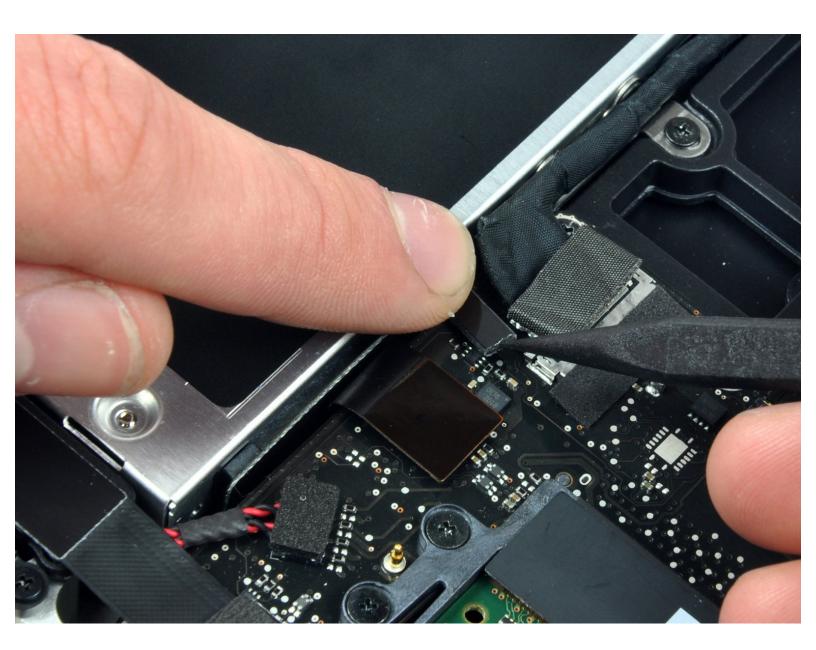


MacBook Pro 15" Unibody 2.53 GHz Mid 2009 Display Assembly Replacement

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INTRODUCTION

Use this guide to replace your MacBook Pro's display assembly.



TOOLS:

- P6 Pentalobe Screwdriver 2009 MacBook Pro Battery (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)
- T6 Torx Screwdriver (1)



PARTS:

- MacBook Pro 15" Unibody (Mid 2009)
 Display Assembly (1)
- MacBook Pro 15" Unibody (Mid 2009)
 Anti-Glare Display Assembly (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.



- 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.



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



 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.

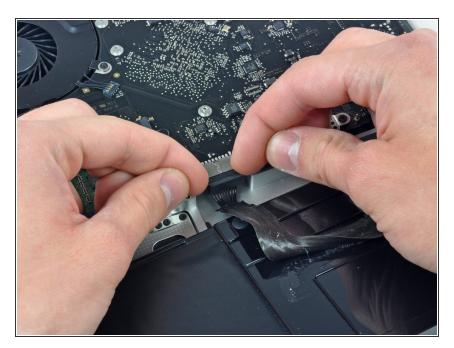
Step 6





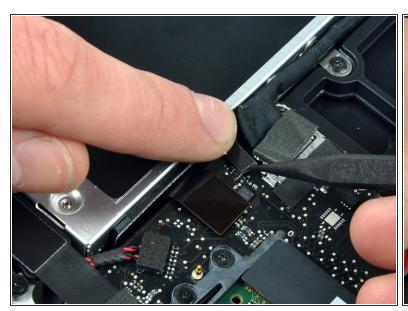
• Lift the battery by its plastic pull tab and slide it away from the long edge of the upper case.

♠ Do not try to completely remove the battery just yet.



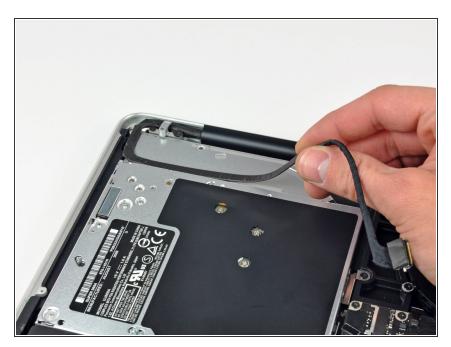
- Tilt the battery back enough to access the battery cable connector.
- Pull the battery cable connector away from its socket on the logic board and remove the battery from the upper case.
 - If you're installing a new battery, you should <u>calibrate</u> it as soon as possible.

Step 8 — Display Assembly





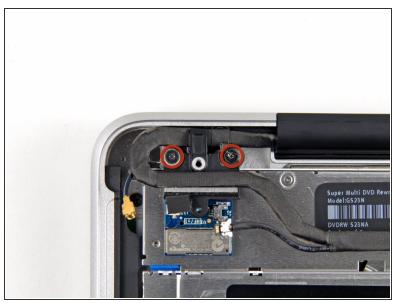
- Apple sticks a small strip of clear plastic with adhesive applied to one side to the logic board behind the camera cable connector to keep it in its socket. When moving it out of the way, be sure not to break any surface-mount components off the logic board.
- Hold the end of the cable retainer down 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.
- Pull the camera cable away from its socket on the logic board.
- (i) Pull the connector parallel to the face of the logic board, not straight up.



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

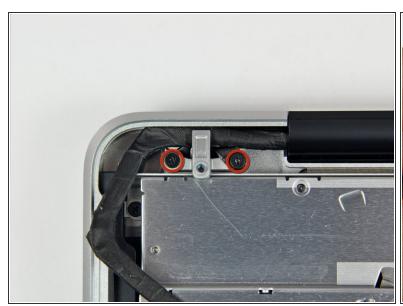


- This step is only required if you have an anti-glare display. If you have a glossy display, skip to step 12.
- Disconnect the Bluetooth cable by pulling the male end straight away from its socket.
- Pull the connector parallel to the face of the logic board, not straight up.
- Use the flat end of a spudger to pry the Bluetooth antenna cable from its socket on the board.



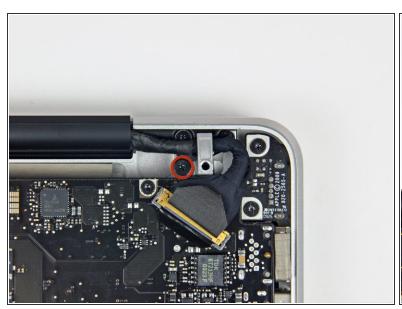


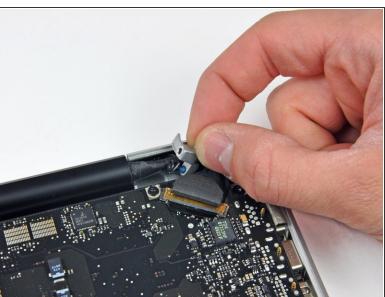
- (i) This step is only required if you have an anti-glare display.
- Remove the two 8 mm Phillips screws securing the Bluetooth/camera cable retainer to the upper case.
- (i) One of the screws may remain captive in the Bluetooth/camera cable ground loop. If replacing the display, be sure to transfer this screw to the new unit.
- Lift the Bluetooth board/cable retainer assembly out of the upper case.



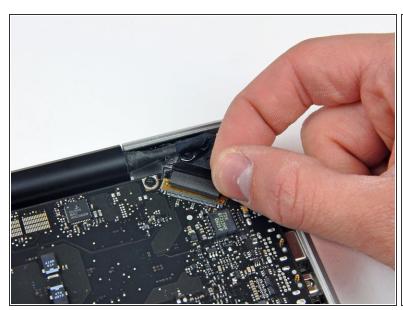


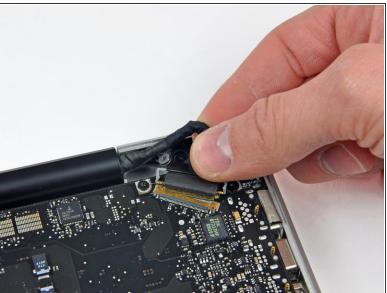
- This step is only for glossy display machines. If you have an anti-glare display, skip this step.
- Remove the two 8 mm Phillips screws securing the camera cable retainer to the upper case.
- One of the screws may remain captive in the camera cable ground loop. If replacing the display, be sure to transfer this screw to the new unit.
- Lift the camera cable retainer out of the upper case.



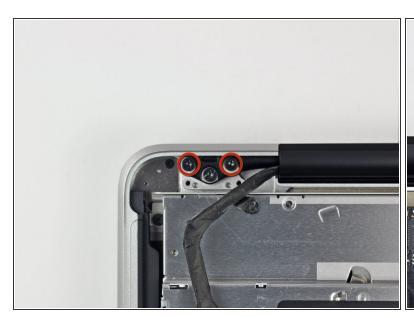


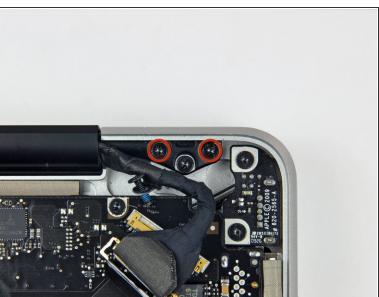
- Remove the single 7 mm Phillips screw securing the display data cable retainer to the upper case.
- i This screw may remain captive in the display data cable ground loop. If replacing the display, be sure to transfer this screw to the new unit.
- Remove the display data cable retainer from the upper case.





- 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 parallel to the face of the logic board, not straight up from its socket.





 Remove the outer two T6 Torx screws securing both display hinges to the upper case (four screws total).



- 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 remaining 6.5 mm Torx screw from the lower 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.
- Remove the last remaining 6 mm T6
 Torx screw securing the display to
 the upper case.

Step 18







- 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.

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