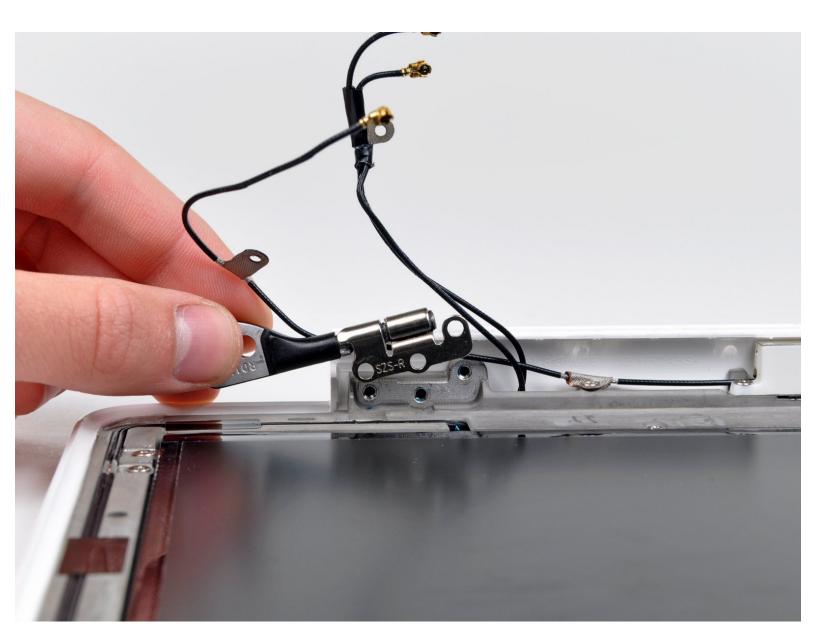


MacBook Unibody Model A1342 Right Clutch Hinge Replacement

Replace a broken right clutch hinge.

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INTRODUCTION

Keep your display opening smoothly by using this guide to replace a damaged clutch hinge.

TOOLS:

- Phillips #00 Screwdriver (1)
- Spudger (1)
- T6 Torx Screwdriver (1)
- T8 Torx Screwdriver (1)

Step 1 — Lower Case



Remove the eight 4 mm Phillips screws securing the lower case to the MacBook.

Step 2



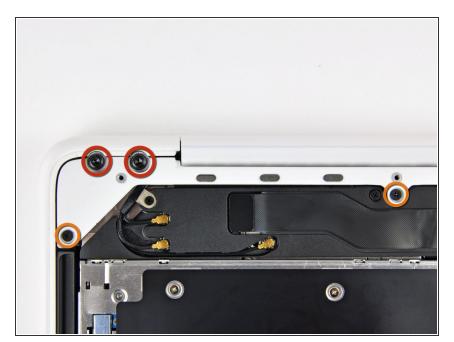
- The lower case is constructed of rubber-coated aluminum. Do not excessively bend the aluminum during removal, as any permanent deformation will cause tolerance issues after reassembly.
- Slightly lift the lower case near the vent opening.
- Continue running your fingers between the lower and upper cases until the upper case pops off its retaining clips.
- (i) The location of these three clips is shown in the third picture.

Step 3 — Battery

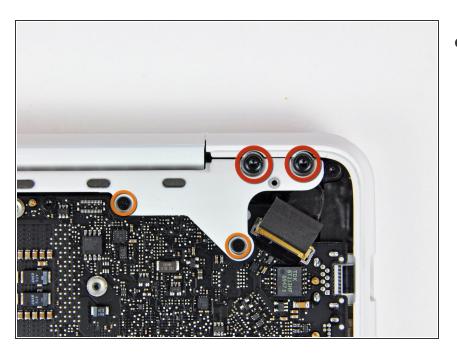


- For precautionary purposes, we advise that you disconnect the battery connector from the logic board to avoid any electrical discharge. This step is **optional** and is not required.
- Use the flat end of a spudger to lift the battery connector up out of its socket on the logic board.
- *i* It may be easier to use your fingernails to lift up on both sides of the connector.

Step 4 — Rear Vent



- Remove the following screws from the optical drive side of the rear vent:
 - Two 10 mm T8 Torx
 - Two 5.2 mm Phillips



- Remove the following screws from the port side of rear vent:
 - Two 10 mm T8 Torx
 - Two 5.2 mm Phillips

Step 6



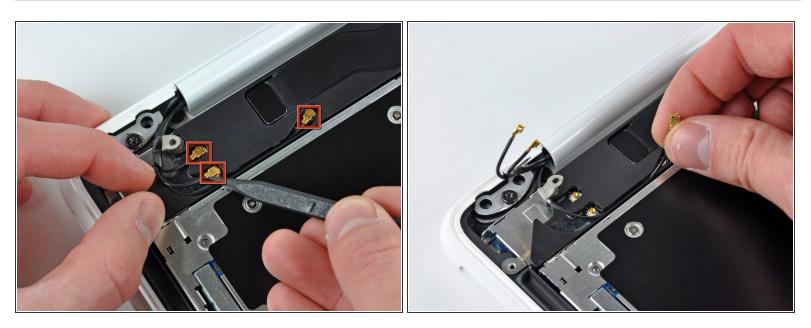
• Carefully lift the rear vent out of the upper case.

Step 7 — Display

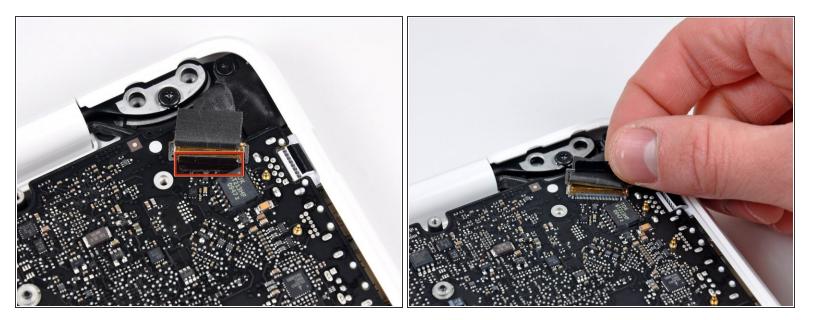


 Remove the single 3 mm Phillips screw securing the AirPort/Bluetooth antenna ground strap to the rear speaker.

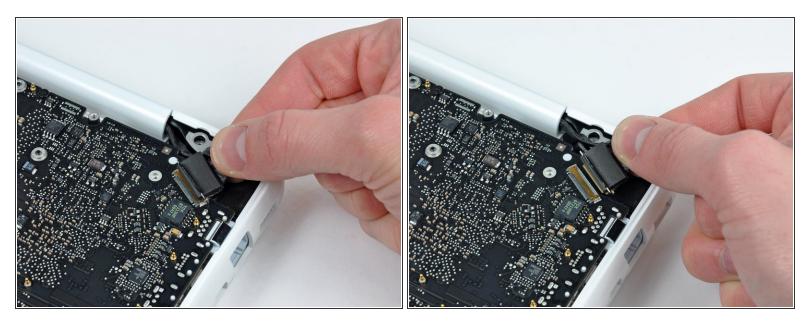
Step 8



- Use the tip of a spudger to pry the AirPort and Bluetooth antenna connectors (3 total) up off the AirPort/Bluetooth card.
- De-route the long antenna from its channel in the rear speaker housing.



- Grab the plastic pull tab secured to the display data cable lock and rotate it toward the DC-In side of the computer.
- There is also a thin metal lock clip under the plastic tab that has to be released (Use the tip of a spudger) before you can disconnect the display data cable.



- Gently pull the display data cable connector away from its socket on the logic board.
- (i) Pull the socket parallel to the face of the logic board.
- The display data cable socket is made of very thin metal and is easily bent. Be sure to pull the connector straight away from its socket.

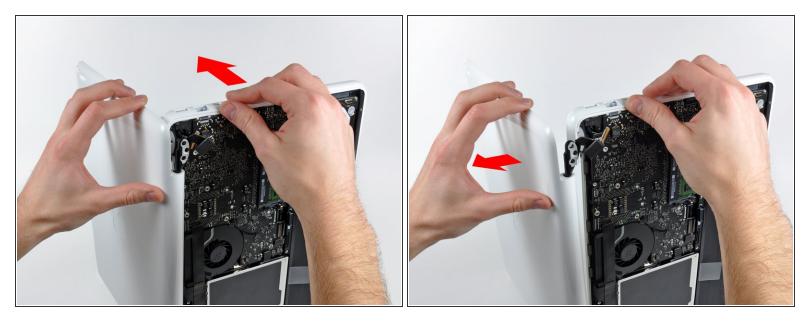
Step 11



- 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 7.8 mm with lock washer T8 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 T8 Torx screw securing the display to the upper case.



- 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.
- (i) The display data cable may cause the upper display bracket to get caught on the upper case. It may be helpful to slightly rotate the upper case away from the display for more clearance.
- 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.

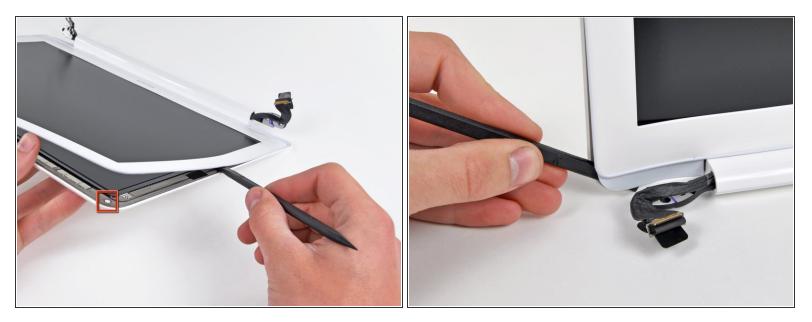
Step 15 — Front Display Bezel



- Insert the flat end of a spudger between the thin rubber strip surrounding the front display bezel and the rear display bezel.
- **Do not** try to insert the spudger between the thin rubber strip and the plastic face of the front display bezel.
- Use the flat end of your spudger to carefully pry the front display bezel away from the adhesive securing it to the rear display bezel.
- Do not pry against the fragile glass LCD panel. Also, do not excessively bend the plastic as it may permanently deform.
- Continue prying until the front display bezel is free along the right side of the display and behind the right clutch hinge.



- Use the flat end of a spudger to pry the front display bezel off the top edge of the display assembly.
- (i) It may be helpful to insert and twist the flat end of your spudger to enlarge the gap between the front & rear display bezels as you work your way around the edge of the display.
- Continue separating until the top edge of the front display bezel is free from the display assembly.
- A Be careful when prying near the iSight camera board, as it has exposed circuitry and is delicate.



- Use your spudger to pry the left side of the front display bezel away from the display assembly.
- Carefully pry up the area behind the left clutch hinge.
- During reassembly, be sure the small plastic pegs on the front display bezel mate up with the holes in the rear display bezel (shown in red). Failure to do so will prevent the front display bezel from sitting flush against the rear bezel.



- Slowly work your way across the lower edge of the front display bezel until it is free from the display assembly.
- Be sure to pry up as far away from the LCD as possible, as it extends below the edge of the front display bezel.
- When you get about half way across, pry up from the other side of the front display bezel's lower edge to ease the process.

Step 19



- Remove the front display bezel from the display assembly.
- (i) To help the adhesive avoid losing is tackiness, do not excessively handle the adhesive and be sure to keep it clean until you are ready for installation.

Step 20 — Clutch Cover



 Remove the two 3 mm Phillips screws securing the clutch cover to the rear display bezel.

Step 21



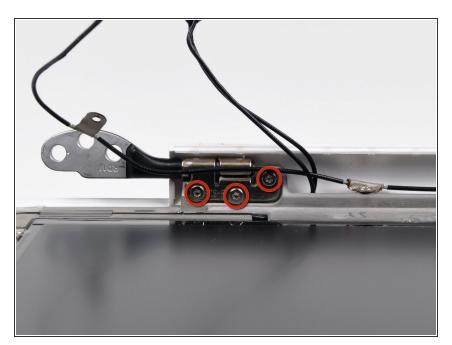
 Insert the flat end of a spudger into the open end of the clutch cover and pry up to release it from the rear display bezel.

(i) Pry up from both sides of the clutch cover until it is completely free from the display assembly.

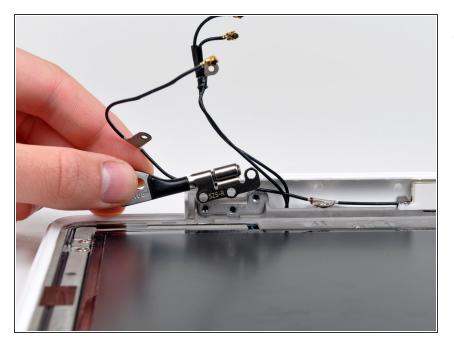


• Remove the clutch cover from the display assembly.

Step 23 — Right Clutch Hinge



 Remove the three 4.7 mm T6 Torx screws securing the right clutch hinge to the rear display bezel.



• Remove the right clutch hinge from the rear display bezel.

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