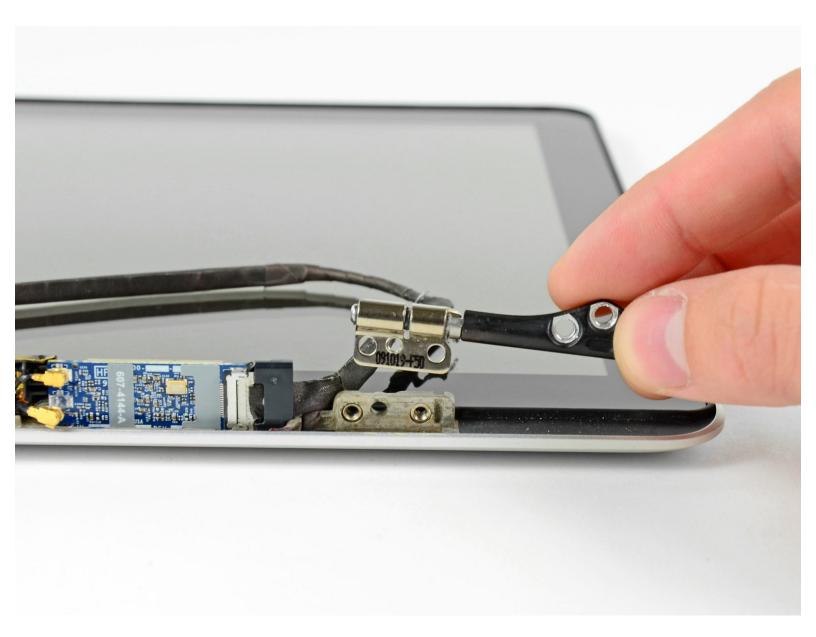


MacBook Unibody Model A1278 Right Clutch Hinge Replacement

Replace the right clutch hinge in your MacBook Unibody Model A1278.

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INTRODUCTION

Use this guide to replace a broken right clutch hinge.

TOOLS:

- Heat Gun (1)
- Heavy-Duty Suction Cups (Pair) (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)
- T6 Torx Screwdriver (1)

PARTS:

MacBook Unibody (Model No. A1278)
 Right Clutch Hinge (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



- (i) 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.



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

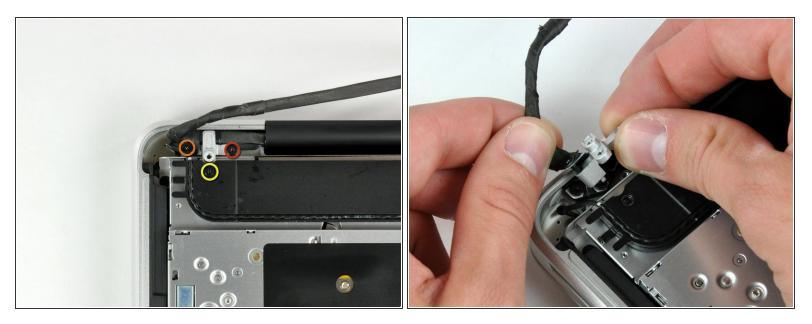
Step 6 — Display Assembly



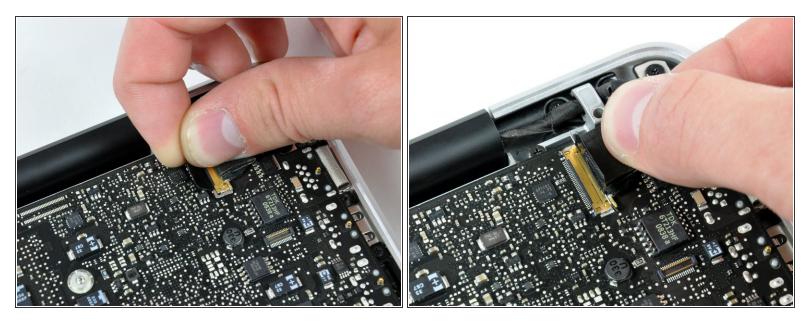
- Disconnect the camera cable by pulling the male end straight away from its socket.
 - Be careful not to pull up on the cable as you remove it from the socket.



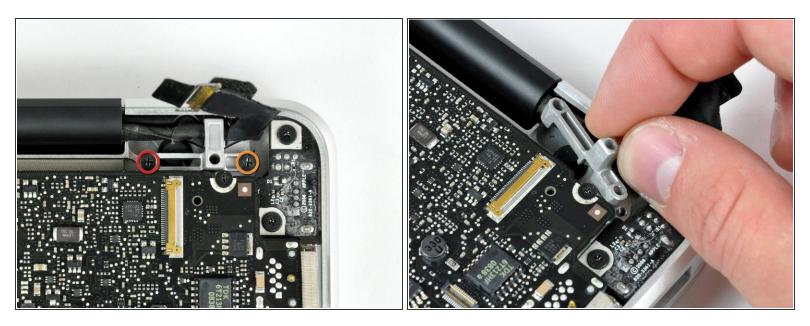
• De-route the camera data cable from the channel in the optical drive.



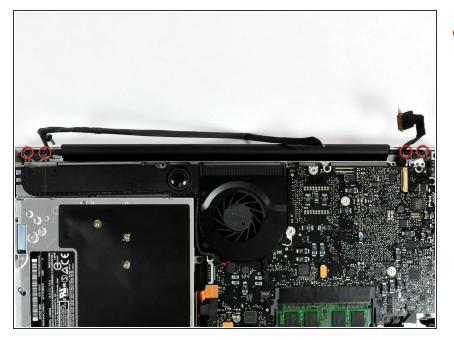
- Remove the following screws securing the camera data cable and right speaker to the upper case:
 - One 9.9 mm partially threaded Phillips screw
 - One 9.6 mm threaded Phillips screw
 - One 4 mm Phillips screw
- Slide the camera cable bracket out from under the subwoofer and remove it from the computer.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



- 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.
- (i) Make sure to pull the connector straight away and not straight up from its socket.



- 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.

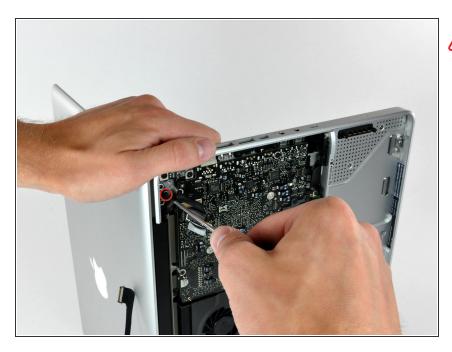


 Remove the two outer 6 mm Torx screws securing each side of the display to the upper case (4 screws total).

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.



- 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 — Clutch Cover



- Grab the clutch cover as shown and slide it toward the right side of the display.
- (i) It should move about 1/4" and stop. Don't force it beyond this point.



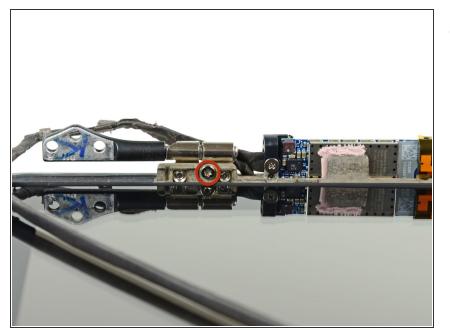
- Gently rock the clutch cover back and forth on its long axis while pulling it away from the display.
- Do this action along the length of the clutch cover until you can lift it off the framework attaching it to the display.

Step 17



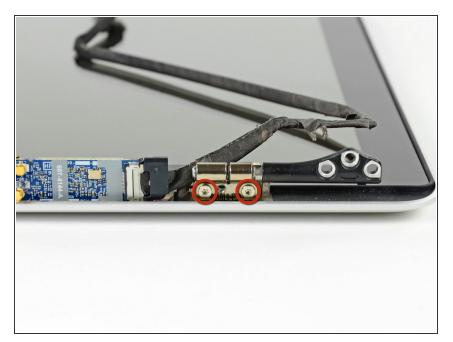
 Remove the clutch cover from the display.

Step 18 — Right Clutch Hinge

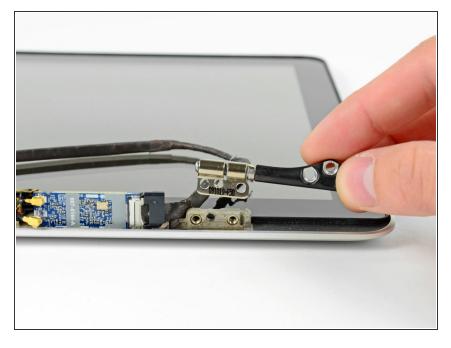


 Remove the single 5.2 mm T6 Torx screw securing the right clutch hinge nearest the display glass.

Step 19



 Remove the two remaining 5.2 mm T6 Torx screws securing the right clutch hinge to the display.



• Remove the right clutch hinge.

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