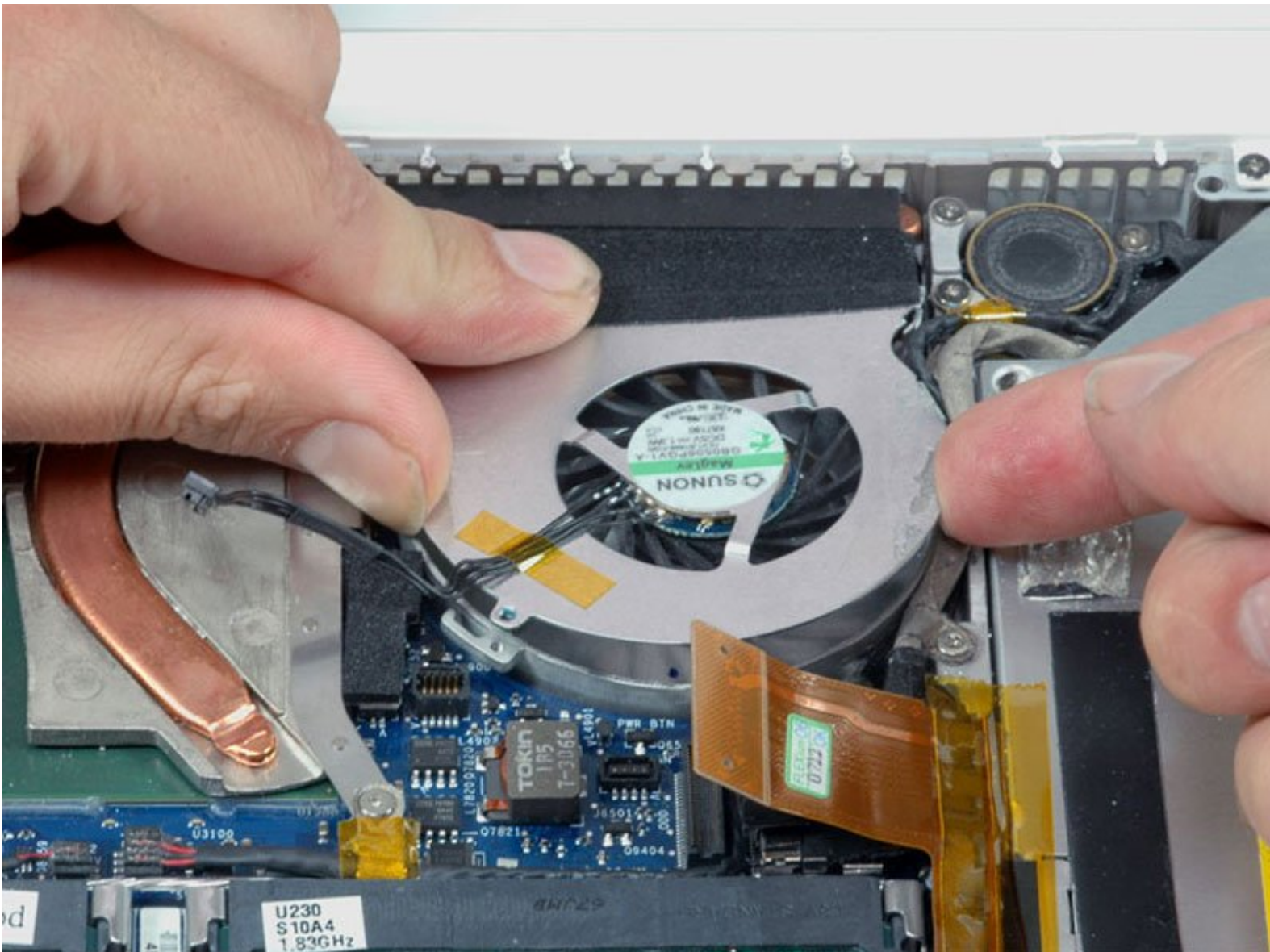




# MacBook Core Duo Fan Replacement

MacBook Core Duo cooling fan replacement.

Written By: iRobot



# INTRODUCTION

Replacing a defective fan is relatively easy and will keep your MacBook Core Duo running cool.



## TOOLS:

- [Coin](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [Compressed Air](#) (1)

*optional*



## PARTS:

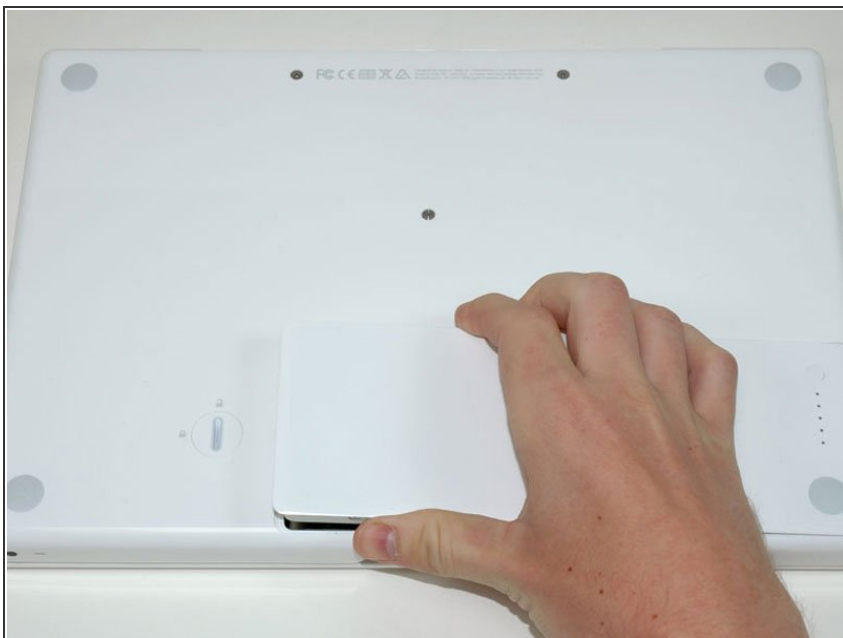
- [MacBook Fan](#) (1)

## Step 1 — Battery



- Use a coin or spudger to rotate the battery-locking screw 90 degrees clockwise.

## Step 2



- Lift the battery out of the computer.

## Step 3 — Memory Cover



- Remove the three evenly-spaced Phillips screws from along the rear wall of the battery compartment.
- ★ The screws are captive to the metal memory cover.
- ★ When replacing the battery casing, use a spudger to re-insert the foam cushioning behind the rear wall for proper battery spacing.

## Step 4



- Lift up on L-shaped memory cover, slide it to the right, and lift it out of the computer.

## Step 5 — Upper Case



- Remove the following 3 screws:
  - One 11 mm Phillips #00 in the middle of the case.
  - Two 14.5 mm Phillips #00.
- ⓘ If the screws stick in the case, you can use a magnetized screwdriver to draw them out.
- ★ The shorter of the three screws goes in the middle.

## Step 6



- Remove the following 3 screws from the rear wall of the battery compartment:
  - Two 3 mm Phillips #00. (A1181 has three 3 mm screws and one 4 mm.)
  - One 4 mm Phillips #00 on the right side.
- ★ When reinstalling these screws, press gently on the lower case to line up the screw holes.
- ⓘ These screws easily strip, so be careful while taking these particular screws out.

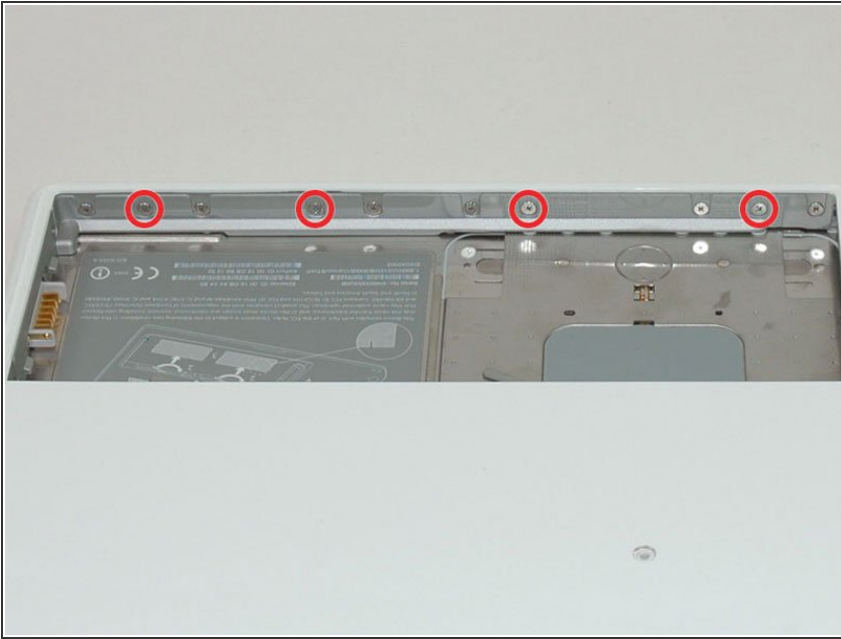


## Step 7



- Remove the two 6 mm Phillips #00 screws from either side of the right wall of the battery compartment (not the ones closest to the battery connector).

## Step 8



- Remove the four 3 mm indicated Phillips #00 screws from the front wall of the battery compartment. When working from the left, remove the 2nd, 4th, 7th and 9th screw.

## Step 9



- Remove the following 4 screws from the back of the computer:
  - Two 7 mm shouldered Phillips on the far sides.
  - Two 10.5 mm Phillips toward the center.
- ⓘ Do not over-tighten these; you can cause the case to distort.

## Step 10



- Remove the two 5.2 mm shouldered Phillips #00 screws from the optical side of the computer.
- ⓘ It is not necessary to remove the similar screws on the other side of the computer.



## Step 11

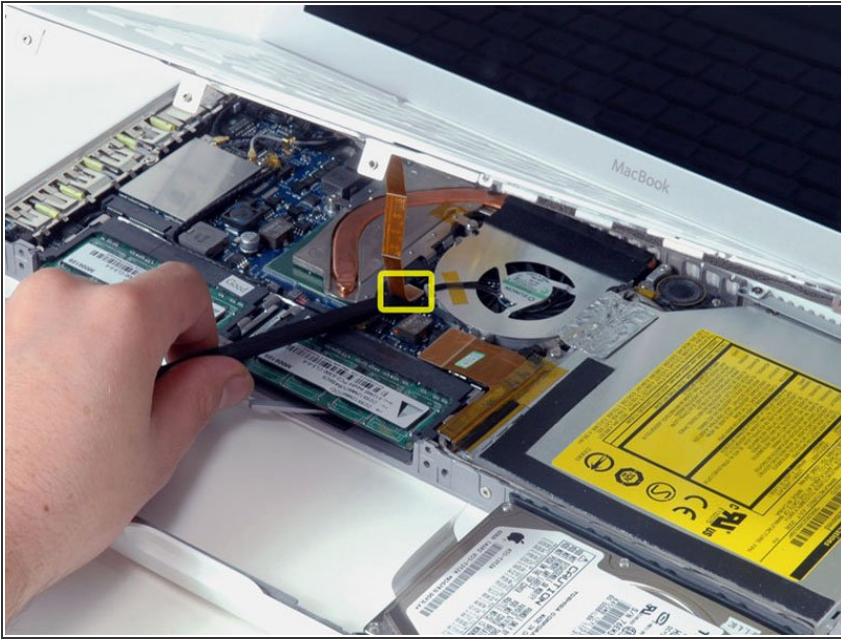


- Starting near the display and working around to the front of the computer, pry up on the upper case. It is held with clips on the right above the optical drive. These will release with some firm lifting pressure.
- Be careful when prying up the upper case. It's very easy to slice open a fingertip and thus provide the blood sacrifice the Mac gods sometimes require of those who insist on doing their own repairs.

⚠ There's a trackpad and keyboard ribbon connecting the upper case to the logic board, so don't pull the upper case off entirely just yet.

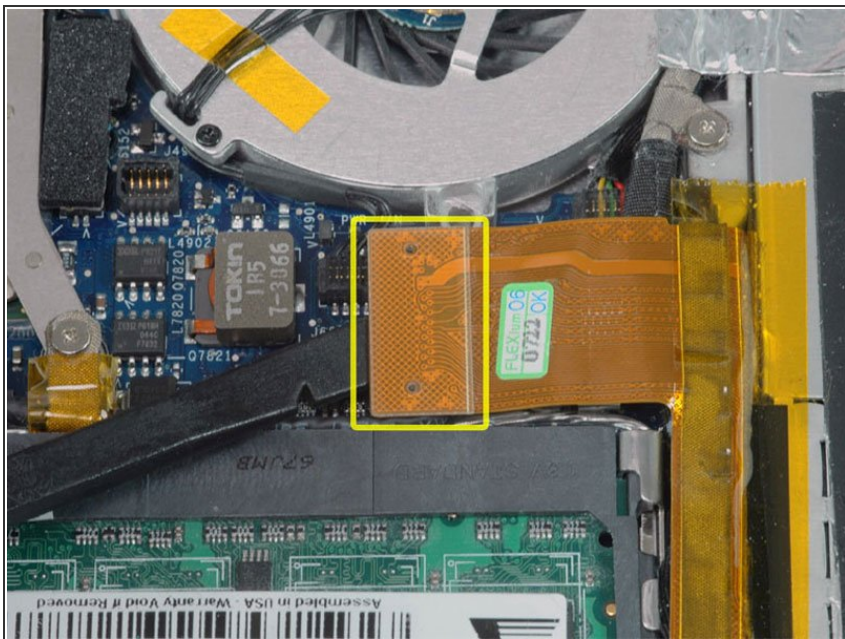
ⓘ If you have trouble getting the clips to release, be careful that you are not prying the plastic top of the upper case away from its metal frame.

## Step 12



- While holding up the upper case (from the bottom or the top), use a spudger to pry up the orange trackpad and keyboard cable from its connector.
- ⓘ Take care to pry between the black socket and the white connector. You might have to pry on both sides for it to release properly.
- ⚠ Do not pry from the bottom or the top, but from the sides.
- ⓘ If you happen to break your upper case cable when removing the upper case, we stock the [cable](#) individually and we have a [guide](#) that makes replacing it easy.

## Step 13 — Fan



- Use a spudger to disconnect the orange optical drive cable from the logic board.

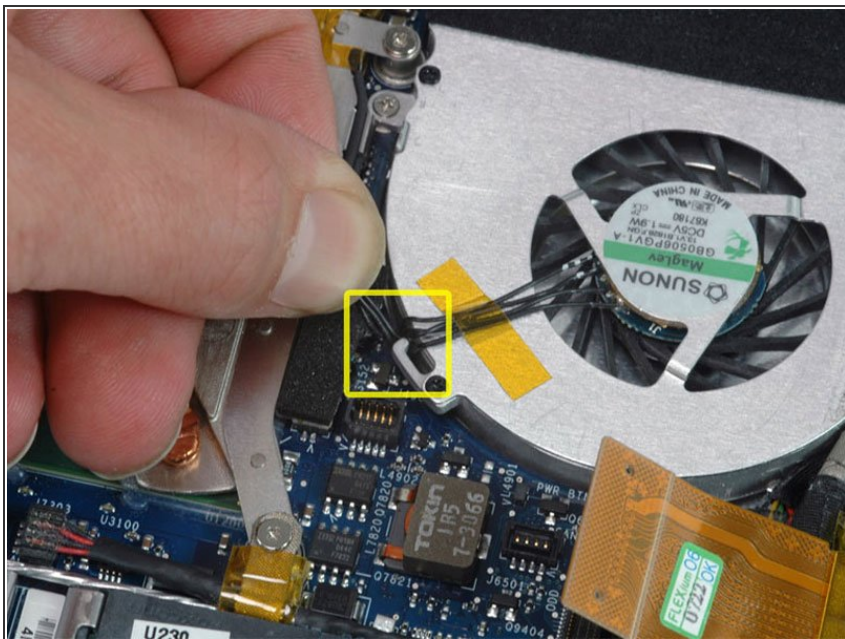
## Step 14



- Use a spudger to disconnect the black fan connector from the logic board.



## Step 15



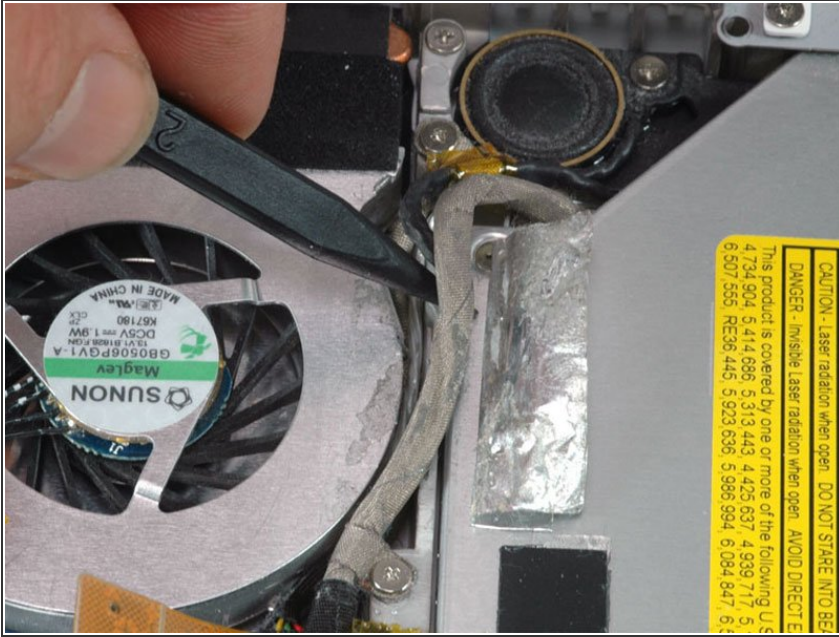
- Deroute the fan cable from behind the tab on the left side of the fan.

## Step 16



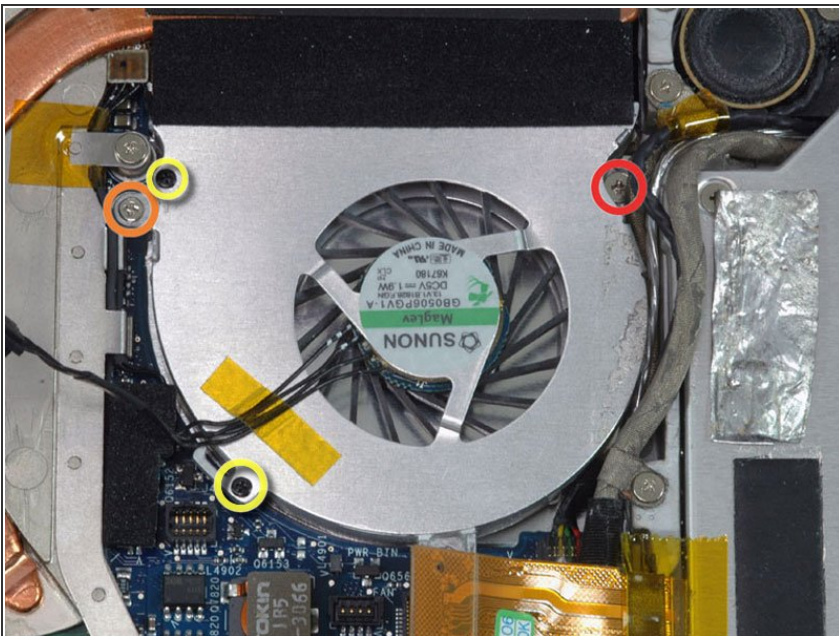
- Peel up the silver foil tape between the fan and the optical drive.

## Step 17



- Use a spudger to move the gray display data and black speaker cables to the right. This will reveal a silver screw securing the fan housing to the lower case.

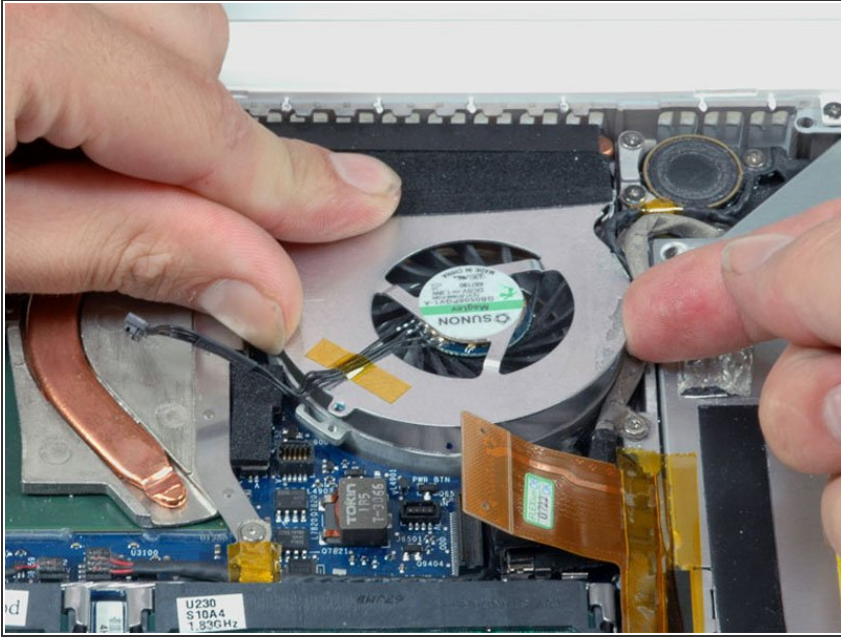
## Step 18



- Remove the following 4 screws:
  - One 3 mm Phillips on the right side of the fan.
  - One 6 mm Phillips on the left side of the fan.
  - Two Phillips screws on the top left and bottom left of the fan.

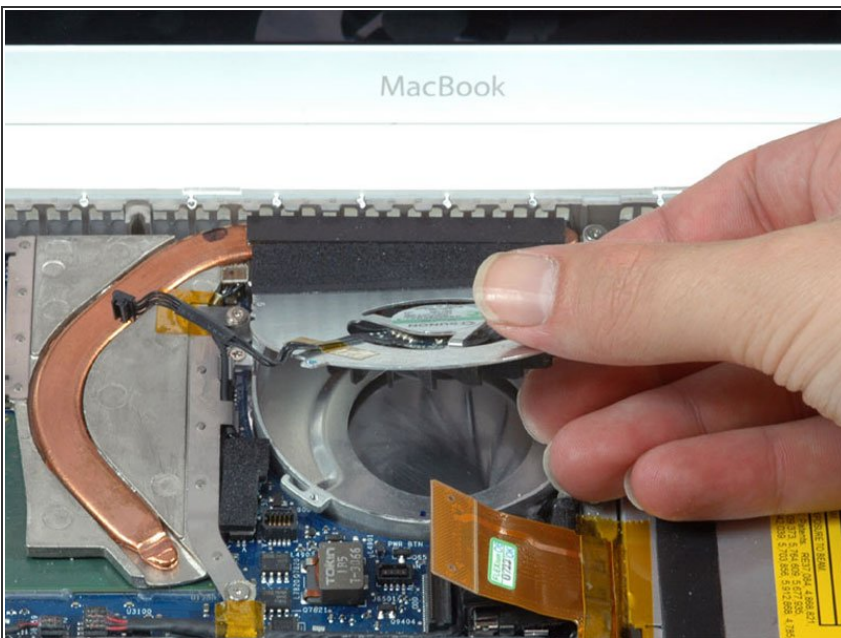


## Step 19



- Push down on the left side of the fan and slide it slightly to the right in order to free the fan from the indicated tab on its right side. You can also use the tip of a spudger to free the tab on the right side of the fan.

## Step 20



- Lift the fan out of the computer, being careful not to rip the black felt tape.
- When replacing an old fan, you may find a lot of dust in the vent and general area. A can of compressed air may be useful for cleaning it out before installing the new fan.

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