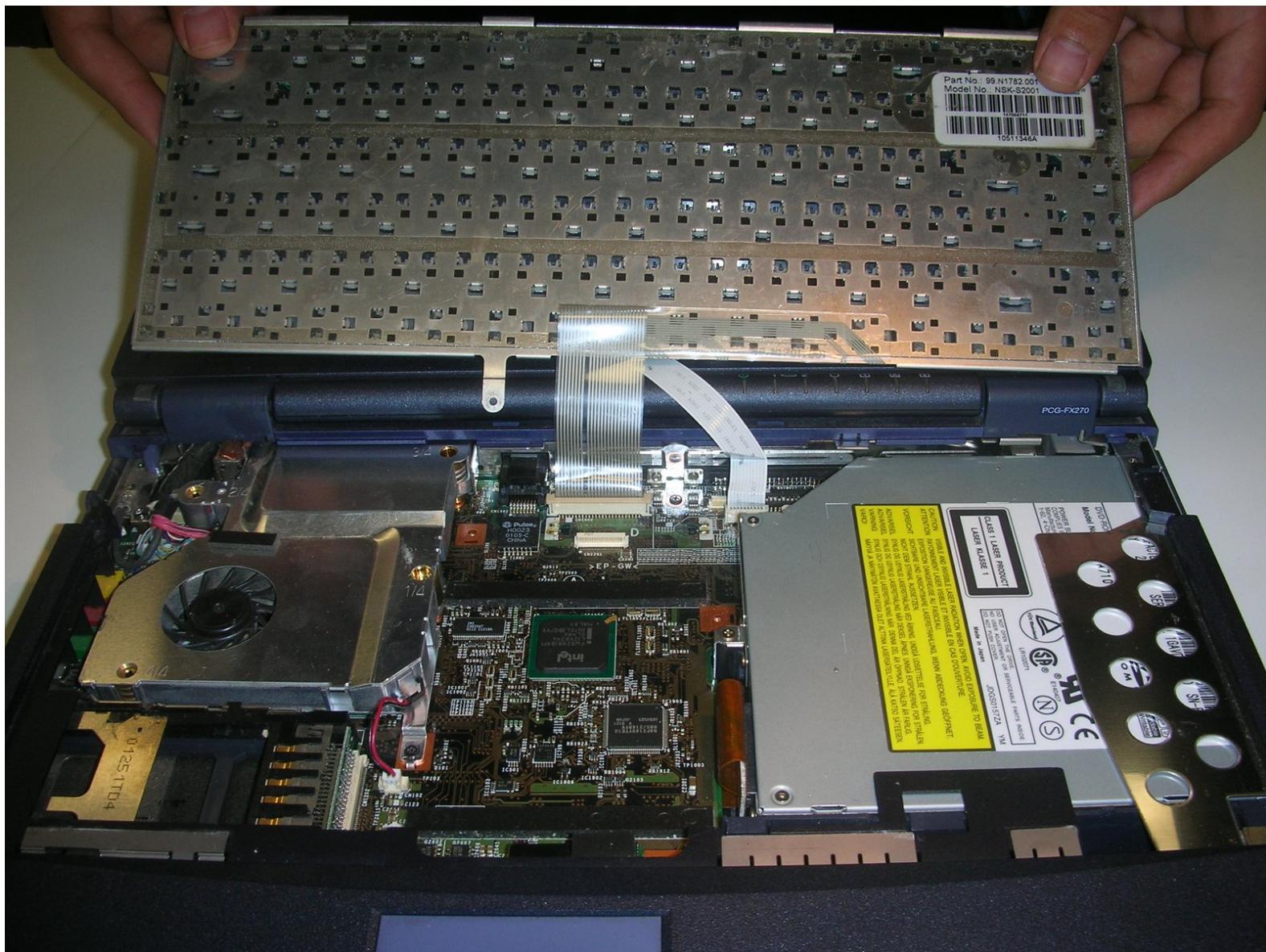




# Sony Vaio PCG-981L Fan Replacement or cleaning

Due to limited information about how to remove and clean the fan, I provided guidelines on it.

Written By: Genaro Sanchez



## INTRODUCTION

Wonder why your computer runs slow and you fan is on all the time? well this is do to improper use or your computer. The fan is a important component in your system because it helps your device to stay at normal temperatures.

### TOOLS:

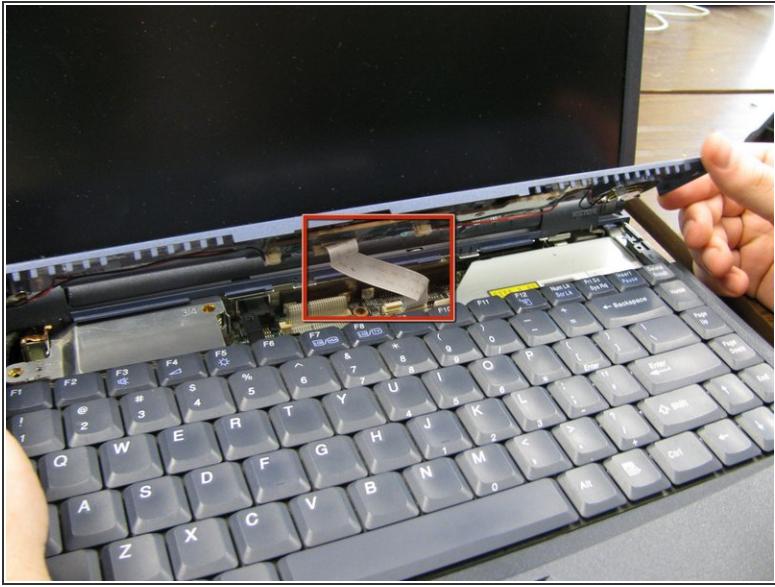
- Phillips #1 Screwdriver (1)

## Step 1 — Keyboard, Speakers, and Speaker Panel



- With the computer facing you, locate the screw on the back left-hand side of the computer (purple marker). This screw keeps the speaker panel and keyboard in place. Use a small Phillips screwdriver to remove the screw. After removing, place the screw in a secure location – it will need to be replaced later.

## Step 2



- Open laptop facing towards user

**⚠ BEFORE REMOVING SPEAKER PANEL:** Note that a ribbon cable connecting the panel to the computer's motherboard is present (red marker). Removing the speaker panel too forcefully could damage this cable and/or its connection, possibly causing severe, irreversible damage to the computer.

- Now that the screw has been removed from the side of the computer, the purple speaker panel can be removed. Carefully lift the left side of the panel, unhook the right side, and remove the panel a couple inches from the computer, taking care not to pull beyond the length of the ribbon cable that secures it to the motherboard (red marker).
  - **(i)** To remove the ribbon cable (red marker), grip the cable near its connection point and gently pull. The speaker board should now be fully separate from the computer.
  - **NOTE:** If you do not wish to replace the keyboard, proceed to "Step 4".

## Step 3

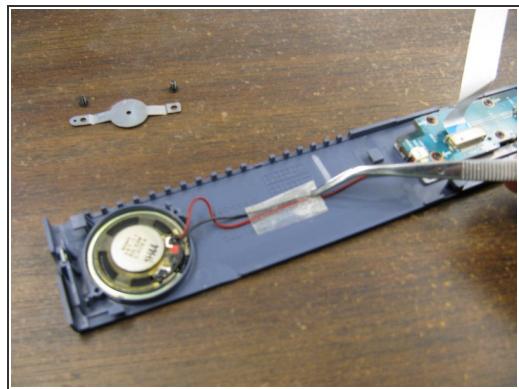
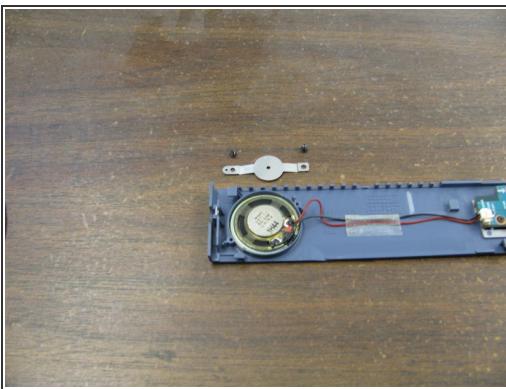
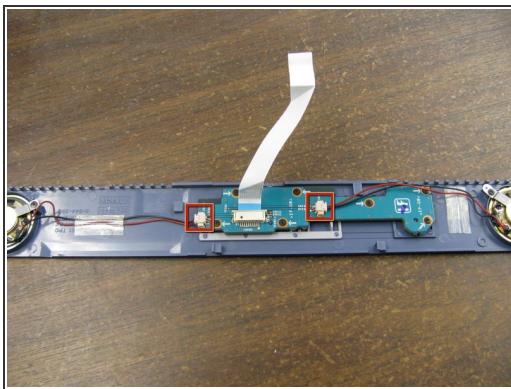


**⚠ BEFORE REMOVING THE KEYBOARD:** It is crucial that the user ground his/herself to avoid damaging sensitive hardware via static electricity. By doing this, user will not have a shock from the product. This can be accomplished by touching a metal lamp that is plugged in, or the back of a desktop computer that is plugged into a wall outlet.

**⚠ ALSO NOTE:** A ribbon cable connecting the keyboard to the computer's motherboard is present (purple marker). Removing the keyboard too forcefully could damage this cable and/or its connection, possibly causing severe, irreversible damage to the computer.

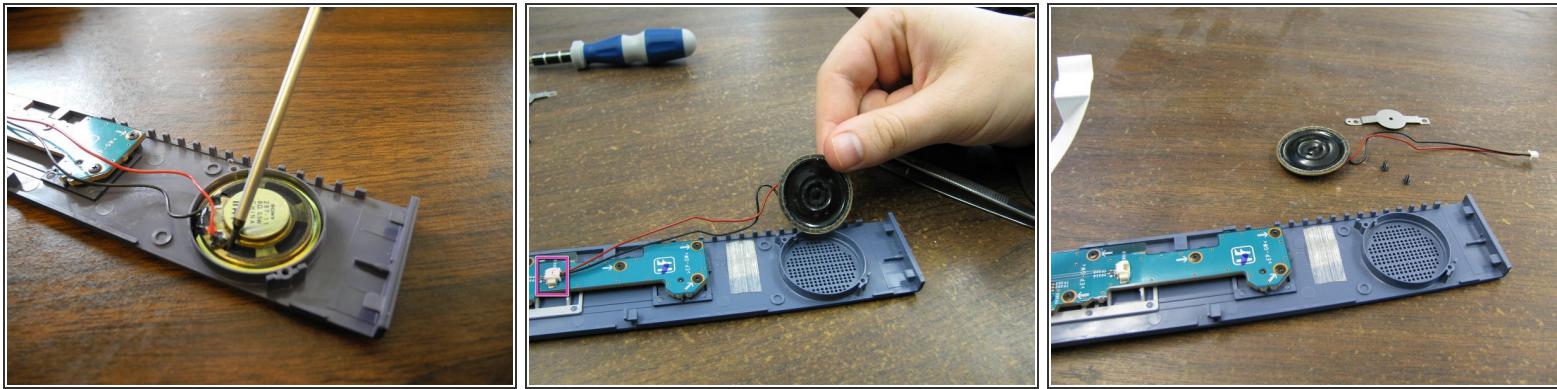
- With the speaker panel absent, the keyboard can be easily removed. Lift the keyboard a few inches from the computer, taking care not to pull beyond the length of the ribbon cable that secures it to the motherboard (purple marker).
- Identify the ribbon cable connecting the keyboard to the computer's motherboard (purple marker) and remove it by gently pulling near its point of connection.
- Once the cable is free from the motherboard, the keyboard is fully separated from the computer.
- *NOTE: If you do not wish to replace the speakers, proceed to "Step 7".*

## Step 4



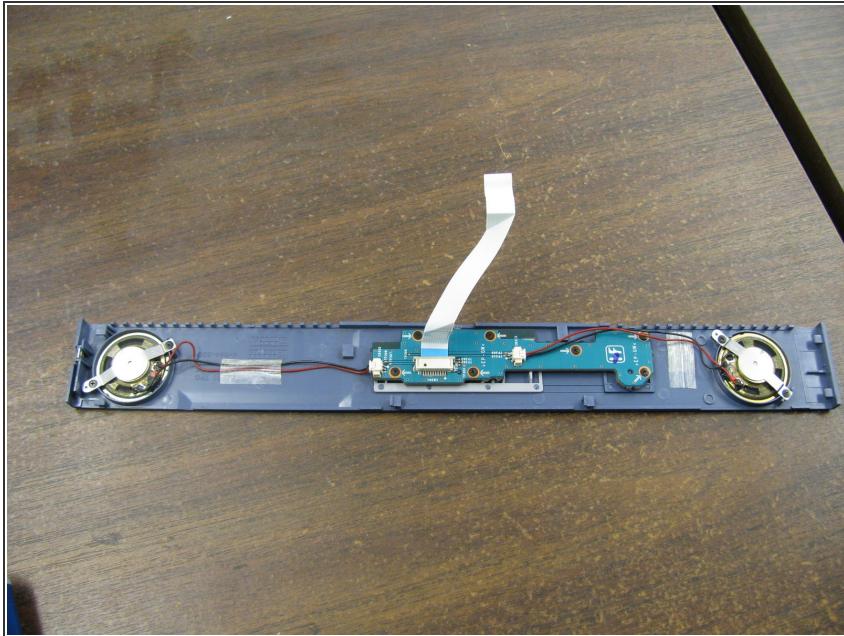
- Identify the speakers on the underside of the speaker panel. Unplug the black and red wires connecting the speakers—on both ends of the panel—to the circuit board on the center of the panel by carefully pulling at the wires close to their connection (red markers) with the circuit board.
- Using a Phillips screwdriver, remove the four screws—two screws per speaker—and the metal brackets holding the speakers in place. Place the screws and brackets in a secure place—they will be replaced later.
- Remove the adhesive tape securing the speaker wires to the panel.

## Step 5



- A sticky adhesive holds the speakers in place in addition to the screws. The speakers will likely be reluctant to detach from the panel due to this cement.
- To overcome the adhesive and remove the speakers, place the screw driver in the hole in the speaker mesh and pry out, using the raised metal lip in the center of the speaker for leverage.
- A good amount of force may be necessary to completely overcome the adhesive. *NOTE: The tweezers or needle nose pliers may be used in place of the screw driver.*

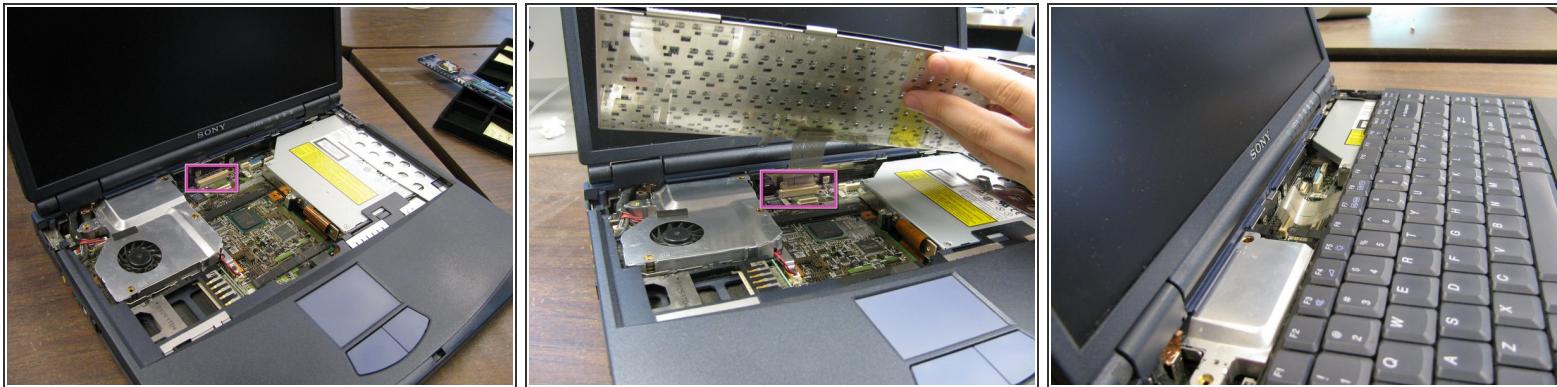
## Step 6



- Place the new speakers into the circular mold that held the old speakers, making sure to align the notch inside the molds with the indents on the outer rim of the speakers.
- Replace the two metal brackets and all four screws—one bracket and two screws for each speaker—to keep the speakers in place.
- Holding them such that the visible metal contacts are facing up, insert the white plastic end of each speaker wire into their respective connection ports on the circuit board.
- Replace the tape securing the wires to the panel.

***(i) NOTE: If you are not replacing the keyboard, proceed to "Step 8".***

## Step 7



- Attach the new keyboard's ribbon cable to the motherboard by carefully inserting it into the white plastic outlet located at the top center of the motherboard (purple marker).
- Rest the keyboard in place making sure it is aligned with the rest of the computer on the bottom and both sides.

## Step 8



- Locate the white attachment point of the speaker panel's gray ribbon cable to the computer's motherboard, in the middle of the board just to the left of the CD drive (red marker). Insert the cable.
- Align the top of the speaker panel with the computer's frame (note purple markers). Allow the panel to rest in place and slide it to the left until the sides of the panel are flush with the computer.
- Replace screw on the left-hand side of the computer (orange marker).

## Step 9 — Sony Vaio PCG-981L Fan Replacement or cleaning



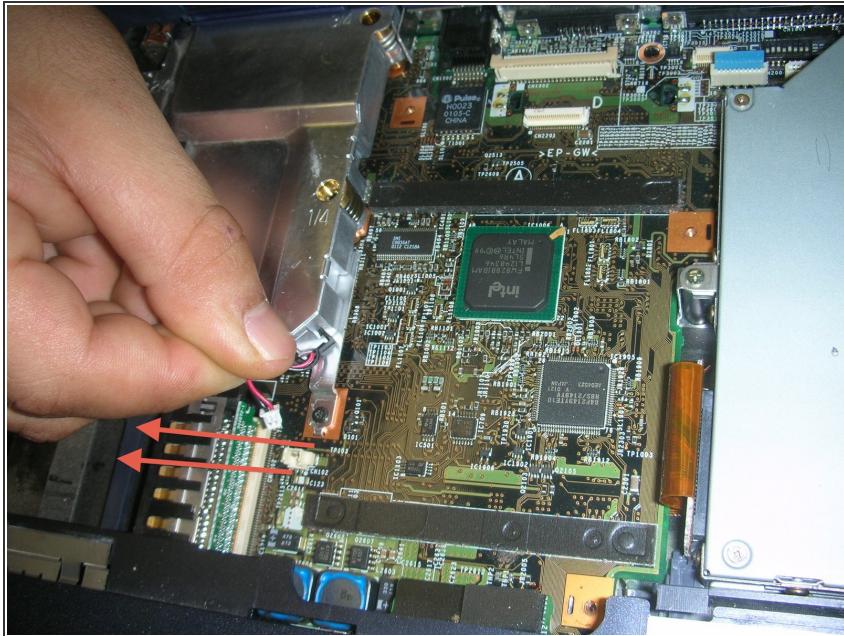
- This picture is a top view of the computer after the speakers and keyboard have been removed.

## Step 10



- Locate the fan's screw and remove it using a small Phillips screwdriver.

## Step 11



- Carefully unplug the fan's power cable. This separates the connection from the fan to the motherboard.
- Pull in the direction of the arrows in the image to properly unplug the cable.

## Step 12



- Once the screw is removed and the power cable is unplugged, gently pull out the fan.
- Pull in the direction of the red arrows to remove the fan. Do not touch the fan blades. Instead, grip the fan from the metal casing surrounding the blades as shown.

## Step 13



- This picture shows the fan removed from the computer.
- Clean the fan using compressed air.

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