



MacBook Pro 15 2016-2017 Speaker Replacement

Here's the guide of speaker replacement of...

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INTRODUCTION

Here's the guide of speaker replacement of MacBook Pro 2016/2017. In October 2016, Apple launched a new MacBook Pro, which had a whole new design and functions including Touch Bar, new butterfly keyboard, display and speakers. However these features annoyed the users because they were really frangible. Apple announced the replacement program of keyboard and display but speakers even many people have been suffering speakers muffling issue. Apple says it costs about \$600 to replace the speaker because they glued to the top case and can't be replaced individually. So I decided to replace by myself and write a guide for those have the same issue.

TOOLS:

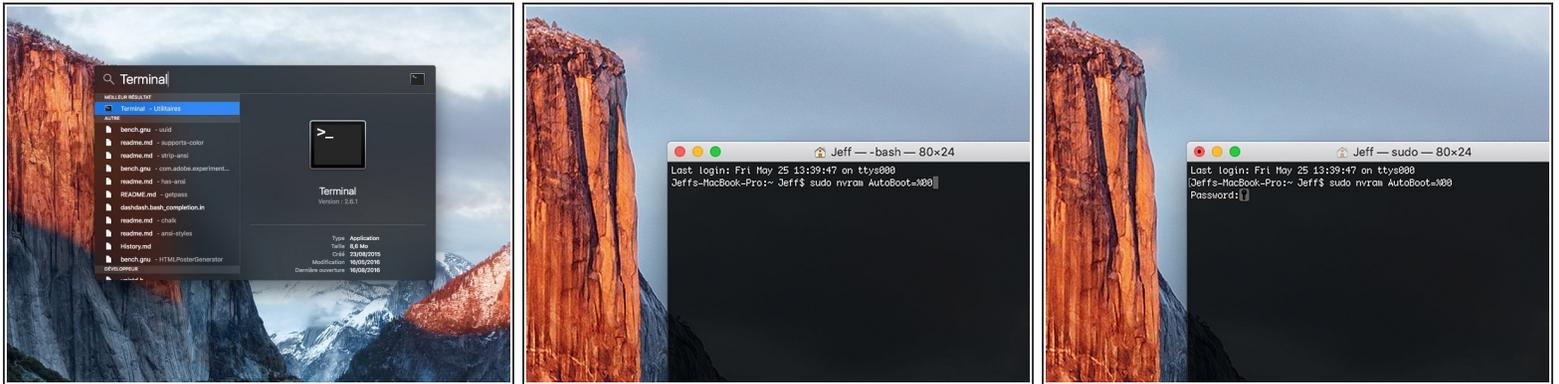
- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks \(Set of 6\)](#) (1)
- [Hair Dryer](#) (1)
- [iFixit 6 Inch Metal Ruler](#) (1)

or Guitar String

PARTS:

- [MacBook Pro 15" Retina \(Late 2016-2017\) Left Speaker](#) (1)
- [MacBook Pro 15" Retina \(Late 2016-2017\) Right Speaker](#) (1)

Step 1 — Disable Auto Boot



- i** Before starting this procedure, you must disable your Mac's **Auto Boot** feature. Auto Boot powers on your Mac when you open the lid, and may be accidentally triggered during disassembly. [Use this guide](#) or follow the abbreviated instructions below to disable Auto Boot. *This command may not work on all Macs.*
- Power on your Mac and launch **Terminal**.
 - Copy and paste the following command (or type it exactly) into Terminal:
 - **sudo nvram AutoBoot=%00**
 - Press **[return]**. If prompted, enter your administrator password and press **[return]** again. *Note: Your return key may also be labeled ↵ or "enter."*
- i** You can now safely power down your Mac and open the bottom case, without it accidentally powering on.
- ★** When your repair is complete and your Mac is successfully reassembled, re-enable Auto Boot with the following command:
- **sudo nvram AutoBoot=%03**

Step 2 — Lower Case



⚠ Completely power off and unplug your MacBook Pro before you begin.

- Close the display and flip the entire laptop upside-down.
- Use a P5 Pentalobe driver to remove six screws securing the lower case, of the following lengths:
 - Four 4.7 mm screws
 - Two 6.6 mm screws
- ☑ Note the orientation of the screws as you remove them—they need to be reinstalled at a slight angle.
- ☑ Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your device.

Step 3



- Press a suction handle into place near the front edge of the lower case, between the screw holes.
- Lift up on the suction handle just enough to open a small gap under the lower case.

Step 4



- Slide the corner of an opening pick into the gap you just created underneath the lower case.
- Slide the opening pick around the nearest corner and then halfway up the side of the MacBook Pro.
- ⓘ This releases the first of the hidden clips securing the lower case. You should feel and hear the clip pop free.

Step 5



- Repeat the previous step on the opposite side, using your opening pick to release the second clip.

Step 6



- Lift the front edge of the lower case (the side opposite the display hinge) just enough to slide your fingertips underneath and get a good grip on it.
- ⓘ Two additional hidden clips near the middle of the cover may pop free at this point, if they haven't already.

⚠ Don't lift very far and don't try to remove the lower case yet.

Step 7

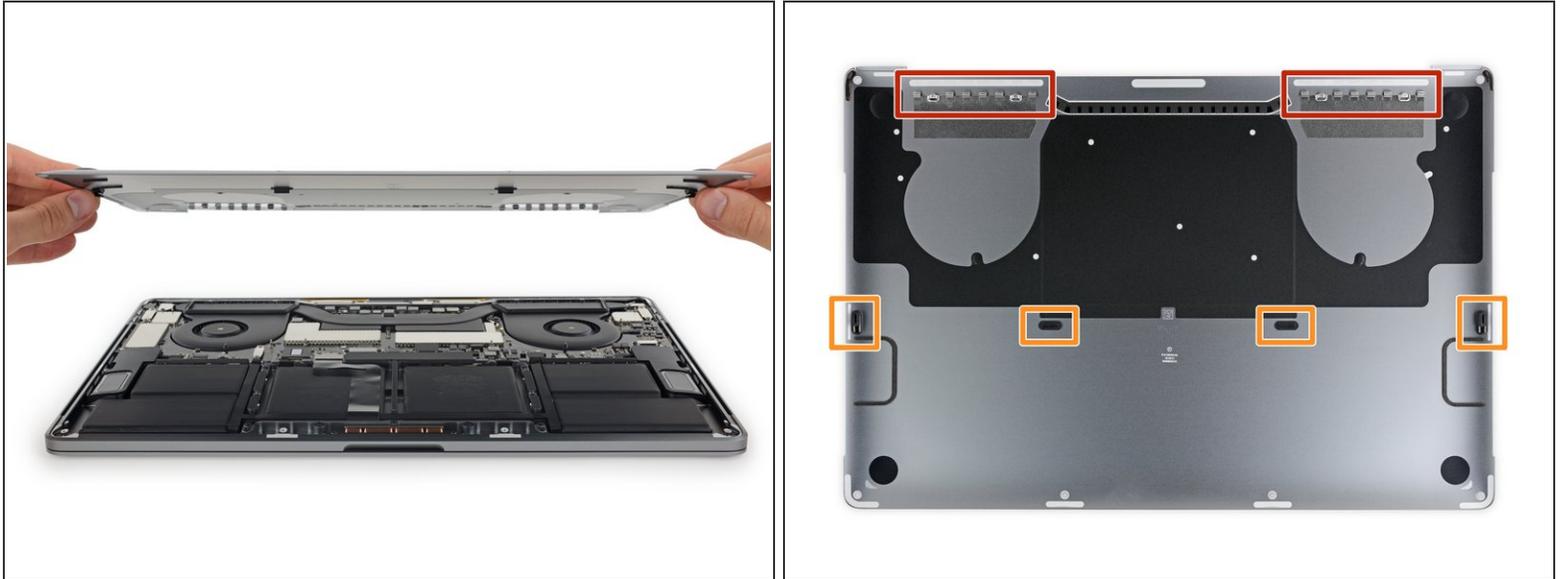


- Pull the lower case firmly towards the front of the MacBook (away from the hinge area) to separate the last of the clips securing the lower case.
 - Pull first at one corner, then the other.

 **Pull to the side—not up.**

 This may require a lot of force.

Step 8



- Remove the lower case.

🔗 To reinstall the lower case:

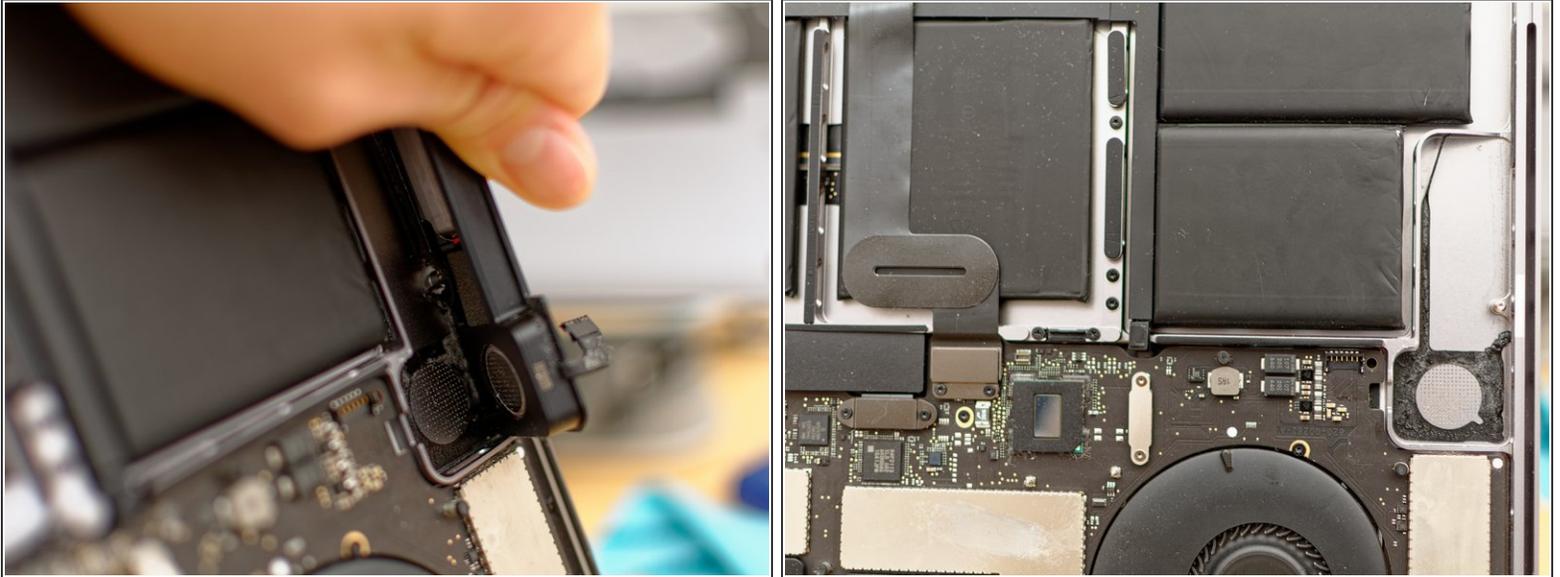
- [Set it in place](#) and align the sliding clips near the display hinge. Press down and slide the cover toward the hinge. It should stop sliding as the clips engage.
- When the sliding clips are fully engaged and the lower case looks correctly aligned, press down firmly on the lower case to engage the four hidden clips. You should feel and hear them click into place.

Step 9 — Speaker Replacement



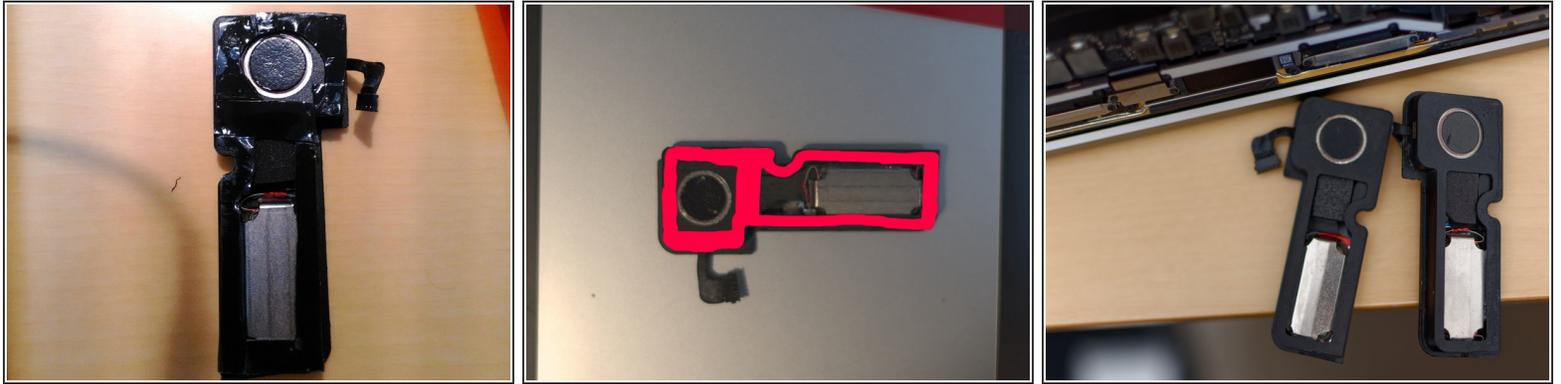
- The speaker is glued to the enclosure with really hard tape, so I used hair dryer to make it easier to take it off.
- Use the hair dryer to heat the metal from the other side, next to the keyboard.

Step 10 — Taking off the speaker (the hardest step)



- After that, insert a metal ruler between the speaker and the enclosure. **Be careful not to damage the battery shells when you do that.**
- You can also try to use a guitar string on the rounded corner next to the battery.
- It works best when you heat the case while trying to remove the speaker. Ask someone to hold the hair dryer while you pull.
- Only apply as much heat as you need until the glue slightly loosens.

Step 11



- In my case, I used double-sided tape for this replacement. The most important thing in this step is **not to make a gap when you cut and put it on the speaker**. Even just a little gap will make sound distorted.
- Also, I noticed the structural differences between 2016 and 2017 models. The right one is 2017 model and the left one is 2016 model from iFixit. Sound absorbing material is slightly different as you can see at the third picture, but I couldn't tell the difference of sound quality.

Several month after this replacement, the battery drive time dropped so much, so I had my MBP checked at Genius Bar. I asked them if I could receive the battery replacement even I replaced the right speaker by myself, they said they could. Ultimately, the top case including battery and speakers was replaced. However I am afraid that the new speakers would break again because they sometimes make a cracking noise while playing music or something.