

Sony Vaio VPCCW21FX System Board Removal

General motherhood :

Standard rules apply regarding static electricity discharge

Keep track of screws that are removed by labeling each group and writing on the internal parts of the components as necessary

Do not mix different size screws

Work on a matt of rubber or linen cloth so dropped screws do not bounce away to the place of lost things

Turn off the computer

Remove the battery

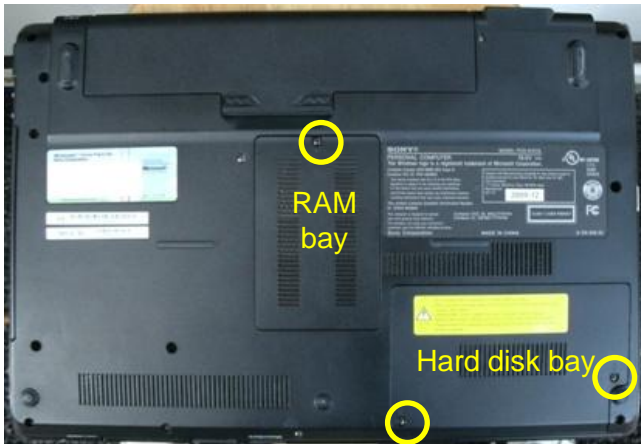
Press the power switch

Now to begin:

Remove both access panels on bottom

RAM cover: 1 captive screw

Hard drive cover: 2 captive screws (marked by two raised dots on case)



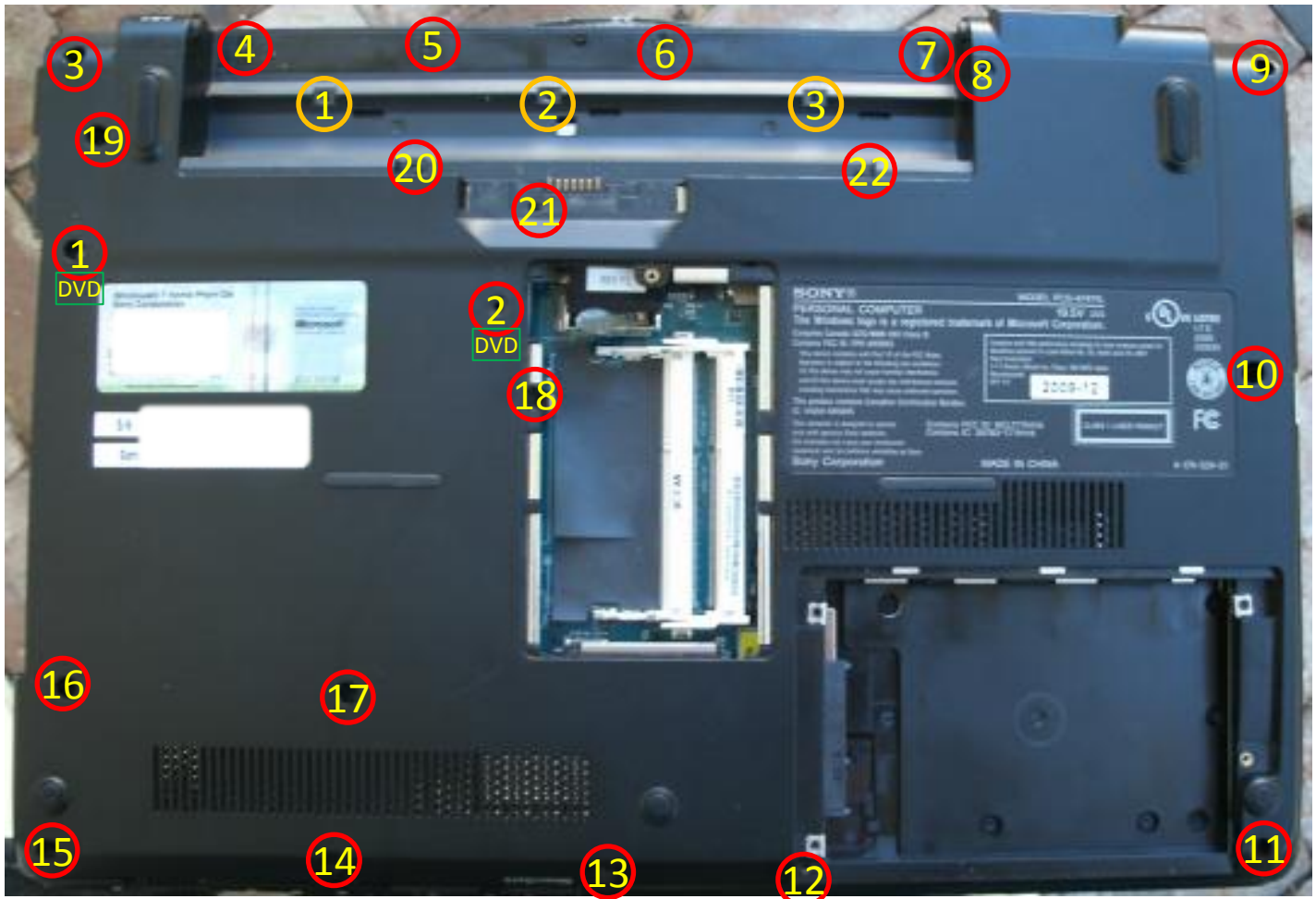
Remove RAM modules



Remove Hard drive: 2 screws

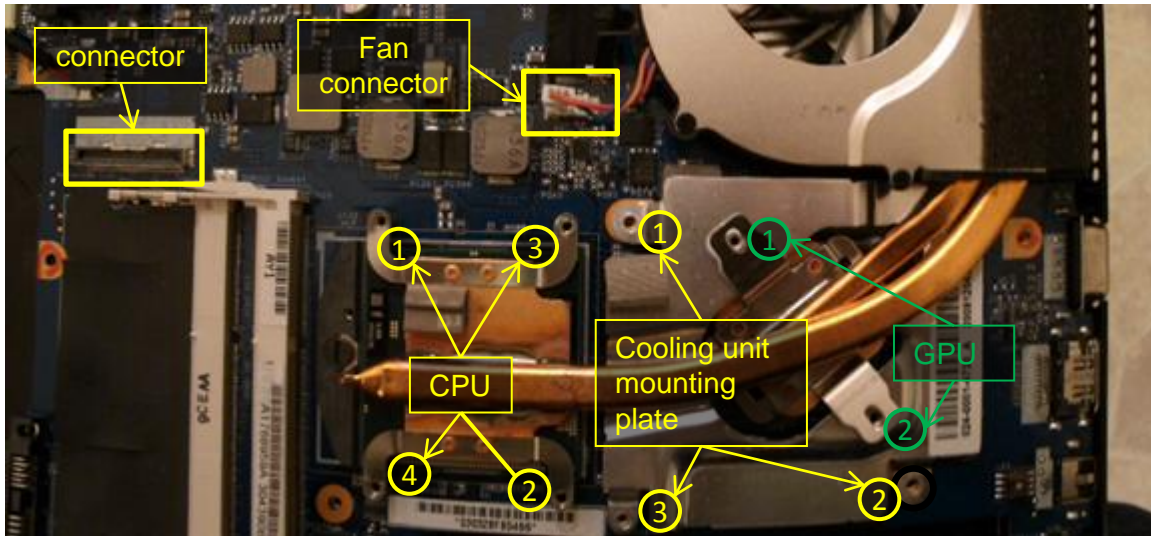


- Remove 3 screws on ridge in battery bay
Note: keep separate – these are a different size than the rest of the screws to be removed from the bottom
- Remove 2 DVD screws (marked by three raised dots on case)
- Remove DVD player (slide out from the side)
- Remove the remaining 20 screws on base (same size as DVD player)
- Lift base off (with battery bay at top)
 - Lift left front edge to clear the alignment pegs
 - Slide left and pull right edge of case (with the headphone and speaker jacks) to the right

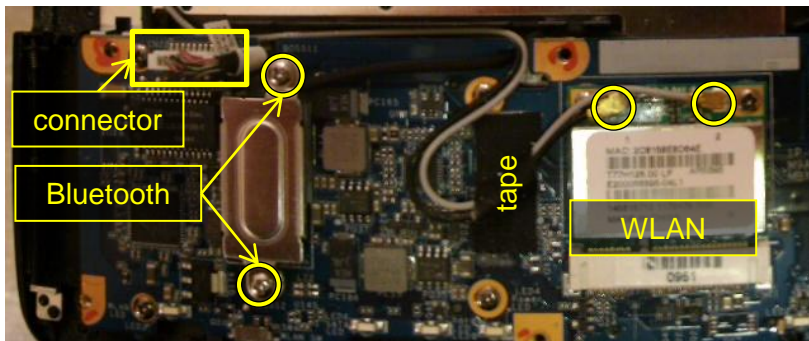


Note: If you are just replacing the keyboard, skip ahead to the Remove Keyboard section

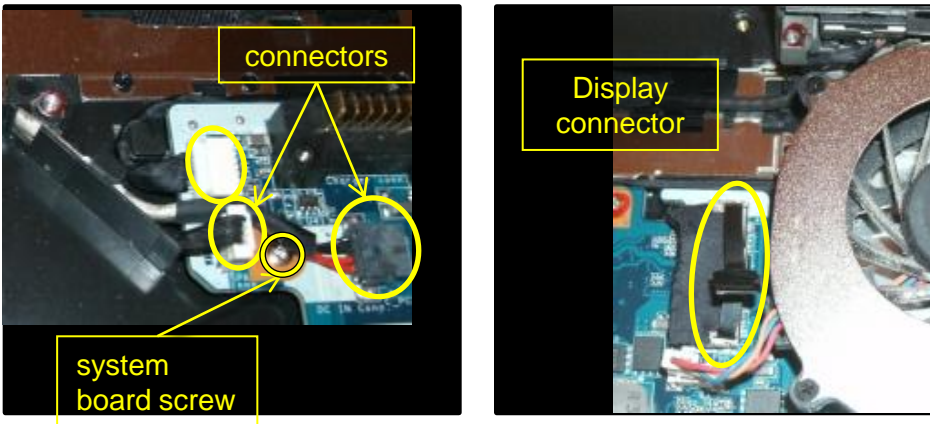
- Disconnect connector in RAM bay (between RAM slots and battery bay)
- Disconnect fan
- Remove 4 CPU screws
- Remove 2 GPU screws
- Remove 3 screws on cooling unit mounting plate
- Remove fan/heat sink assembly
- Remove cooling unit mounting plate



- Lift tape holding WLAN cables
- Disconnect WLAN cables - use spudge and work up from sides
- Remove 2 cover plate screws from Bluetooth module
- Disconnect the connector from edge of system board next to Bluetooth module
- Lift Bluetooth module clear
- Free cables from system board

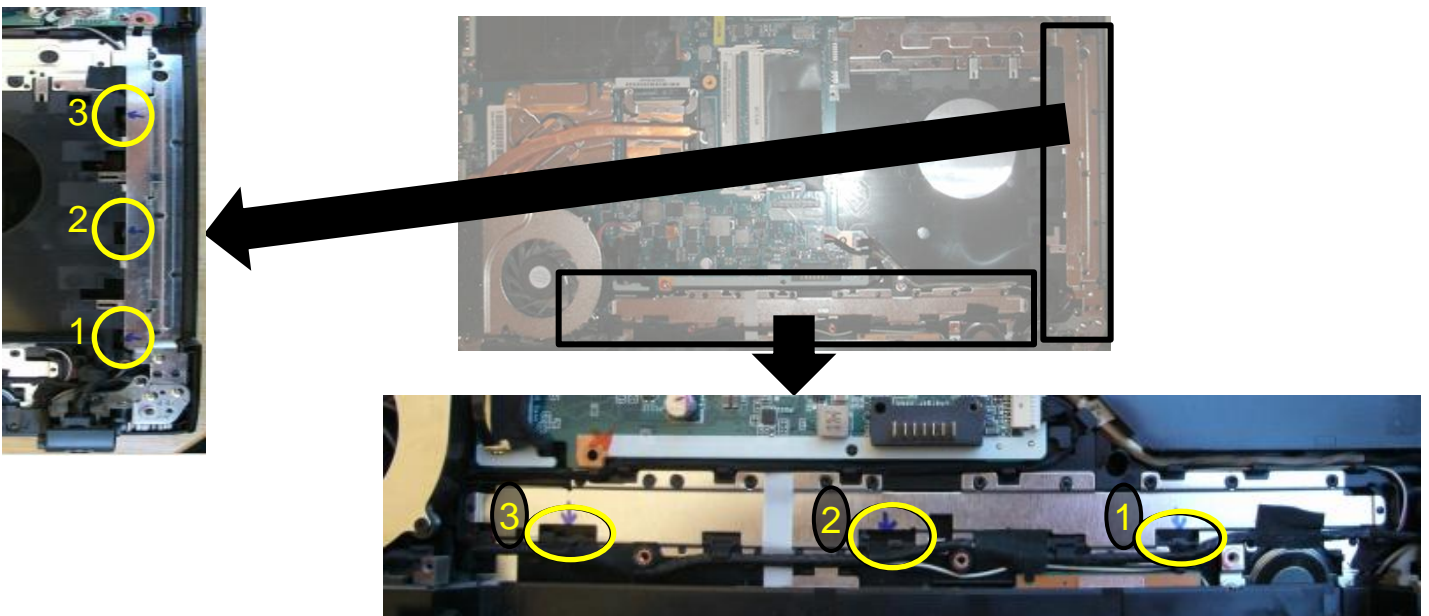


- Disconnect 3 connectors from edge of system board by corner of DVD
- Remove the 1 system board screw exposed when the 3 connectors were removed
- Remove the 1 system board screw by the RAM side of the CPU
- Disconnect display connector from edge of system board by fan

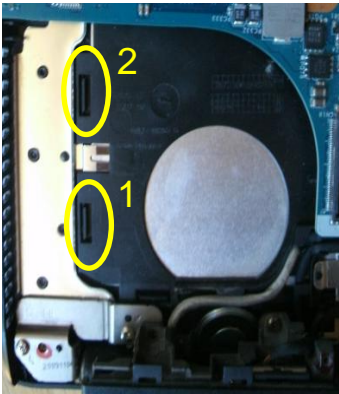


Remove Keyboard

- Open the computer and stand it up on the top of the case (back of the display)
- Place a protective cover on the screen, e.g.: cloth, anti-static bag, etc.
- Release 3 keyboard clips on the DVD side starting with the clip closest to the display
- Note: Release the clips with a flat edge screwdriver pressing inboard at an angle and applying sufficient force
- Release 3 keyboard clips along the keyboard edge closest to the display, starting with the clip closest to the DVD



If the CPU cooler/fan HAS been removed: (not necessary if just removing the keyboard)
Release the 2 exposed keyboard clips on the fan side.



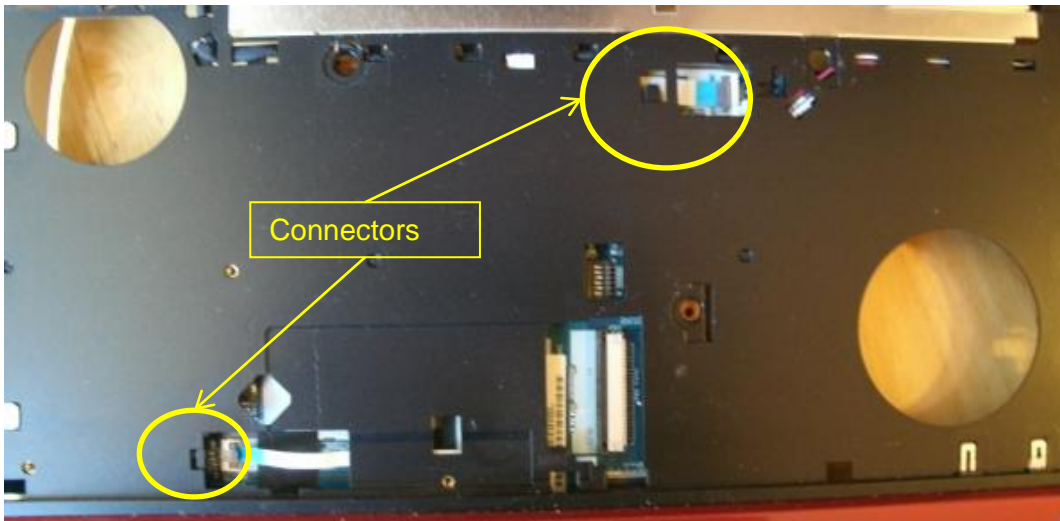
If the CPU cooler/fan HAS NOT been removed:
Turn the computer right side up and open the cover
With the keyboard up, slide a spudger under the left top corner of the keyboard
Slide the spudger down the left side to release any remaining clips.
Caution: as the keyboard is removed, apply no force to the keyboard cable
Lift the top edge of the keyboard up enough to get your fingers under it
Slide the keyboard about 5mm toward the display to free the keyboard retainer tabs at the bottom.
Keep the bottom of the keyboard in place and rotate the top of the keyboard away from the display.
Lay the keyboard key side down

Remove the tape from the keyboard connector (stick it on the cable for safe keeping)
Release the keyboard flex cable to free the keyboard. (connector is a slide to release)
Push on the extended tips of the locking mechanism.



Motherboard removal (continued)

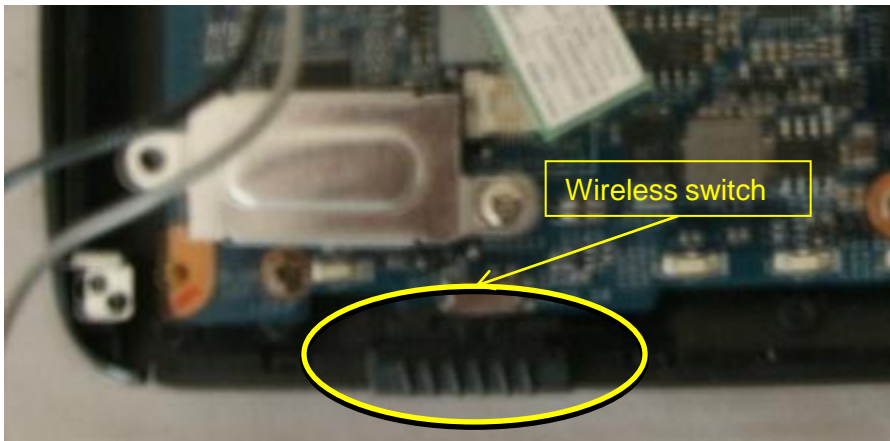
Release the cables exposed by keyboard removal (connectors are a lift to release, flip up from the cable side)



Lay a piece of cloth where the keyboard was to protect the display, then close the computer and flip it over

Note the external wireless switch which will have to be aligned for reassembly

Lift the DVD side edge of the system board up and slide away from the fan side



Wire routing pictures

