



MacBook Air 11" Mid 2012 Upper Case Replacement

Replacing the keyboard and upper case in the mid 2012 11" MacBook Air.

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INTRODUCTION

Use this guide to replace your MacBook Air's upper case. The upper case includes the keyboard and trackpad.



TOOLS:

- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [T8 Torx Screwdriver](#) (1)



PARTS:

- [MacBook Air 11" \(Mid 2012\) Upper Case with Keyboard](#) (1)
- [MacBook Air 11" \(Mid 2011-Mid 2012\) Trackpad Cable](#) (1)

Step 1 — Lower Case



i Shut down and close your computer. Lay it on a soft surface top-side down.

- Remove the following ten screws:
 - Two 8 mm 5-point Pentalobe screws
 - Eight 2.5 mm 5-point Pentalobe screws

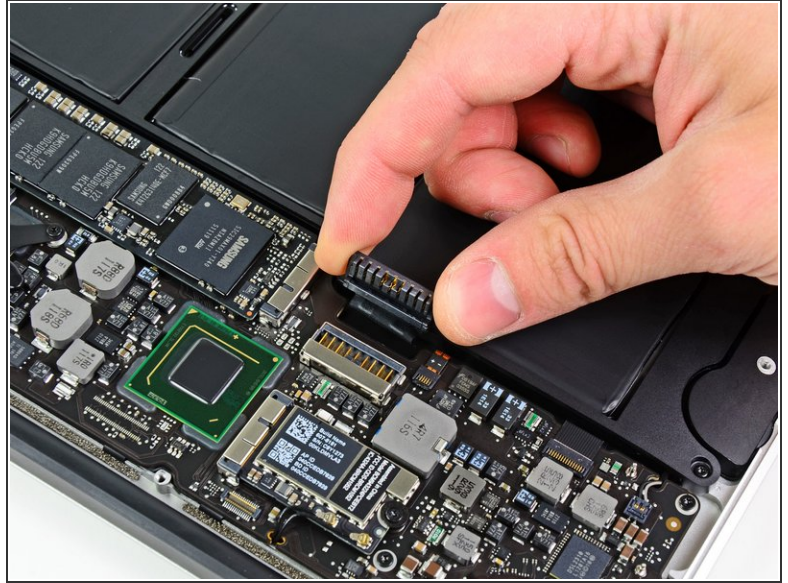
i The special screwdriver needed to remove the 5-point Pentalobe screws can be found [here](#).

Step 2



- Wedge your fingers between the display and the lower case and pull upward to pop the lower case off the Air.

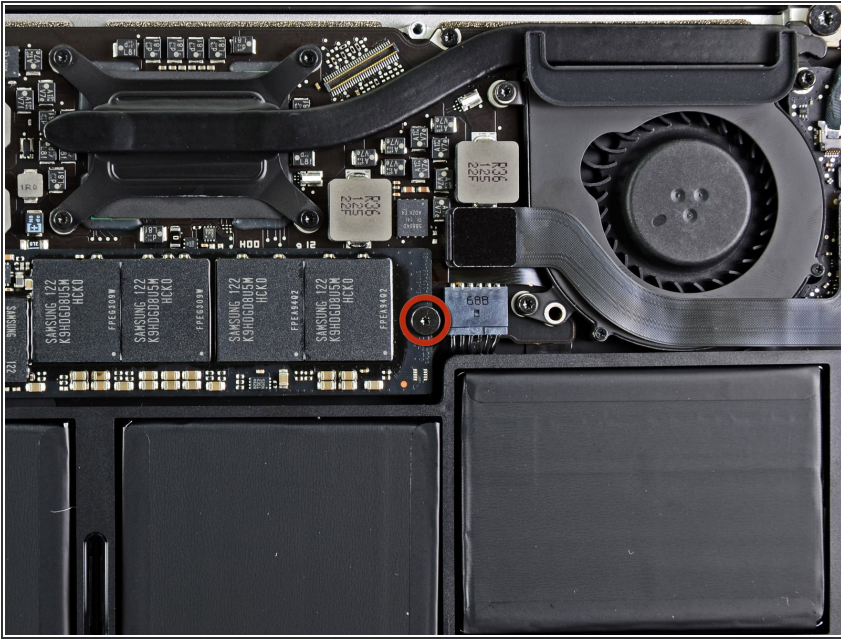
Step 3 — Battery



 In this step you will disconnect the battery to help avoid shorting out any components during service.

- Use the flat end of a spudger to pry both short sides of the battery connector upward to disconnect it from its socket on the logic board.
- Bend the battery cable slightly away from the logic board so the connector will not accidentally contact its socket.

Step 4 — Solid-State Drive



- Remove the single 2.9 mm T5 Torx screw securing the SSD to the logic board.

Step 5



- Use a spudger to help lift the free end of the SSD just enough to grab it with your other hand.

 Do not lift the end of the SSD excessively.

- Pull the drive straight out of its socket and remove it from the logic board.

 When reinstalling the SSD, be sure it is properly seated before reinstalling its retaining screw.

Step 6 — I/O Board Cable



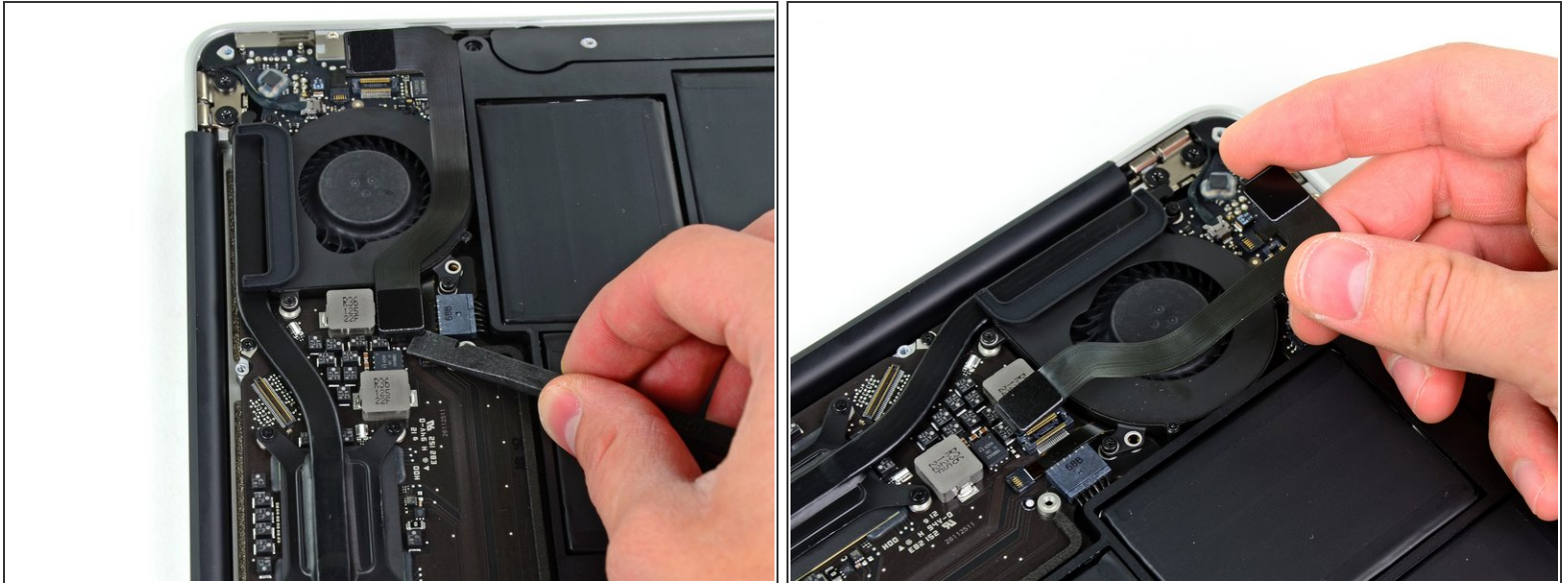
- Use the flat end of a spudger to pry the I/O board cable up from its socket on the I/O board.

Step 7



- Peel the I/O board cable up from the adhesive securing it to the fan.

Step 8



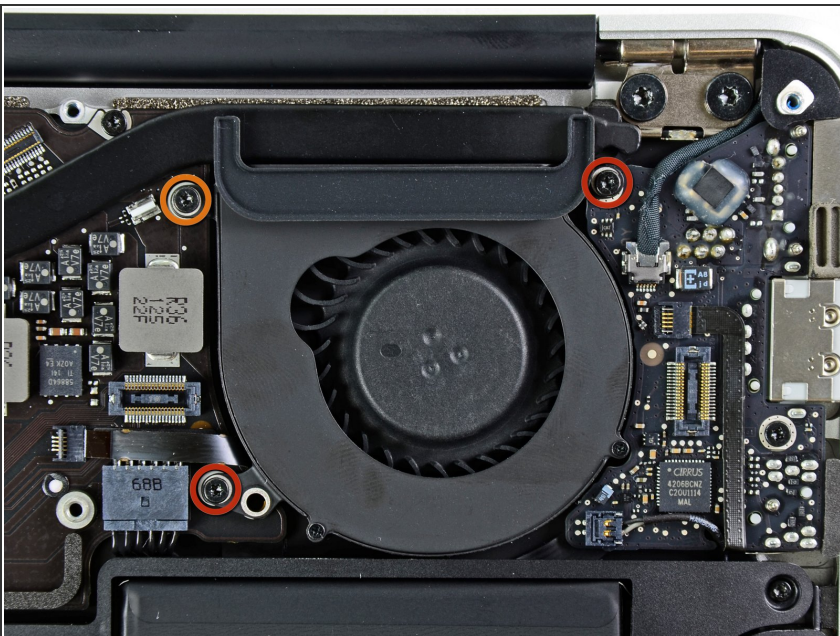
- Use the flat end of a spudger to lift the I/O board connector up and out of its socket on the logic board
- ⚠ Be sure to lift straight up on the connector as you disconnect it from its socket. The socket is very deep on the logic board and prying it from side to side may damage the logic board
- Remove the I/O board cable.

Step 9 — Fan



- Use the tip of a spudger to carefully flip up the retaining flap on the fan cable ZIF socket.
- ⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

Step 10



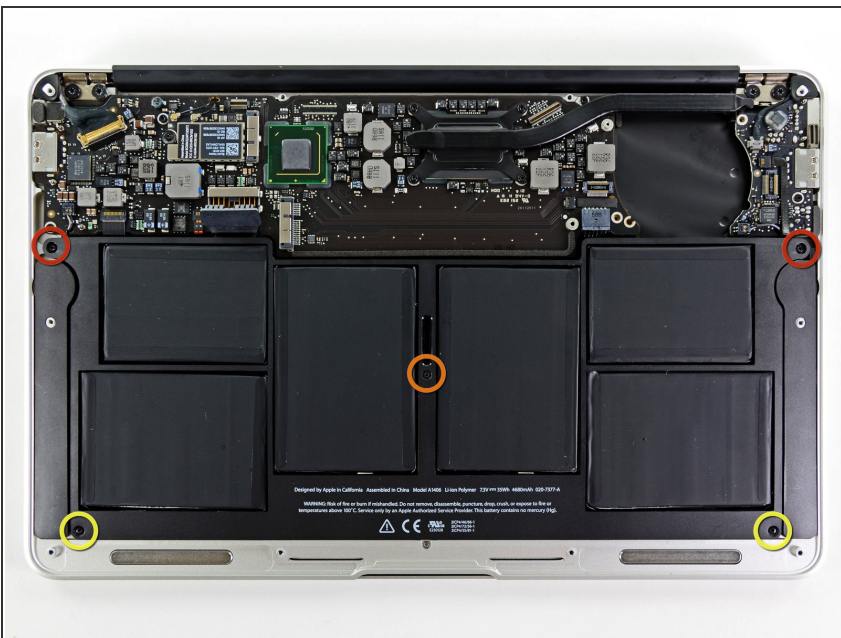
- Remove the following three screws securing the fan to the upper case:
 - Two 5.2 mm T5 Torx screws
 - One 3.6 mm T5 Torx screw

Step 11



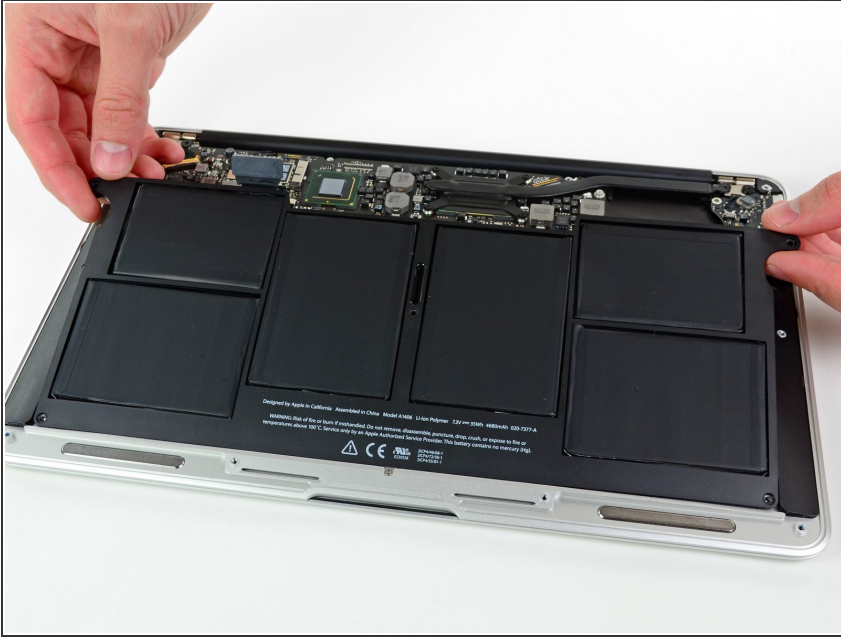
- Lift the fan out of the upper case and carefully pull the fan ribbon cable out of its socket as you remove it from the Air.

Step 12 — Battery



- Remove the following five screws securing the battery to the upper case:
 - Two 5.2 mm T5 Torx screws
 - One 6 mm T5 Torx screw
 - Two 2.6 mm T5 Torx screws

Step 13



- ⚠ Do not touch or squeeze the six lithium polymer cells when handling the battery.
- Lift the battery from its edge nearest the logic board and remove it from the upper case.

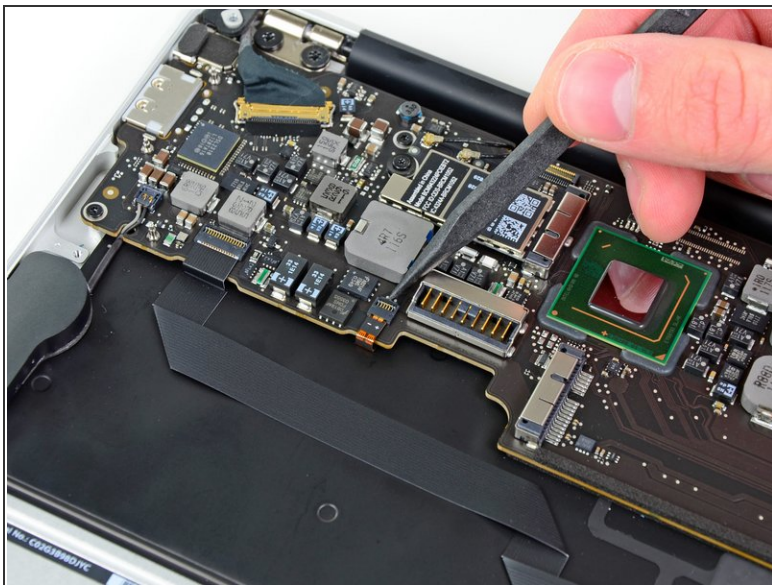
Step 14 — Logic Board



- Use the flat end of a spudger to free the adhesive loop securing the I/O board power cable to the upper case.
- Disconnect the I/O board by pulling the power cable away from its socket on the logic board.
- ⓘ Pull the cable parallel to the face of the logic board toward the front edge of the Air.

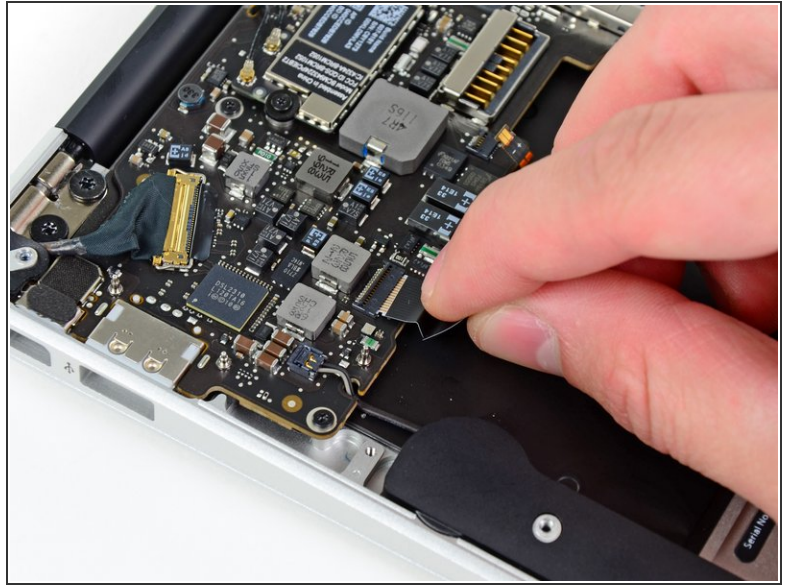
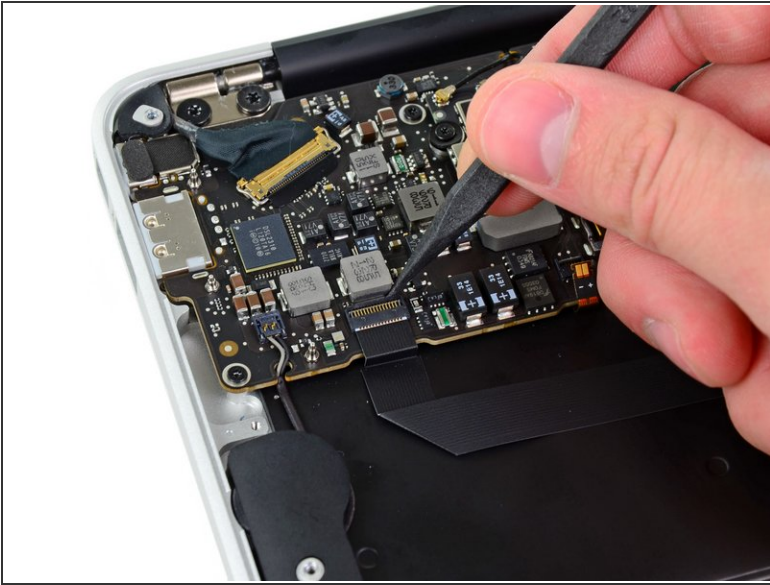
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Step 15



- Use the tip of a spudger to flip up the retaining flap on the keyboard backlight ribbon cable ZIF socket.
- ⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.
- Pull the keyboard backlight ribbon cable out of its socket.

Step 16

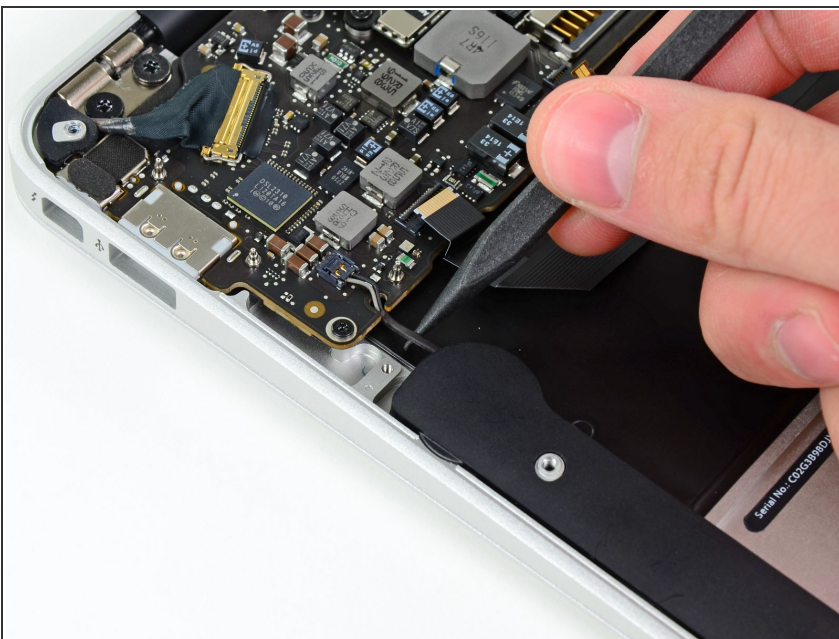


- Use the tip of a spudger or your fingernail to flip up the retaining flap on the trackpad ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

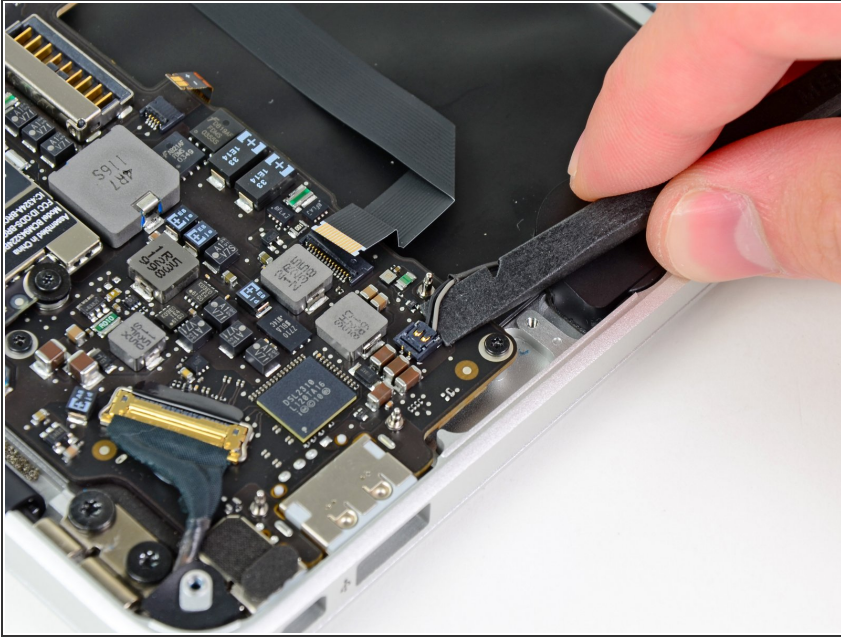
- Pull the trackpad ribbon cable straight out of its socket toward the front edge of the Air.

Step 17



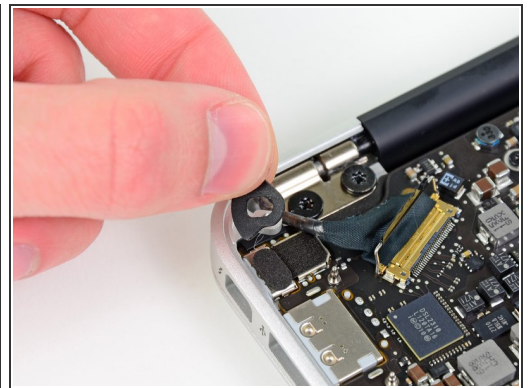
- Use the tip of a spudger to de-route the right speaker cable from the slot cut into the logic board.

Step 18



- Use the flat end of a spudger to pry the right speaker cable connector up and out of its socket on the logic board.
- ⓘ Pry up from beneath the cables.

Step 19



- Gently push the tip of a spudger under the black plastic flap stuck to the display data cable lock to make the lock pop upward and away from the socket.
- Remove the small rubber gasket from the corner of the upper case near the display data cable.

Step 20



- While holding the lock away from the socket, gently pull the display data cable out of its socket.

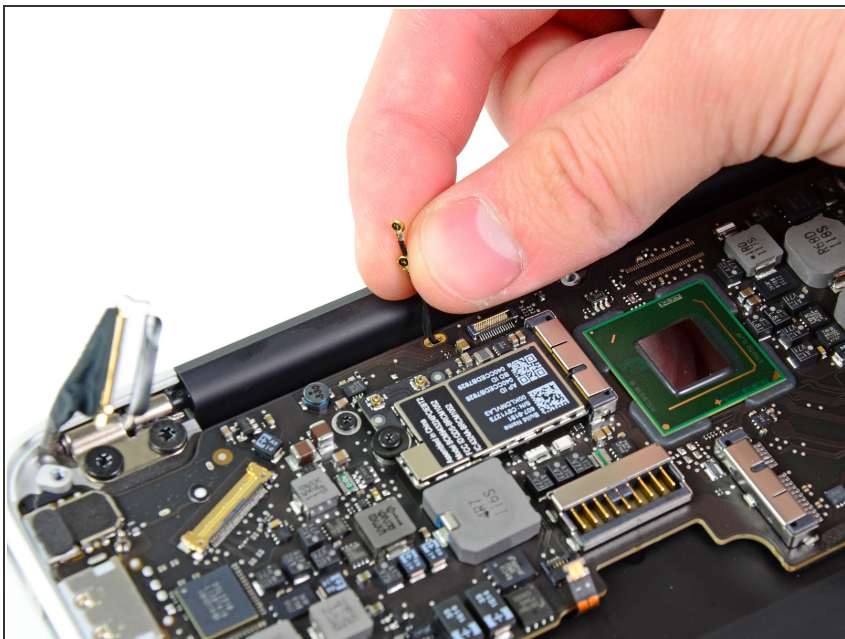
⚠ Do not pull upward on the display data cable as you disconnect it, as its socket may break off the logic board.

Step 21



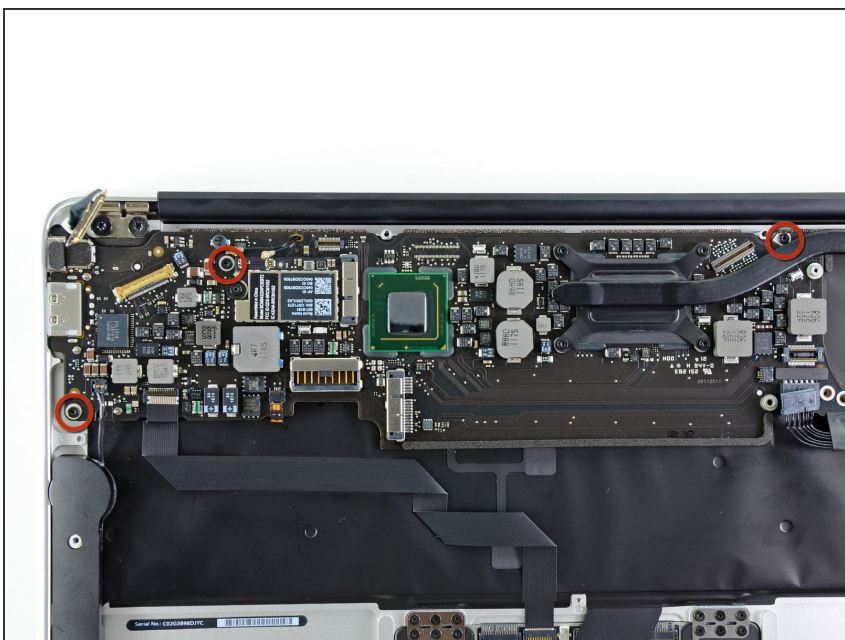
- Use the flat end of a spudger to pry both antenna cable connectors up and off their sockets on the AirPort/Bluetooth card.

Step 22



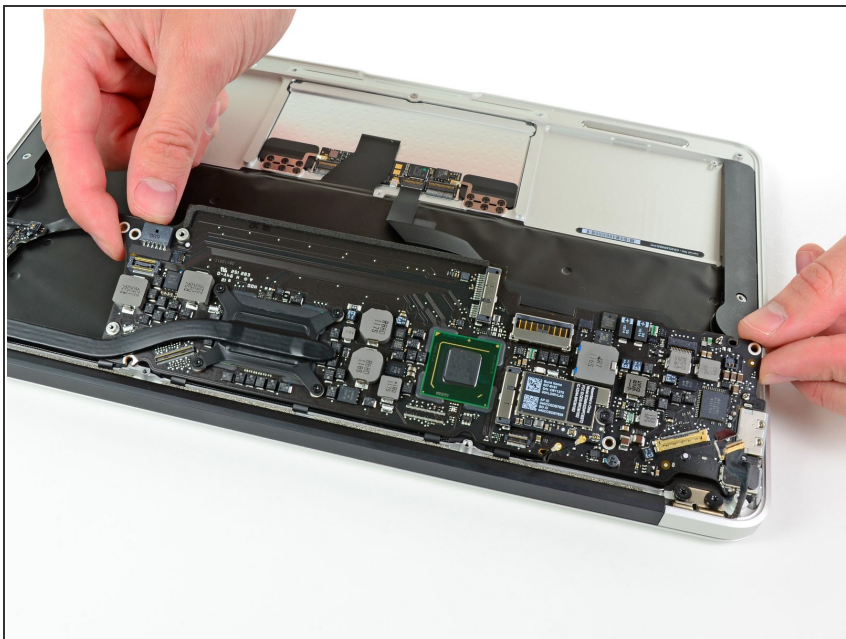
- Gently de-route the antenna cables from the slot cut into the logic board.

Step 23



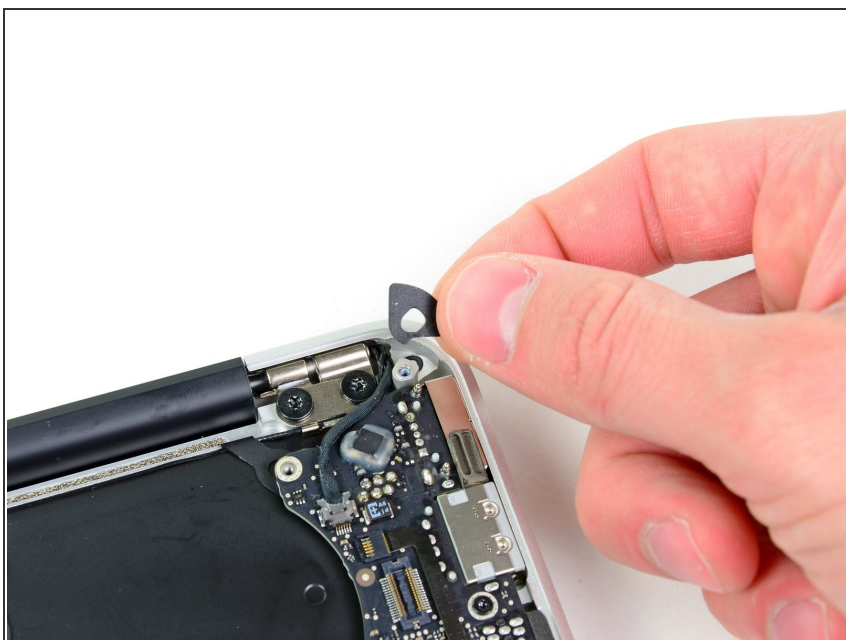
- Remove the three 3.6 mm T5 Torx screws securing the logic board to the upper case.

Step 24



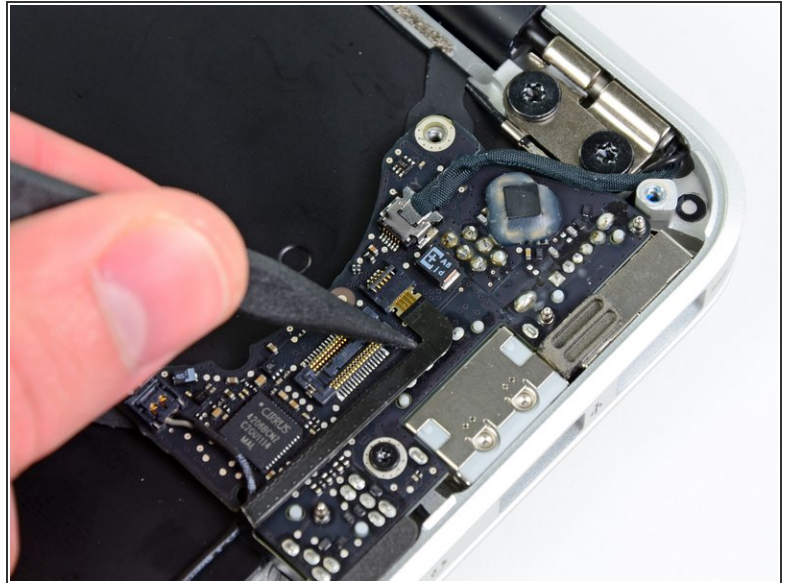
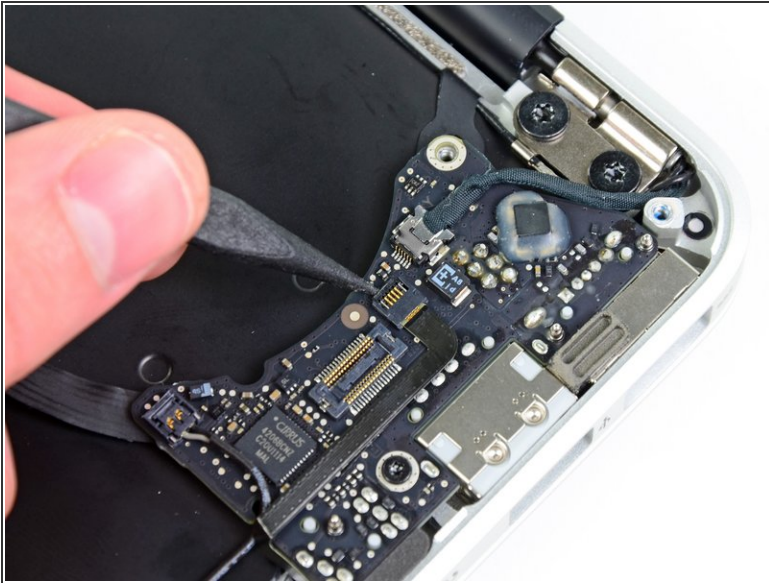
- Gently lift the logic board assembly out of the upper case, minding the fragile heat sink and any cables that may get caught.

Step 25 — Display Assembly



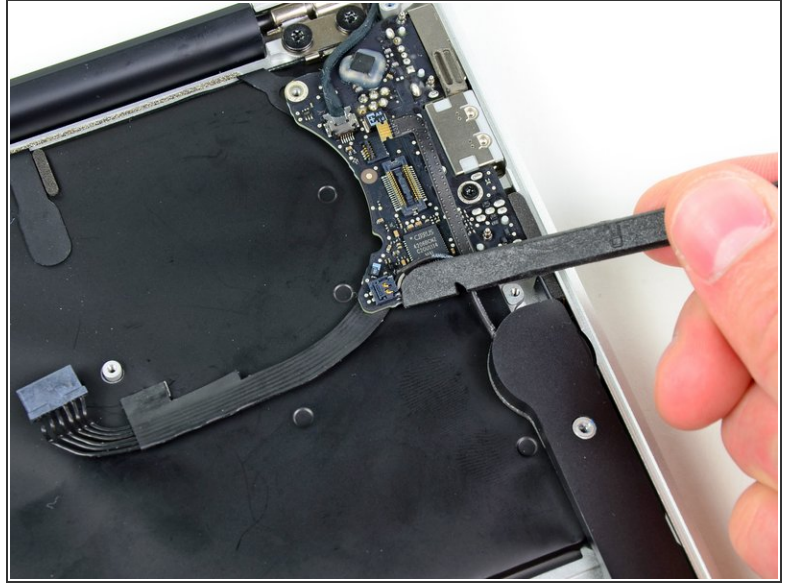
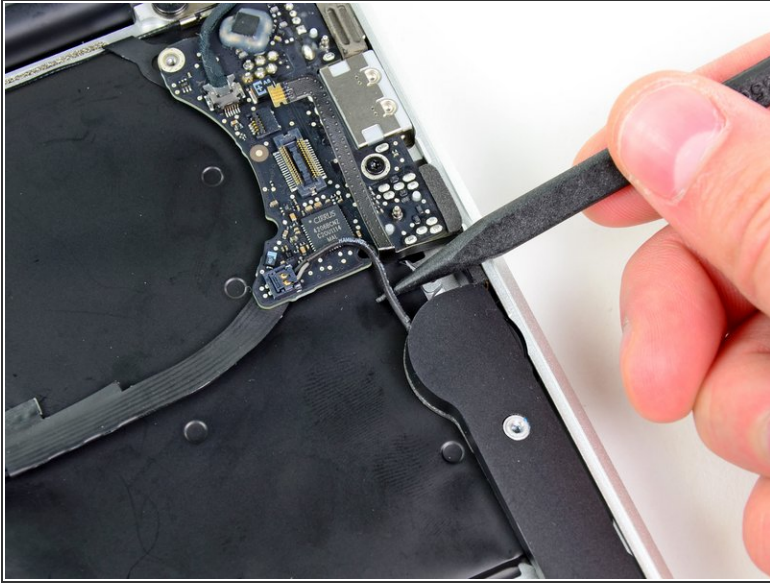
- Remove the small rubber gasket from the corner of the upper case nearest the I/O board.

Step 26



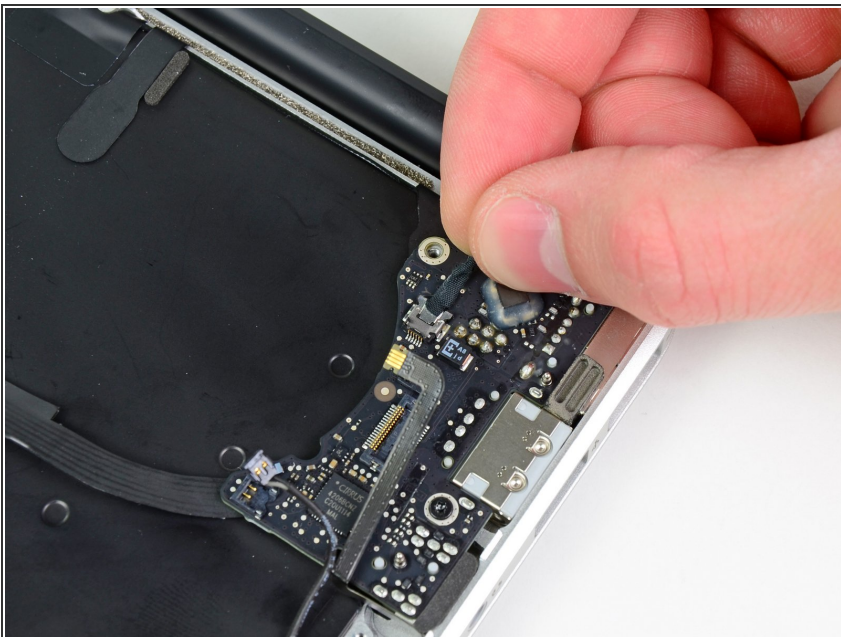
- Use the tip of a spudger to carefully flip up the retaining flap on the microphone cable ZIF socket.
- ⚠ Be sure you are prying up on the retaining flap, **not** the socket itself.
- Pull the microphone ribbon cable straight out of its socket.

Step 27



- De-route the left speaker cable from the notch cut into the I/O board.
 - Use the flat end of a spudger to pry the left speaker cable connector up and out of its socket on the I/O board.
- i** Pry up from beneath the wires.

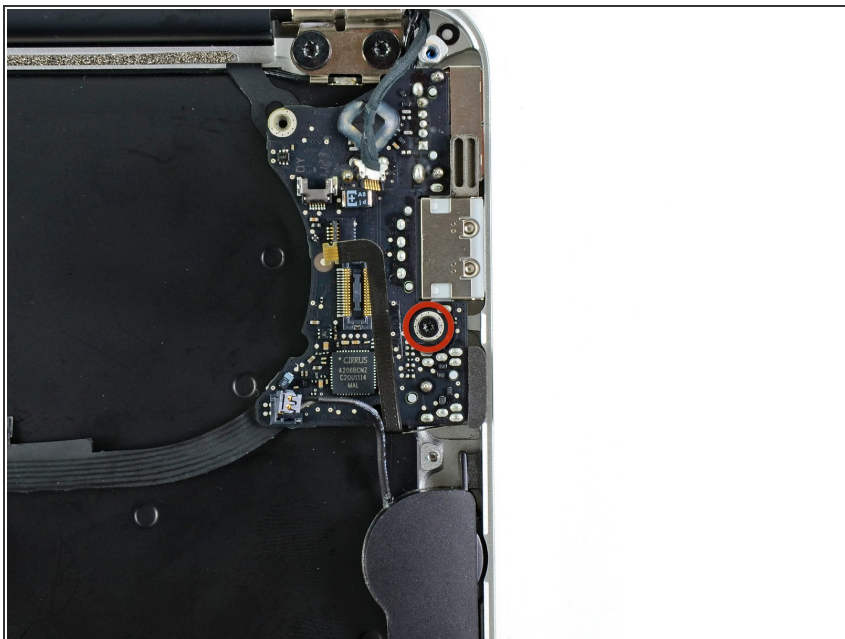
Step 28



- Pull the camera cable parallel to the face of the I/O board toward the rear edge of the Air to disconnect it from its socket.

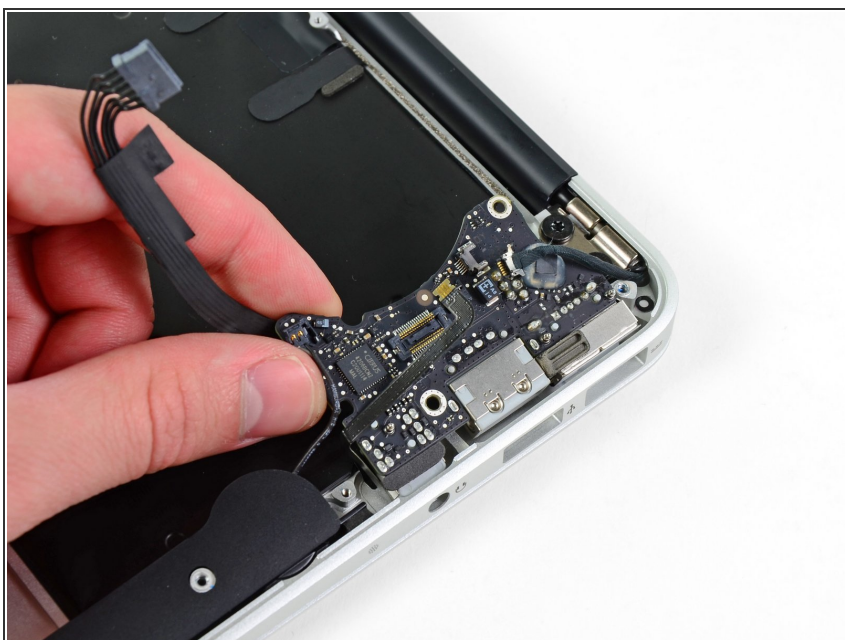
! Do not lift upward on this cable as you disconnect it, as its socket may break off the logic board.

Step 29



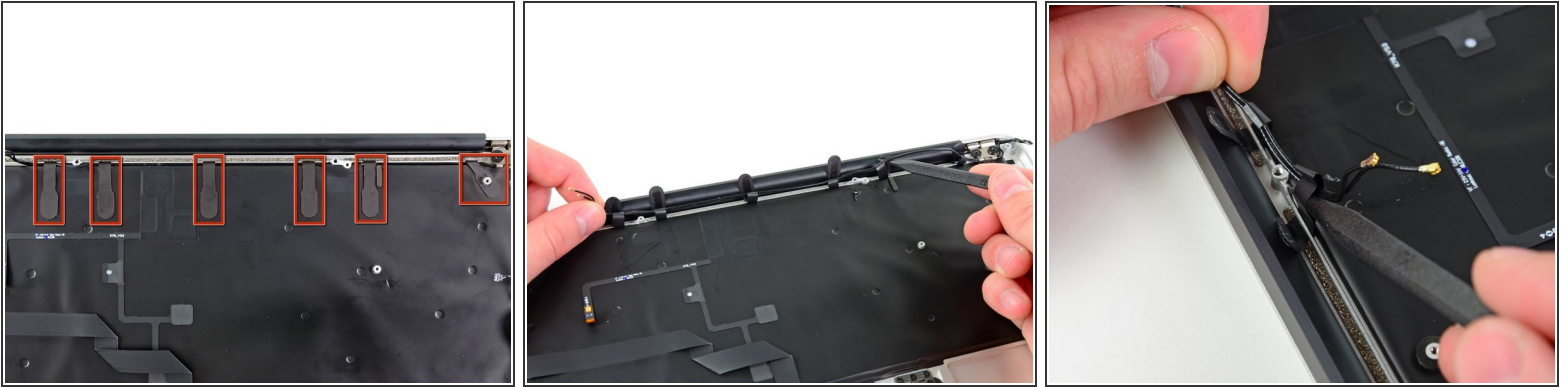
- Remove the single 3.6 mm T5 Torx screw securing the I/O board to the upper case.

Step 30



- Carefully lift the I/O board from its edge nearest the logic board and remove it from the upper case.

Step 31



- Peel up the six cable loops securing the antenna cables to the upper case.
- Gently pull the cable loops slightly out of the channel cut into the upper case one at a time.
- Use your spudger to open up the plastic loops as you de-route the antenna cables through them.
- Repeat this for all of the retaining loops.

Step 32



- Remove the inner 4.9 mm T8 Torx screw securing each display hinge to the upper case (two screws total).

Step 33



- Open the display until it is perpendicular to the upper case and place it on a table as shown.
- While holding the Air steady, remove the remaining 4.9 mm T8 Torx screw from the lower display bracket.

Step 34



- ⚠ Before removing the last display screw, be sure to hold the display and upper case steady with your other hand. Failure to do so may allow the components to fall onto the table, causing potentially expensive damage.
- Remove the last 4.9 mm T8 Torx screw securing the display to the upper case.

Step 35



- Push the upper case slightly toward the display assembly, then rotate it away from the front of the display assembly.
- Once the two display hinges have cleared the upper case, remove the display and set it aside.

Step 36 — Upper Case



- Use the flat end of a spudger to pry the right speaker off the adhesive securing it to the upper case.
- ⚠ Only pry up on the speaker from the areas of bare aluminum on the upper case. Prying up from the keyboard area may damage the keyboard and the speaker itself.
- Remove the right speaker from the upper case.

Step 37



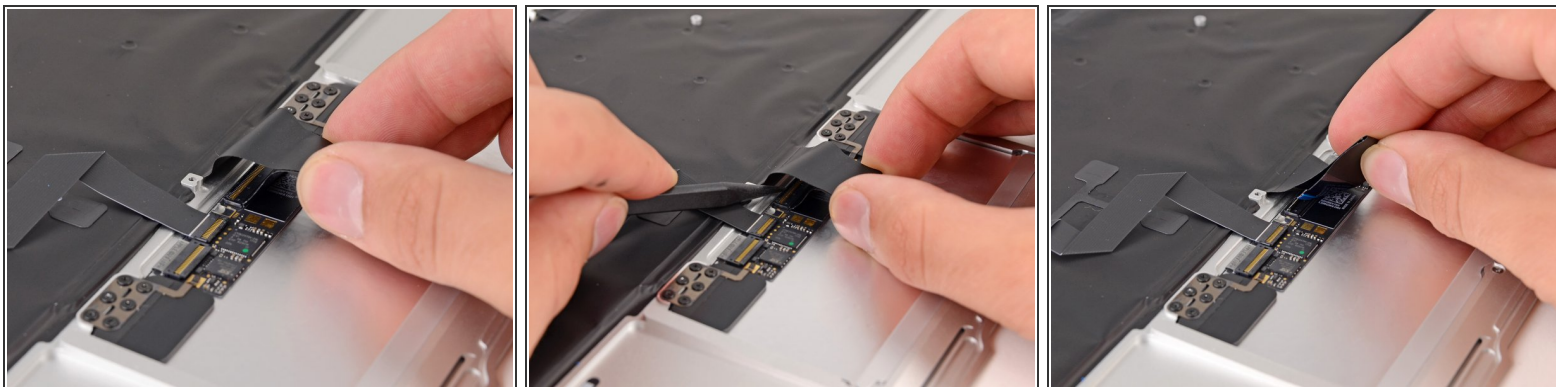
- Use the flat end of a spudger to pry the left speaker off the adhesive securing it to the upper case.
- ⚠ Only pry up on the speaker from the areas of bare aluminum on the upper case. Prying up from the keyboard area may damage the keyboard and the speaker itself.
- Remove the left speaker from the upper case.

Step 38



- Use the tip of a spudger to pry the microphone away from the side of the upper case.
- Remove the microphone from the upper case.
- Upper case remains.

Step 39 — Upper Case



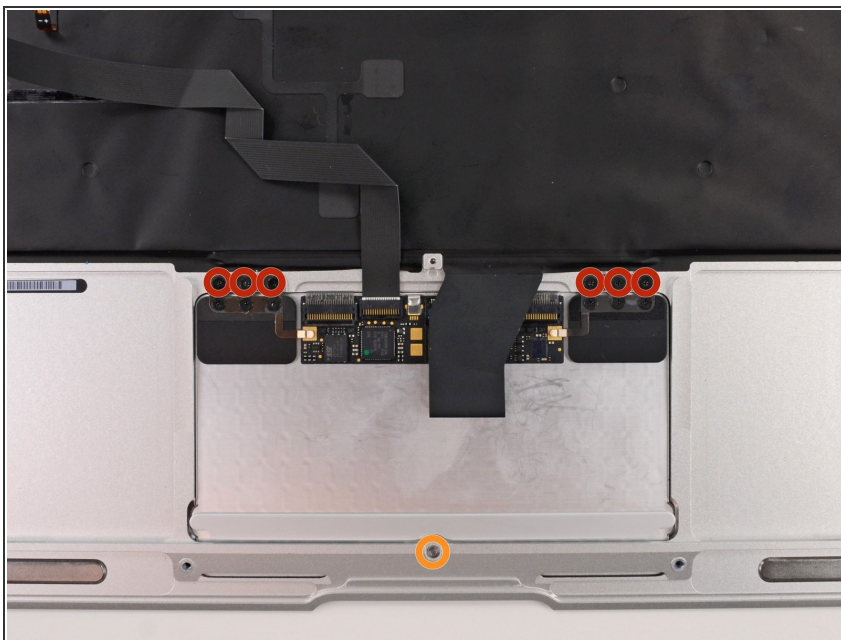
-  The ZIF connector for the keyboard ribbon cable is hidden under the cable itself.
- Push/lift the keyboard ribbon cable off of the upper case with one hand.
 - With the other hand, use a spudger to flip up the retaining flap on the ZIF connector.
 - Once the retaining flap has been flipped up, carefully pull the ribbon cable straight out of its socket.

Step 40



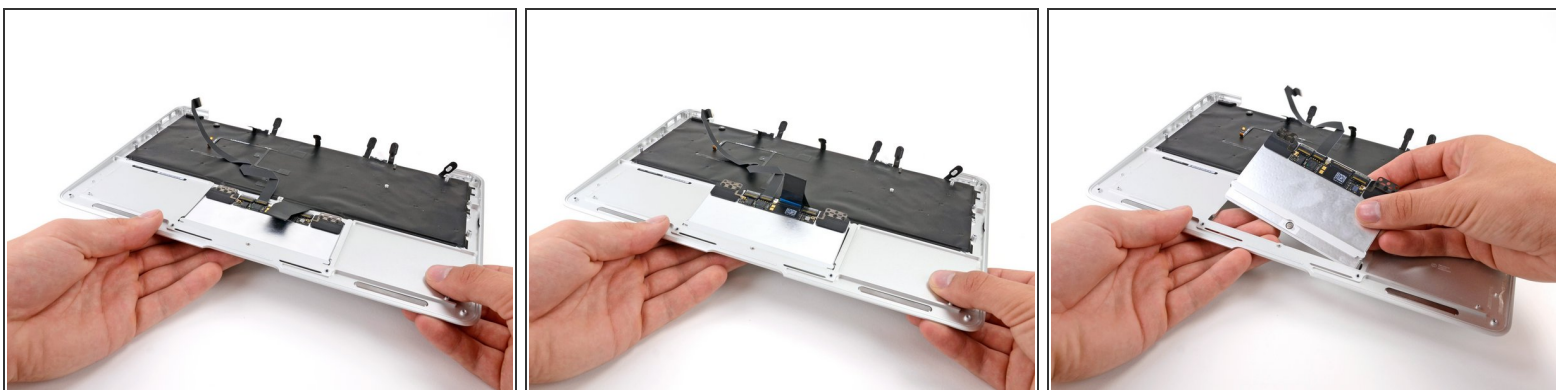
- Use the flat end of a spudger to separate the trackpad ribbon cable from the underside of the keyboard.
- ⓘ The cable is held in place with adhesive. Work carefully, and be sure to not let the spudger slip and damage any components.

Step 41



- Remove the six 1.5 mm Phillips #00 screws securing the trackpad to the upper case.
- Check your replacement upper case—if it doesn't have this wide T5 screw, remove it to transfer into the replacement.
- ⓘ This is an adjustment screw to set the distance of the click of the trackpad—on reassembly, test the click and adjust this screw until it feels right.

Step 42



- Holding the upper case up off the table with one hand, gently push the trackpad up through the upper case.
- Remove the trackpad from the upper case.

Step 43



- The upper case remains.

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