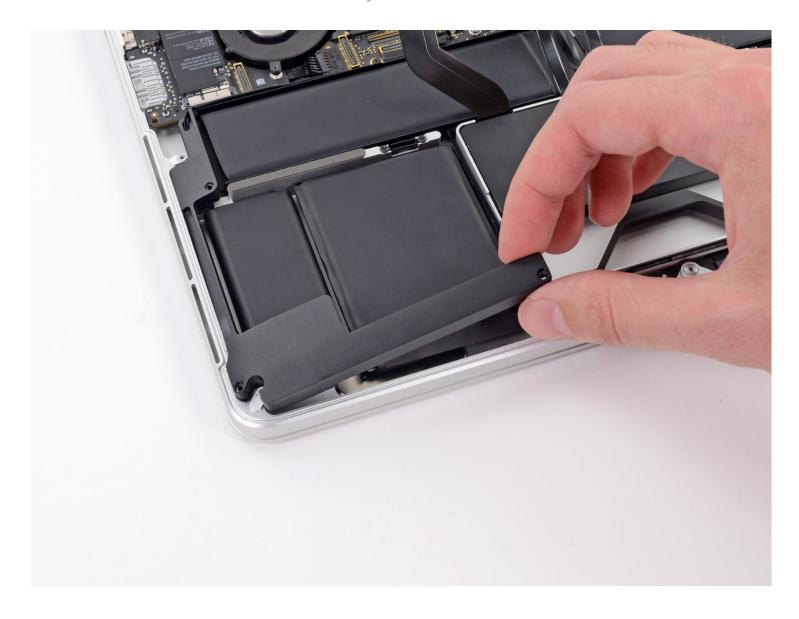


# MacBook Pro 13" Retina Display Early 2013 Right Speaker Replacement

Use this guide to replace the right speaker.

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#### INTRODUCTION

Use this guide to replace the right speaker.

#### TOOLS:

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

iFixit Opening Tool (1)

Spudger (1)

T5 Torx Screwdriver (1)

T6 Torx Screwdriver (1)

Tweezers (1)

#### PARTS:

MacBook Pro 13" Retina (Late 2012-Early 2013) Right Speaker (1)

#### Step 1 — Lower Case



- Remove the following ten screws securing the lower case to the upper case:
  - Two 2.3 mm P5 Pentalobe screws
  - Eight 3.0 mm P5 Pentalobe screws
- Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from to avoid damaging your device.



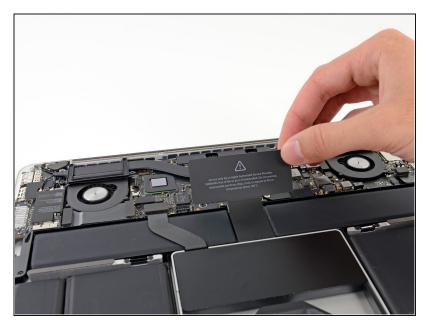
- Wedge your fingers between the upper case and the lower case.
- Gently pull the lower case away from the upper case.
- Remove the lower case and set it aside.

#### Step 3



- During reassembly, gently push down the center of the lower case to reattach the two plastic clips.
  - The lower case is connected to the upper case at the center, with two plastic clips.

#### **Step 4** — **Battery Connector**

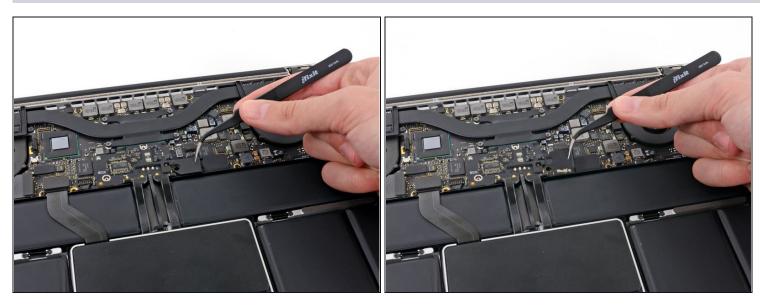


 Remove the plastic cover adhered to the battery contact board.

## Step 5



- Remove the following screws securing the battery connector board to the logic board:
  - Two 2.8 mm T6 Torx screws
  - One 7.0 mm T6 Torx shouldered screw

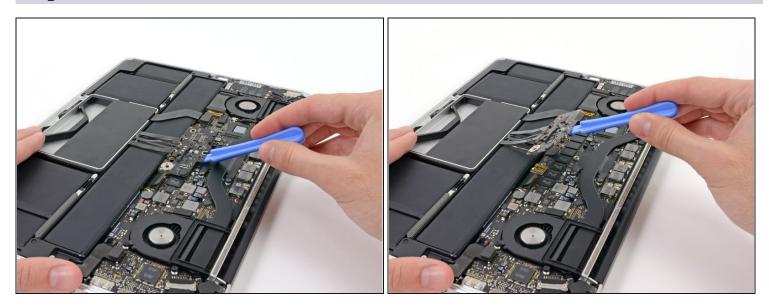


• Use <u>tweezers</u> to remove the small plastic cover located near the bottom right of the battery connector board.

## Step 7



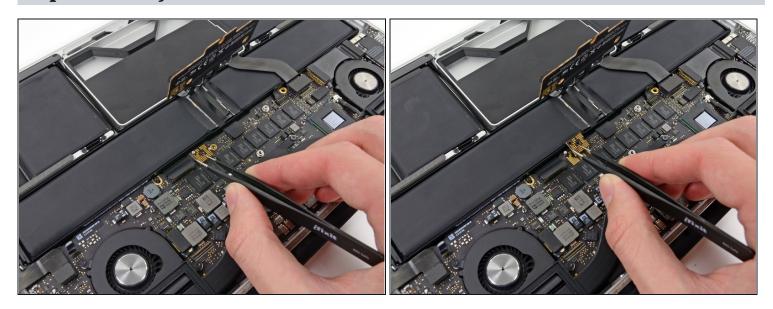
• Remove the wide head 6.4 mm T6 Torx screw securing the battery connector to the logic board assembly.



- Carefully lift the battery connector board up off the logic board.
- It is recommended to bend the battery cables just slightly, to keep the board suspended up above the logic board and out of the way.

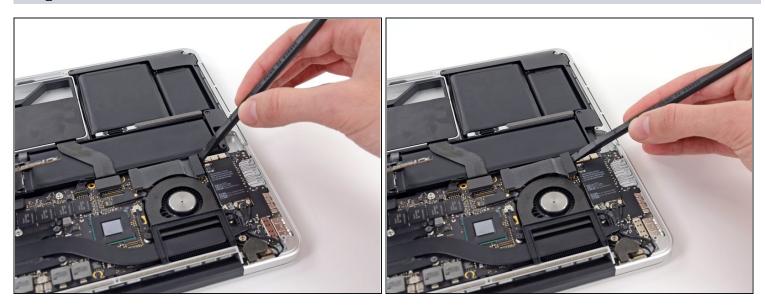
 $\triangle$  Do not fold the board completely over, or crease the cables, as this may damage the battery.

#### Step 9 — Battery Contact Board



- Grasp the Interposer with <u>tweezers</u>.
  - (i) An interposer is the name for an interface that links one electrical connection to another. In this repair, it is the board connecting the battery to logic board.
- Lift the Interposer off the logic board and remove it.
- A Removing this board will ensure that the battery remains disconnected throughout your repair, preventing your computer from accidentally powering on. It's also a good idea to take it out so it doesn't fall out unexpectedly.

#### Step 10 — I/O Board Data Cable



• Use the flat end of a spudger to pry the right side of the I/O board data cable connector up off its socket on the I/O board.

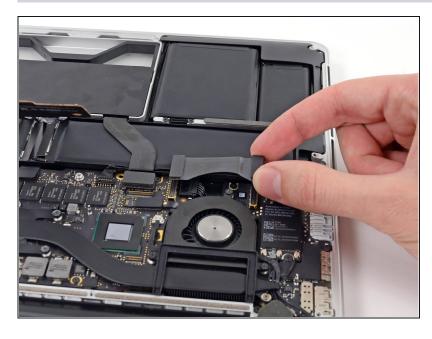
⚠ When prying the I/O board data cable connector from its socket, make sure to pry the connector itself and not the socket. Prying the socket may cause irreversible damage to the I/O board.





- Wedge the flat end of a spudger beneath the left side of the I/O board data cable connector.
- Gently twist the spudger to disconnect the I/O board data cable connector from its socket on the logic board.

## Step 12



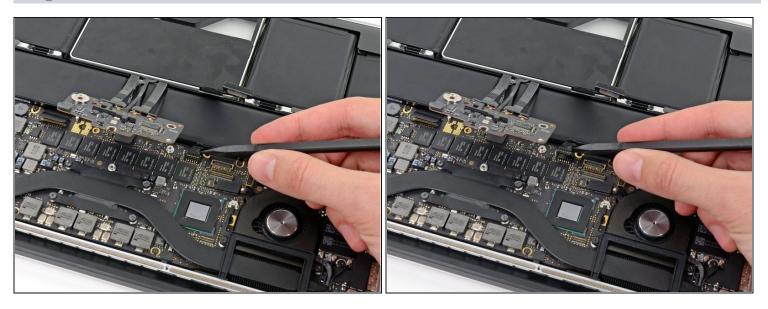
 Lift and remove the I/O board data cable from the MacBook Pro.

#### Step 13 — Right Speaker



- Use the flat end of a spudger to pry the SSD cable connector up from its socket on the logic board.
- Move the SSD cable connector out of the way.

## Step 14



- Wedge the pointed end of a spudger beneath the right speaker cable connector.
- Gently pry the right speaker cable connector up off from its socket on the logic board.

**A** Be sure you are prying up on the connector, **not** the socket itself.



- Use a T5 Torx driver to remove the following screws securing the right speaker to the upper case:
  - One black 6.8 mm screw
  - One silver 6.3 mm screw
  - One black 4.9 mm screw
- *i* The silver screw (in the corner) may be covered with a foam pad. If so, use your tweezers to peel it up and remove it.





- Lift and remove the right speaker out of the upper case.
- ☑ If necessary, de-route the right speaker cable from its channel in the upper case.

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