



Repairing HP Pavilion ZD7000 Motherboard

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How to get to the motherboard.

Note: This is one of the more difficult fixes. Make sure to keep track of your screws and everything you remove from the device as you take them out. Not doing so may cause worse problems than faulty speakers.

In order to do this, it would be wise to keep a tray with several compartments and some sticky notes to separate and label screws from specific locations on the device as you remove them.



Step 1 — Battery

- Begin by turning the laptop over so that you can see the bottom of the computer.



Step 2

- Slide the battery release switch to the right while simultaneously lifting up the battery.



Step 3 — Fans

- Loosen the 8 Phillips screws around the plate and remove the plate.



Step 4

- Remove the 9 Phillips screws from the plate covering the fans.
- The 3 screws around the lower fan also hold the fan onto the metal plate.



Step 5

- Lift the plate and lower fan off the heat sink being careful not to damage the lower fan cable, which is attached to the motherboard.
- Disconnect the lower fan connector from the motherboard.
- Remove the metal plate and lower fan.
- The lower fan will easily separate from the metal plate.





Step 6

- Disconnect the upper fan connector from the motherboard.
- Remove the 4 spring loaded screws holding the heat sink assembly to the motherboard.
- When reassembling, thread all screws in 1 - 1 1/2 turns then alternately tighten each screw 1 turn - starting top left, then bottom right, then bottom left, then top left again etc. until the heat sink assembly is firmly seated and all screws are tightened the same amount.



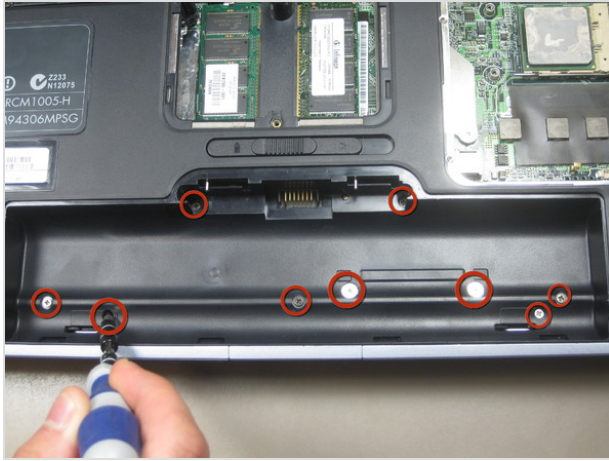
Step 7

- Slide the heat sink assembly including the upper fan out by pulling it down and left simultaneously.
- When reinstalling heat sink, ensure it is thoroughly cleaned and the thermal paste (or pads) are replaced to ensure proper thermal contact with the devices on the logic board to prevent thermal issues.



Step 8 — Monitor

- Begin after removing the battery and fans.
- Remove the screws from the outer frame of the laptop.



Step 9

- Remove the 9 screws from the battery area.



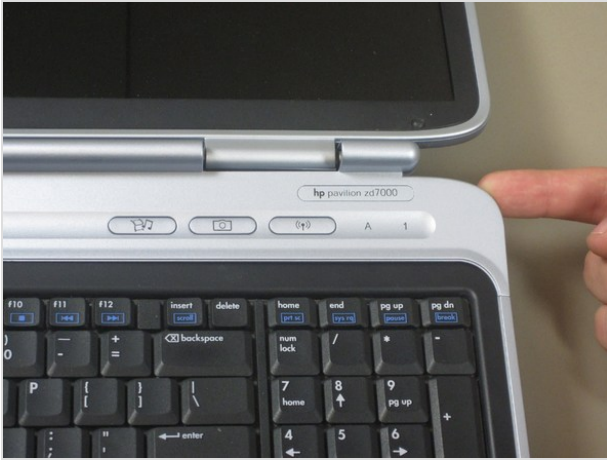
Step 10

- Remove the 8 screws from the back panel of the laptop.



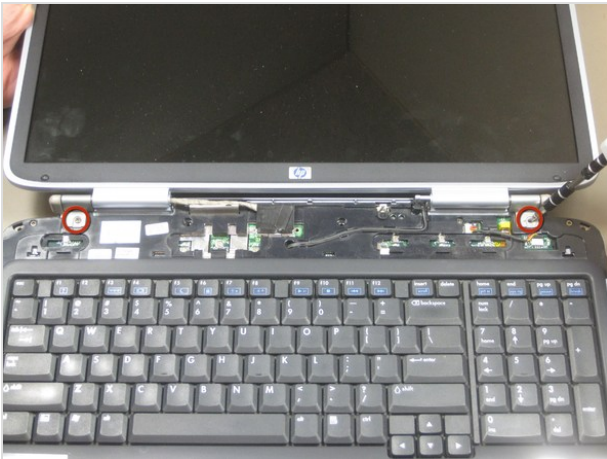
Step 11

- Using a flathead remove the 2 screws on the left-side panel of the laptop.



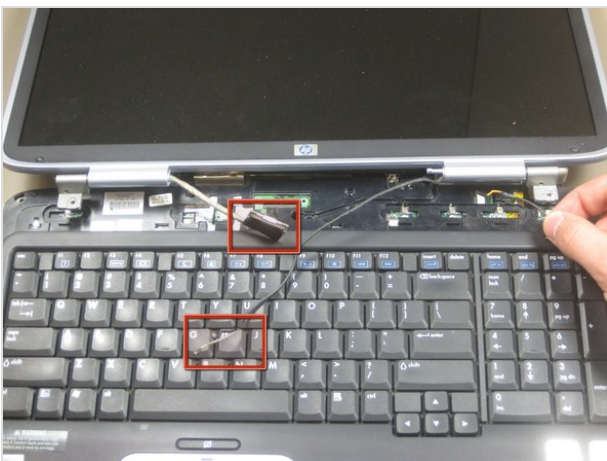
Step 12

- Open the laptop so that both the screen and keyboard are in view.
- Carefully pry off the frame above the keyboard.



Step 13

- To begin disconnecting the monitor, remove the 2 screws.
- Do not pull monitor off yet.
- Make sure to keep the screen propped up to reduce the amount of strain on the screws as you take them out.



Step 14

- Disconnect the 2 wires connecting the monitor to the rest of the laptop.
- Note: Do not tug on the wires. Just like wall plugs, you need to disconnect them from the actual point of connection.



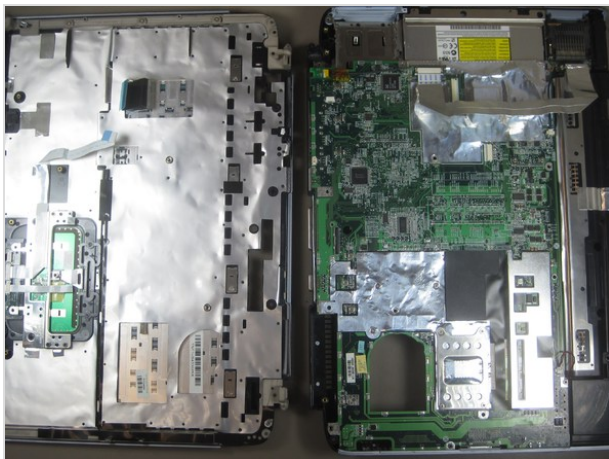
Step 15 — Motherboard

- Remove the screws connecting the screen to the keyboard.



Step 16

- You can now carefully pry the keyboard off. However, do NOT do so yet. There are still wires connecting the 2 components together.



Step 17

- Disconnect the 3 ribbon cables attached to the motherboard.
- The wire ribbons are removed by snapping out the small latches on the sides of the connection components. The ribbons should slide out with ease.
- See images 2 and 3 for a closer look.





Step 18

- Remove the screws from the motherboard.
- There are many different sizes and types of screws here. Make sure you are keeping track of where they all belong.



Step 19

- Disconnect the wires, belonging to the speakers, from the motherboard.



Step 20

- Remove CD-Rom By simply sliding it out.



Step 21

- Pry the frame off the laptop outwards while simultaneously lifting the motherboard out of it.
- Go slowly on every side instead of focusing on only one corner.



Step 22

- You can now carefully remove the entire Motherboard.
- Note: Unless you plan on replacing it, handle the motherboard with care. This is the heart of your computer. Any damage will cause a system failure.



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

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