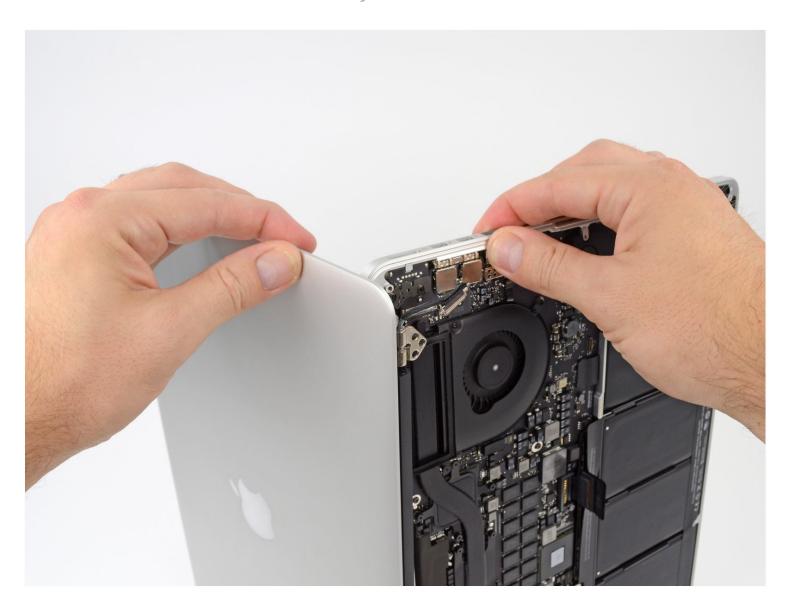


# MacBook Pro 15" Retina Display Early 2013 Display Assembly Replacement

Laptop take a tumble? Having trouble seeing...

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#### **INTRODUCTION**

Laptop take a tumble? Having trouble seeing through a jungle of cracks in your screen? Use this guide to replace your display assembly.

#### TOOLS:

MacBook Pro and Air 5-Point Pentalobe Screwdriver (1)

Spudger (1)

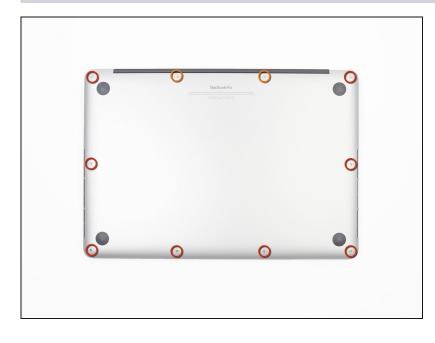
T5 Torx Screwdriver (1)

TR8 Torx Security Screwdriver (1)

#### PARTS:

MacBook Pro 15" Retina (Mid 2012-Early 2013) Display Assembly (1)

#### Step 1 — Lower Case

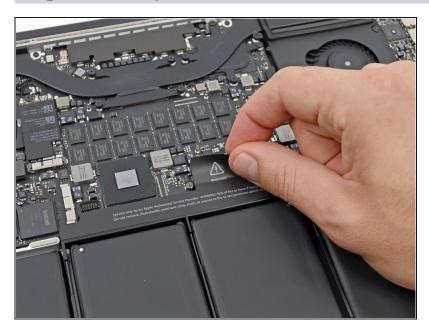


- Remove the following P5
  pentalobe screws securing the
  lower case to the MacBook Pro:
  - Eight 3.0 mm
  - Two 2.3 mm

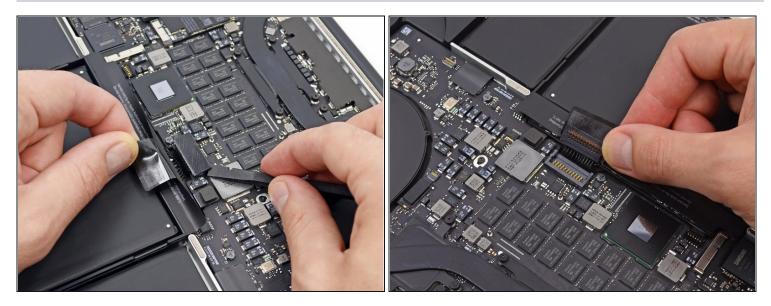


- Lifting from the edge nearest the clutch cover, lift the lower case off the MacBook Pro.
- Set the lower case aside.

# **Step 3 — Battery Connector**

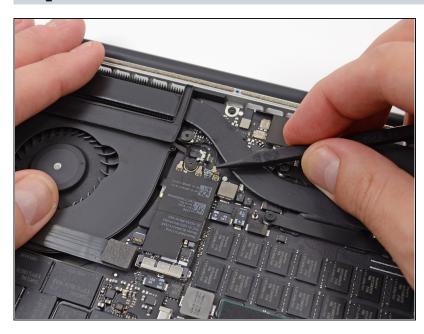


• Peel back the warning label covering the battery connector.



- Using the flat end of a spudger, gently pry the battery connector straight up out of its socket on the logic board.
- Bend the battery cables back and out of the way, ensuring that the battery connector doesn't accidentally make contact with the logic board.

#### Step 5 — AirPort/Camera Cable



- Use a spudger or tweezers to pry the three AirPort antenna cables straight up off of their sockets on the AirPort board.
  - ⚠ The cable connection points are fragile. Be careful to lift only on the connector, and not on the socket or cable.
  - To reconnect, align the connector carefully into position over the socket, and press it down firmly with the flat of your spudger.



- Use the tip of a spudger to push the camera cable's plug toward the fan and out of its socket on the logic board.
  - i The plug in the photo has six connections, but some models have twelve connections. The process of removing the plug from its socket is the same for both.
  - if the camera cable's plug won't come easily out of its socket on the logic board, fold back the rubber cover over the fan to gain access to the cable, then gently pull on the cable while using the spudger to gently push the plug out of its socket.
  - ⚠ Be sure to push parallel to the board, first on one side, then the other, to slowly "walk" the plug out of its socket. Do not pry up, or you will damage the socket.

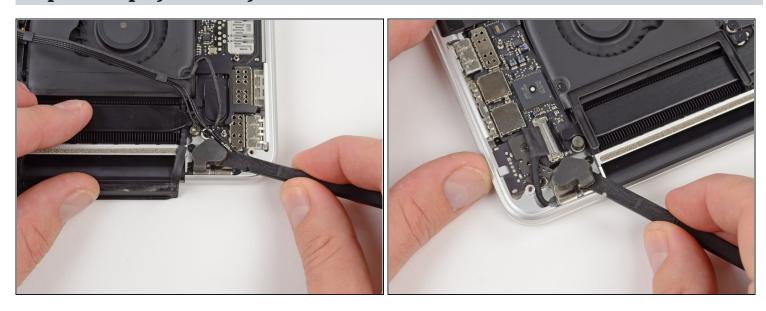


- Insert the flat end of a spudger underneath the rubber heat sink cover on the right fan.
- Slide the spudger underneath the length of the cover, releasing the adhesive.
- Lift the cover and flip it back so that you can access the cables underneath.

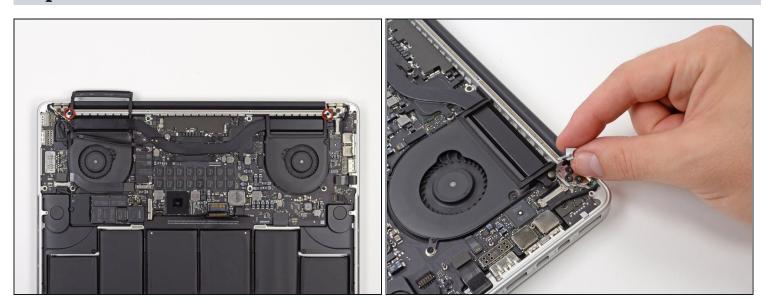


- Use your fingers to pull the AirPort/Camera cables up off the fan.
  - (i) The cables are adhered to the fan, so peel them up carefully to avoid damaging them.
- Carefully de-route the cables from the plastic cable guide.

# Step 9 — Display Assembly



• Use the flat end of a spudger to pry off the two rubber hinge covers, one from each end of the device.



- Remove the two 3.1 mm T5 Torx screws securing the aluminum hinge covers to the upper case.
- Remove the two aluminum hinge brackets from the MacBook Pro.

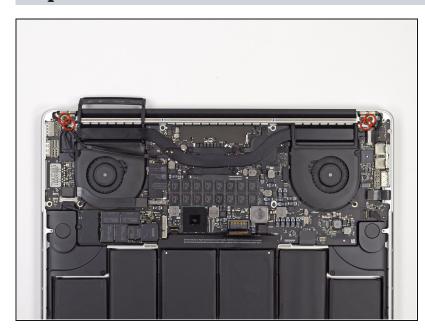




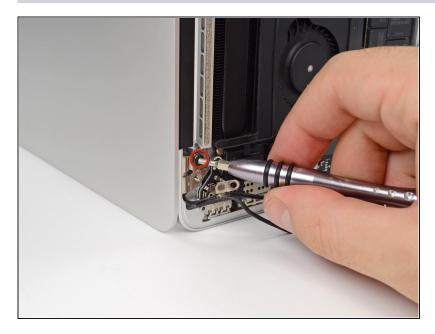


- Use the tip of a spudger to pry the display data cable lock and rotate it toward the DC-In side of the computer.
- Pull the display data cable straight out of its socket on the logic board.

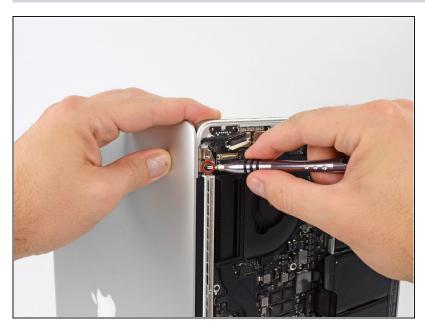
⚠ Do not lift up on the display data cable, as its socket is very fragile. Pull the cable parallel to the face of the logic board.



- Remove four out of the six 5.3 mm T8 Torx screws securing the display to the upper case.
- (i) We purposely have you leave one screw attaching the display to the upper case to aid in future steps.
- When reassembling, make sure that the screws go through the two grounding loops on the webcam/airport cable.



- Open the MacBook Pro approximately 110 degrees, and place it sideways on the table, as shown.
- While holding the display and upper case together with your left hand, remove the remaining T8 Torx screw from the lower (closer to the table) display bracket.



- ⚠ 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.
- While holding the display and upper case together with your left hand, remove the remaining T8 Torx screw from the upper display bracket.







- Grip both halves of the device, one in each hand.
- Gently push forward on the bottom half of the device to detach it from the display assembly.
- Carefully set each component aside, making sure to set down the lower half keyboard-side down.

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