



Sony Vaio PCG-51412L Fan Replacement

This guide will show you how to remove and replace your laptop's fan.

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INTRODUCTION

If your laptop is overheating you may need to replace the fan. This guide will guide you in replacing your laptop's fan. The tools required in this process are: an iFixit opening tool, a PH0 screwdriver, and needle nose pliers.

TOOLS:

- Phillips #0 Screwdriver (1)
- iFixit Opening Tool (1)
- Small Needle Nose Pliers (1)

PARTS:

- Sony Vaio VPCY2 PCG-51412L Fan (1)

Step 1 — Battery



- Flip your laptop so that the bottom is facing up.

Step 2



- Slide the “Lock” switch to the right.
- Slide and hold the “Release” switch to the left.

Step 3



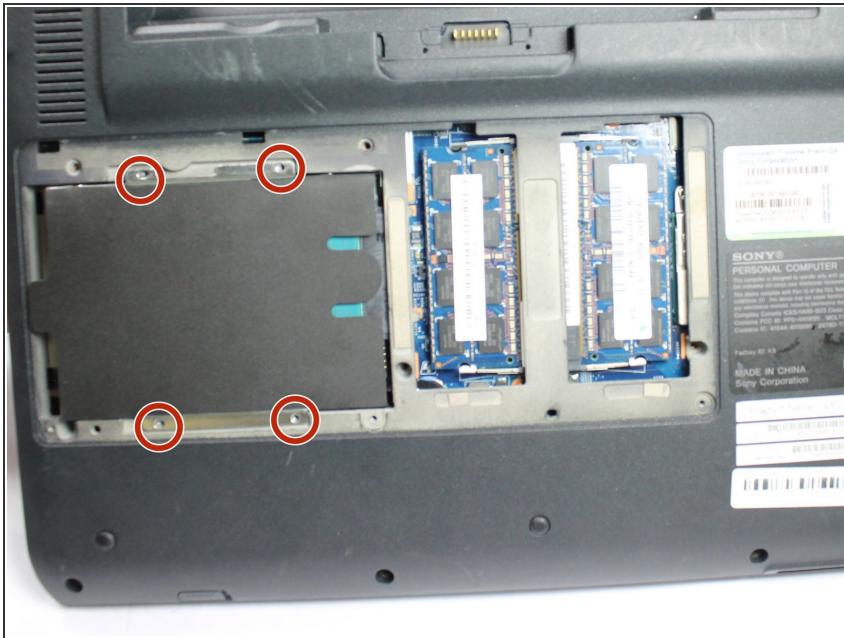
- While holding the “Release” switch, lift the lip of the battery.
- Lift the battery up and out of the laptop.

Step 4 — Hard Drive



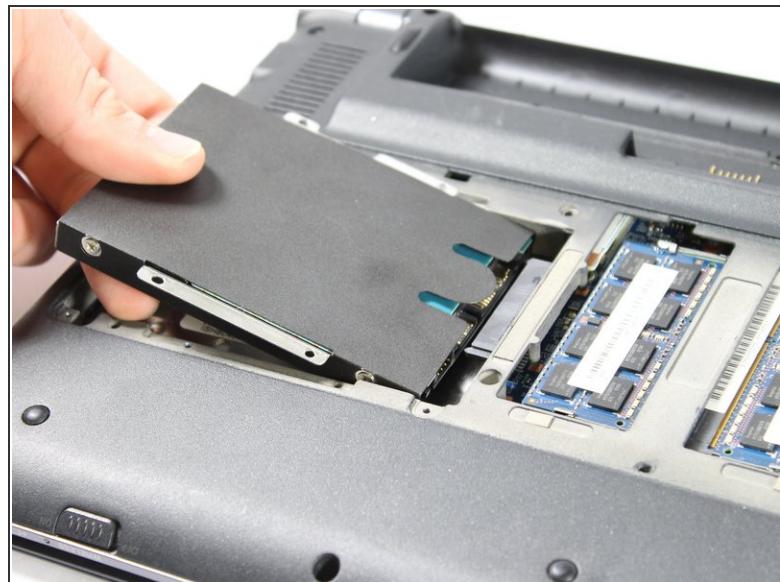
- Using a #0PH screwdriver, unscrew the three 4.80mm screws on the back of the device.
- The screws are held into the panel by washers, they will not fall out once unscrewed.

Step 5



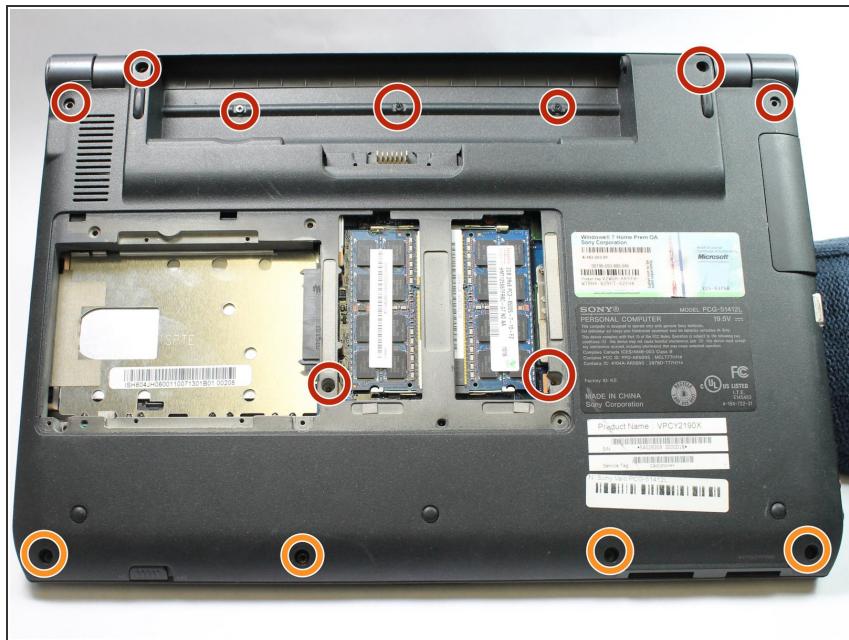
- Remove the panel.
- Use the #0PH screwdriver to remove the four 3.61mm screws.

Step 6



- Carefully lift the hard drive.
- Remove the hard drive by pulling it to the left.

Step 7 — Fan



- Remove all nine 5.63mm screws with the #0PH screwdriver.
- Remove the four 8.62mm screws with the #0PH screwdriver.

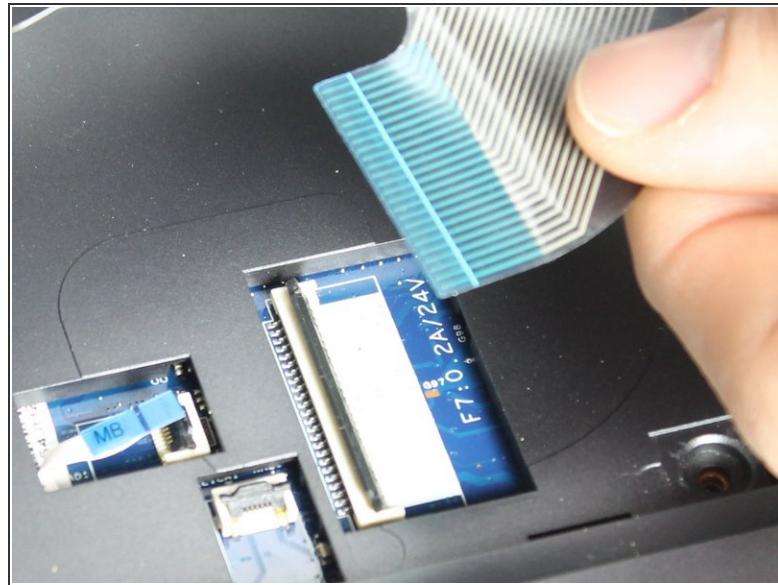
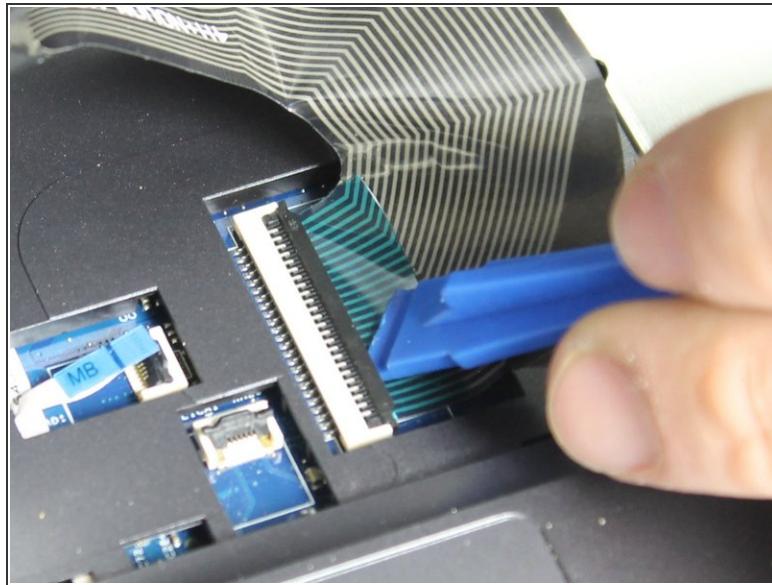
Step 8



- Flip your Vaio so that the keyboard is facing up.
- Use the iFixit Opening Tool to lift the keyboard from the frame, starting at the ESC key corner.
- Gently slide the iFixit Opening Tool along the edge of the keyboard.

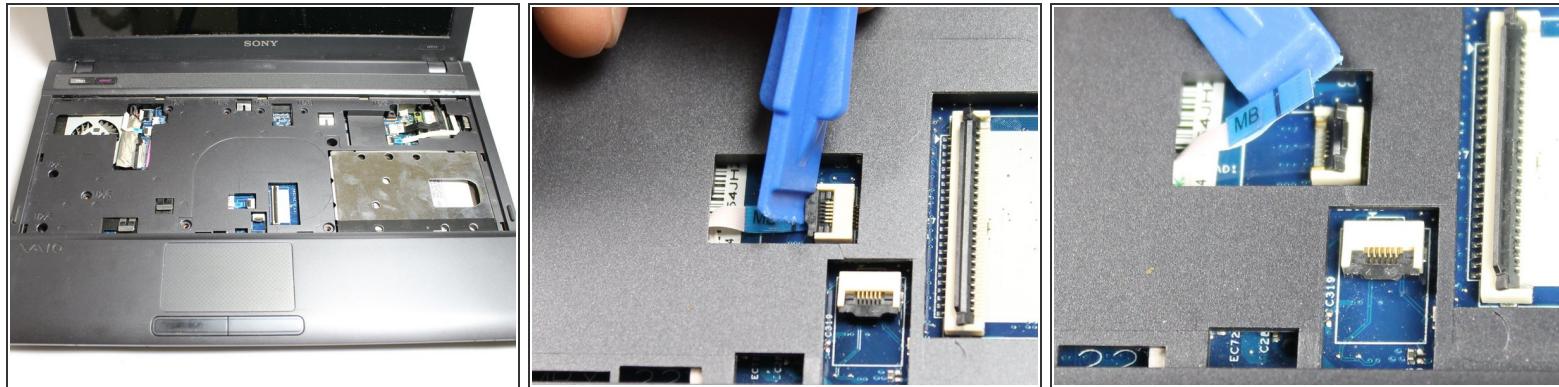
⚠ The keyboard is connected to the frame with a wire, do not fully lift the keyboard from the frame

Step 9



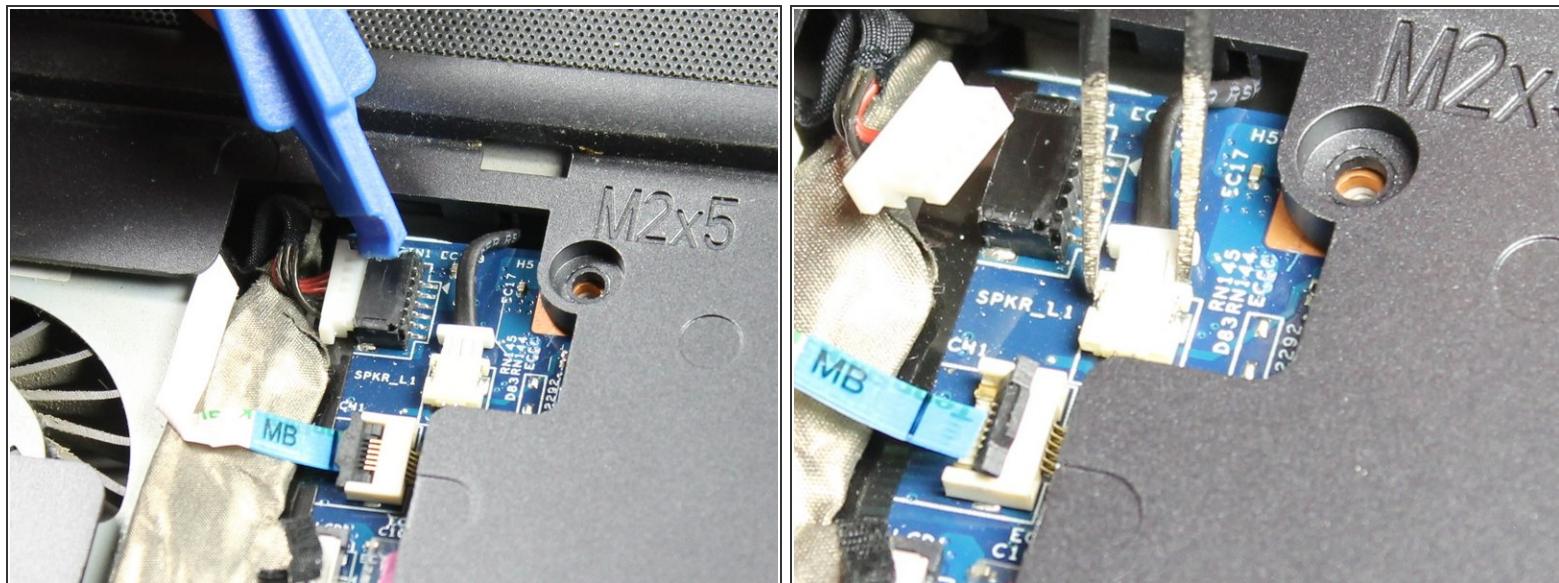
- The cable is located under the keyboard, just above the touchpad.
- Use the iFixit Opening Tool to flip the clip up in order to release the cable.
- Detach the cable from the frame.
- Remove the keyboard from the frame.

Step 10



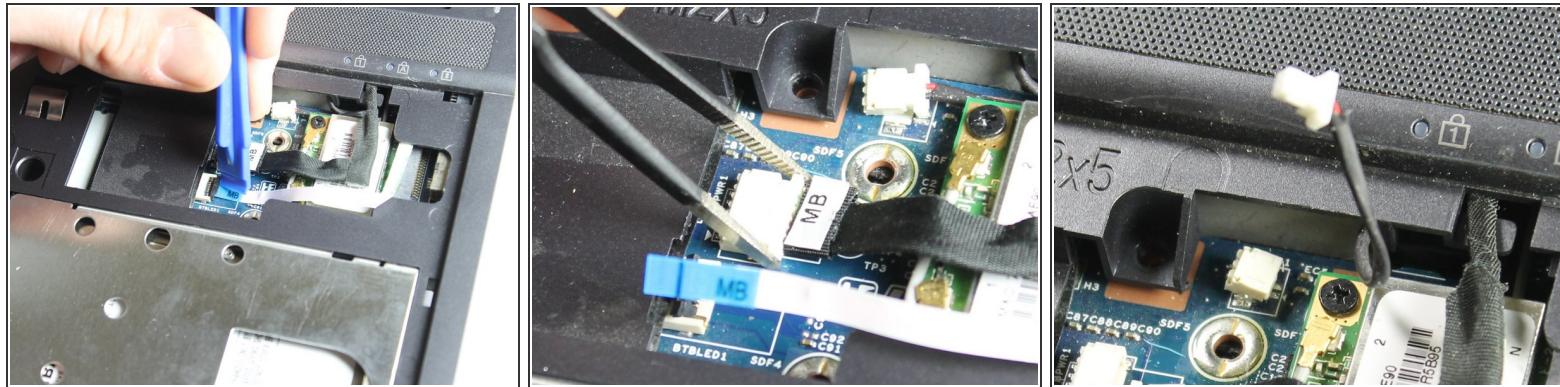
- Use the iFixit Opening Tool to lift the edge of the clip from the cable.
- Gently pull the cable away from the clip.
- Repeat the first two steps on the second clip shown in the picture.

Step 11



- Use the iFixit Opening Tool to detach the cable from the motherboard.
- Use the small needle nose pliers to pull the cable from the motherboard.

Step 12



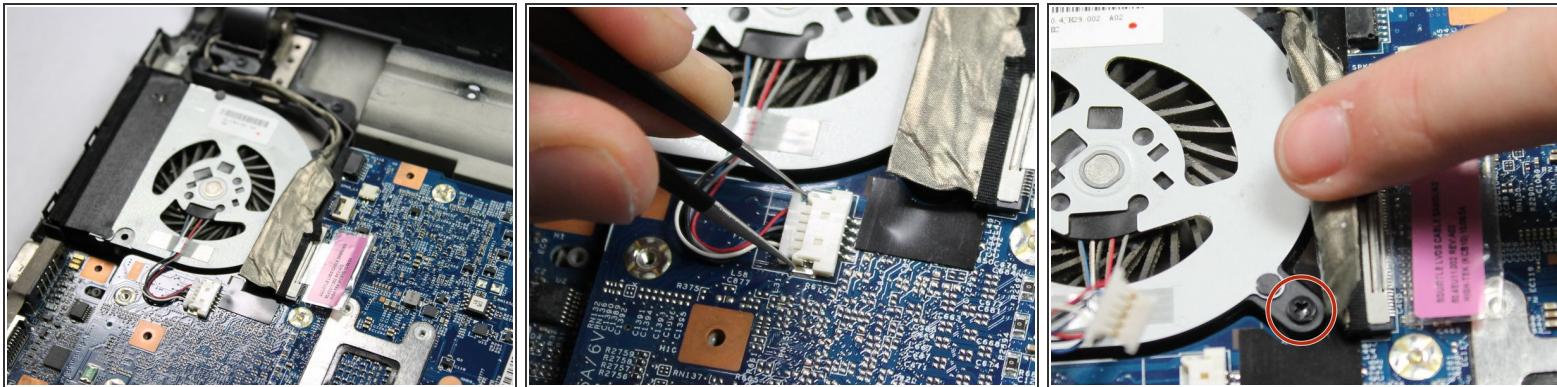
- Use the iFixit Opening Tool to flip the clip up in order to release the first cable.
- Use the small needle nose pliers to pull the second cable from where it is attached.
- Use the small needle nose pliers to detach the third cable from motherboard.

Step 13



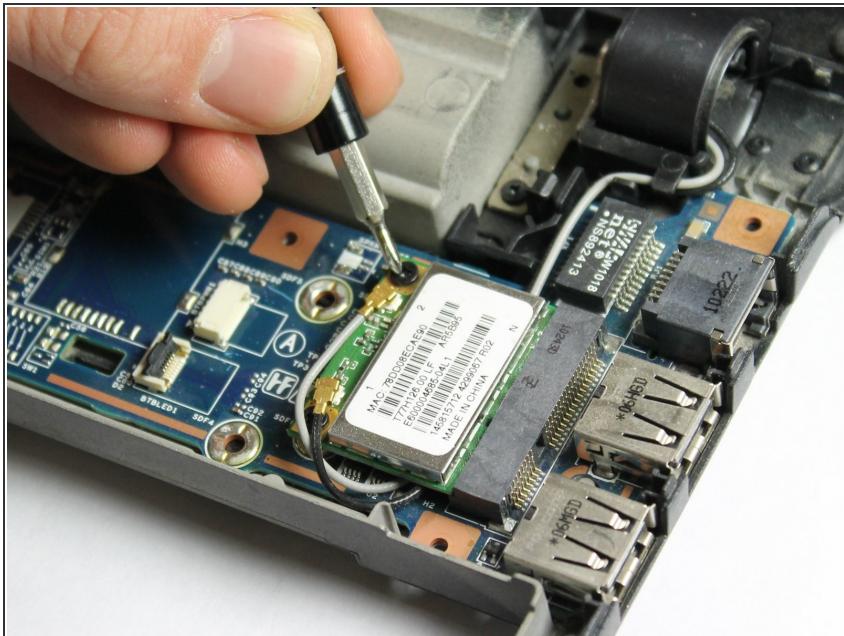
- Use the iFixit Opening Tool to lift the back of the Vaio from the frame.
- Slide the iFixit Opening Tool around the edges of the frame.

Step 14



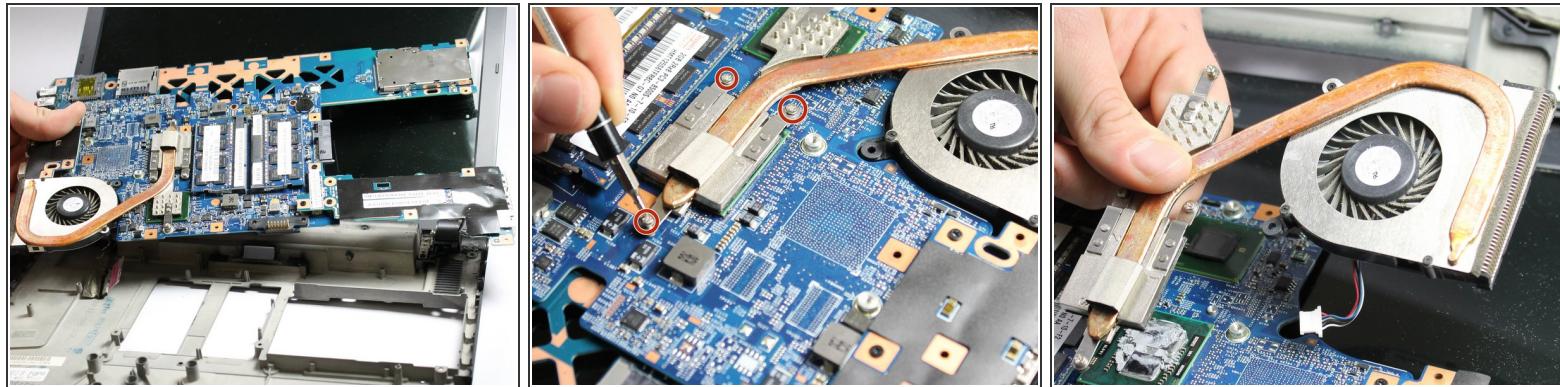
- Use the small needle nose pliers to pull the cable connector from the motherboard.
- Push the flap to the side so you can access the screw beneath.
- Use the #0PH screwdriver on the one 5.63mm screw.

Step 15



- Unscrew the 5.63mm screw tethering the motherboard to the laptop with a #0PH screwdriver.
- Remove the piece from the motherboard.

Step 16



- Flip the motherboard upside down to access the other side.
- Use a #0PH screwdriver to remove the three 3.61mm screws holding the fan to the motherboard.
- Remove the fan from the motherboard.

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