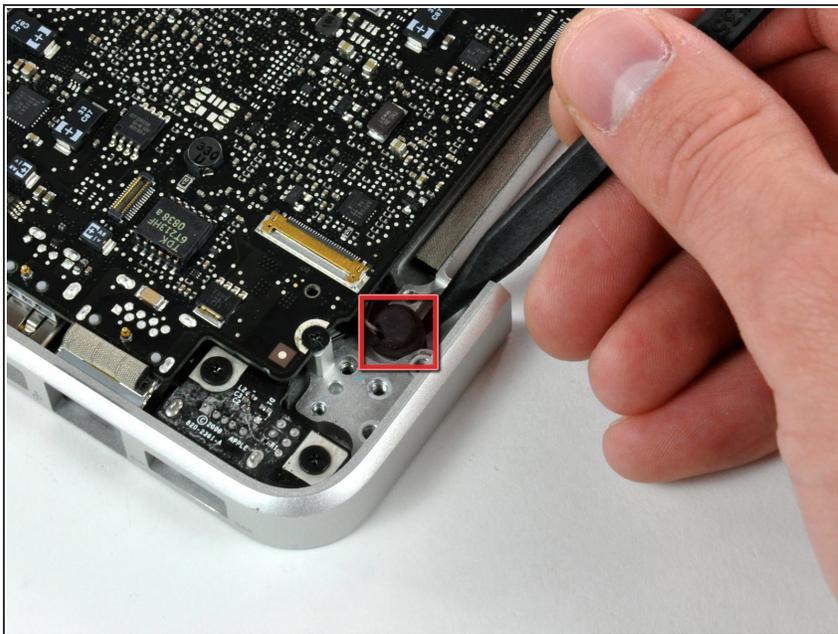
- Disconnect the battery cable connector by pulling it straight away from the logic board.
- ⓘ If you cannot grasp the cable with your fingers, a spudger and tweezers may be helpful for removal.

Step 40



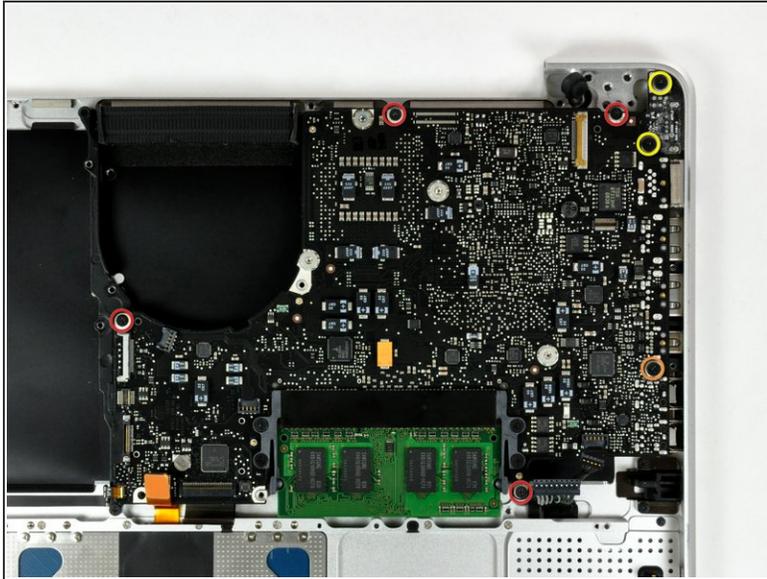
- Remove the two 4mm Phillips screws securing the bottom case clip to the upper case.
- Lift the bottom case clip out of the upper case.

Step 41



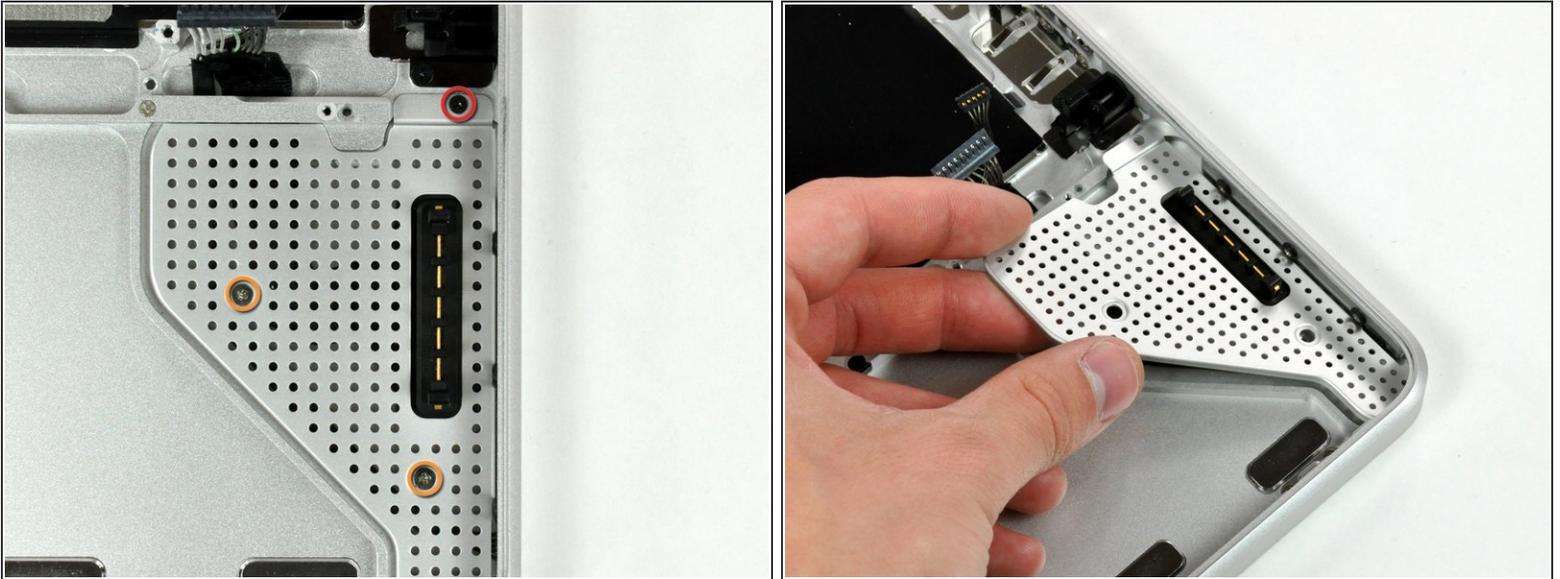
- Use the tip of a spudger to release the microphone from the upper case.

Step 42



- Remove the following five screws securing the logic board to the upper case:
 - Four 3 mm Phillips screws.
 - One 3.5 mm Phillips screw.
- Remove the two 7 mm Phillips screws securing the DC-in board to the upper case.
- Lift the logic board from its left edge and pull it out of the upper case.

Step 43



 If you are buying a new upper case from us, the next two steps are not necessary. Your upper case will come with these parts preinstalled.

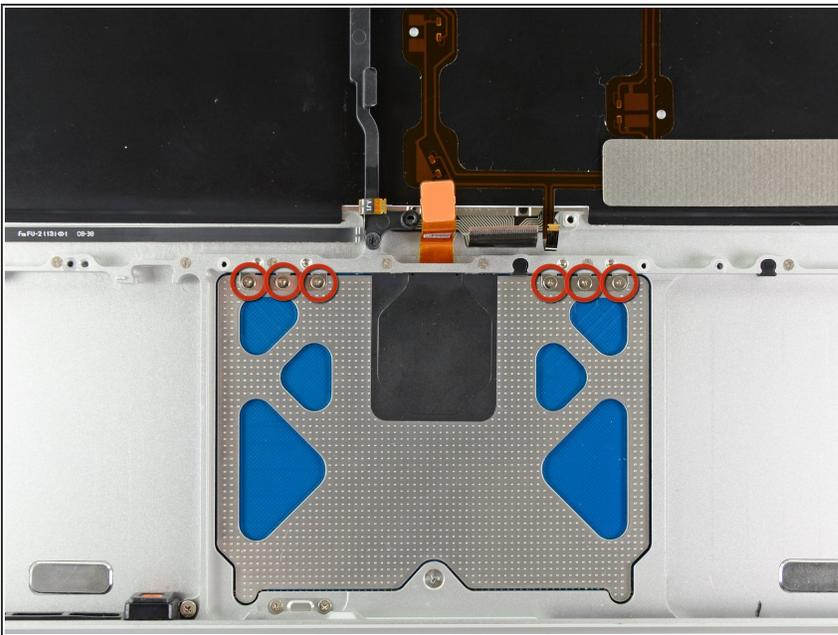
- Remove the following screws securing the battery connector cover to the upper case:
 - One 2.5 mm Phillips screw.
 - Two 1.5 mm Phillips screws.
- Lift the battery connector cover out of the upper case.

Step 44



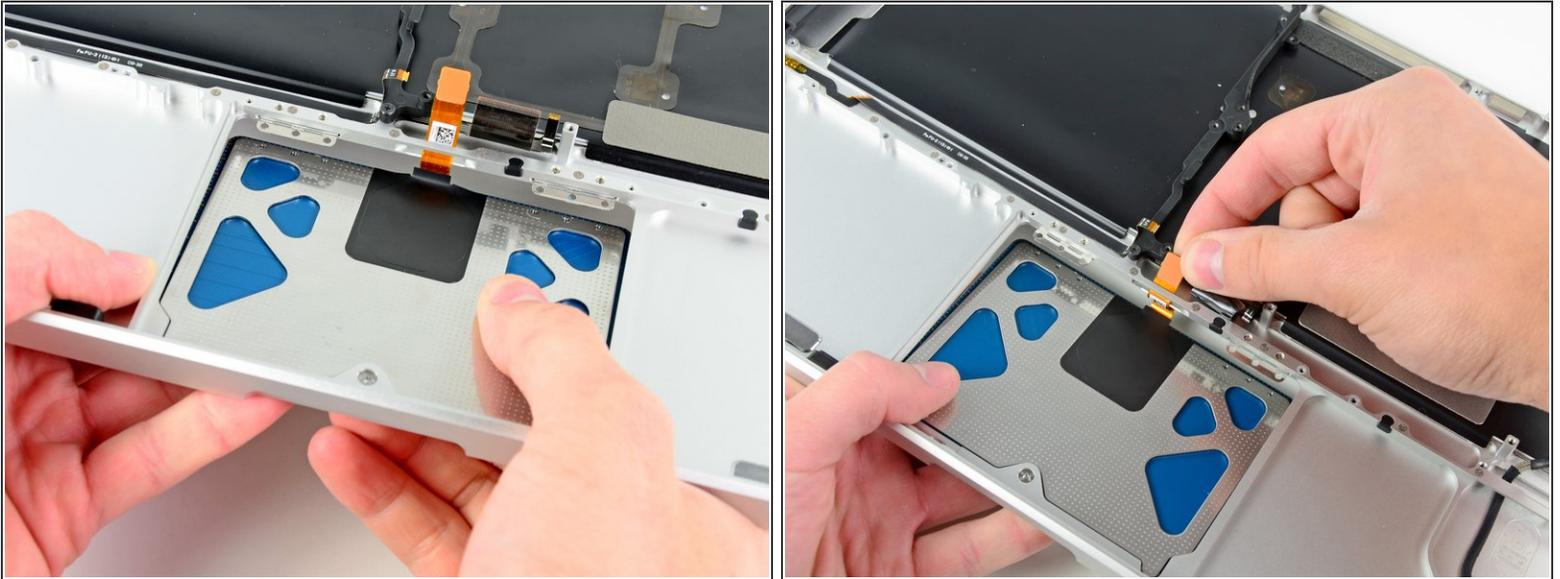
- De-route the battery connector cable through the gap in the upper case and remove it from the computer.
- ⓘ If you are installing an Upper Case that is missing the black bracket in the middle then transfer it from the old case to the replacement.

Step 45 — Upper Case



- Remove the six 1.4 mm Y0 Tri-wing screws securing the trackpad to the upper case.

Step 46



- 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 47



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

Step 48



- i In the following steps, you will be working on your new upper case.
- Use a Y1 Tri-wing screwdriver to loosely install the 1.2 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.

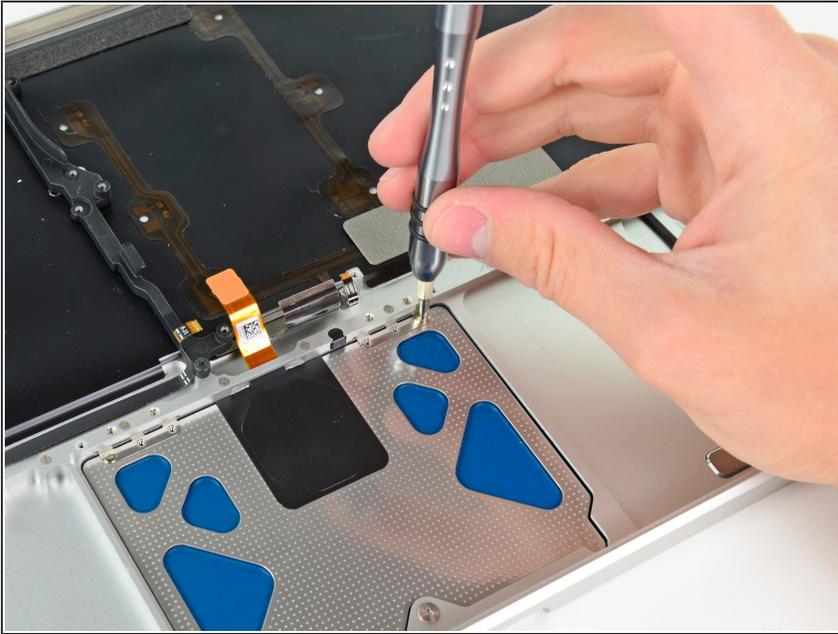
Step 49



- 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 50



- Insert a 1.4 mm Y0 Tri-wing screw into each of the outer holes drilled into the trackpad (two screws total).

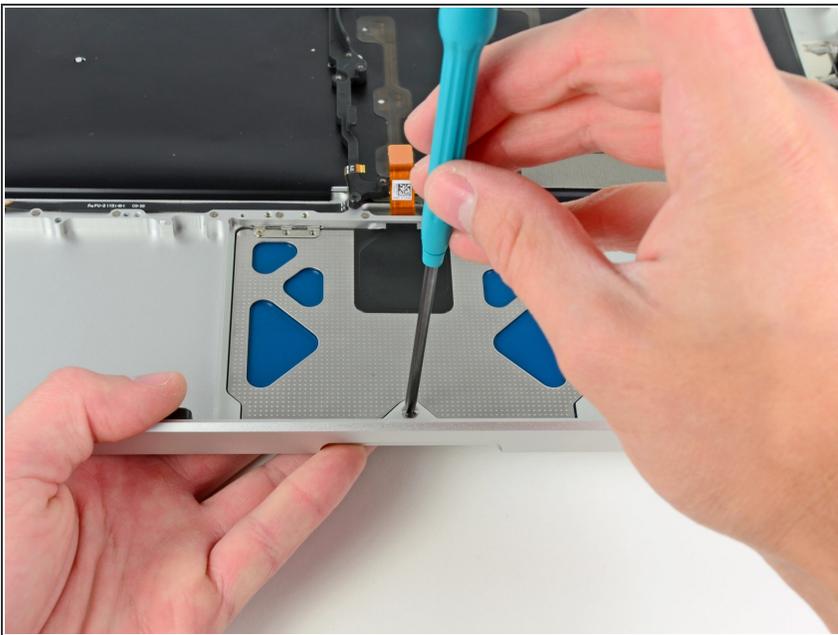


You'll install the rest in a bit.



- ⓘ Tighten the screws all the way, then back them out about a quarter turn to aid in aligning your trackpad during the next few steps.

Step 51



- While continually trying to click your trackpad, gently tighten the Y1 Tri-wing set screw until the clicks return to their factory "feel".



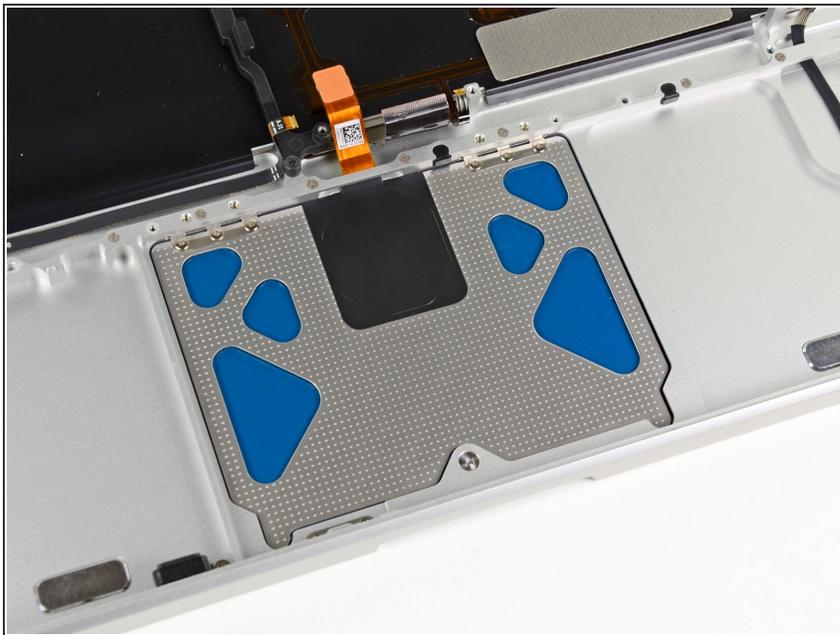
- ⓘ You can tell when the screw is tightened just right by the noise it makes when the trackpad clicks. If the set screw is too loose, the trackpad will have excessive play before it clicks. If it is too tight, the trackpad will click too easily and won't make the characteristic loud mouse clicking noise.

Step 52



- 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 53



- 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 Y0 Tri-wing 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.