



HP Pavilion dv5000 Motherboard Replacement

The motherboard is the main part of the...

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INTRODUCTION


The motherboard is the main part of the computer and houses the CPU and GPU. Although it is rare to encounter problems with the motherboard, it needs to be removed to access the fan and heat sink underneath.

TOOLS:

Phillips #1 Screwdriver (1)

Step 1 — Battery



 Turn off the computer, and unplug it from all external power sources.

- Lay the computer face-down on a flat surface. Orient the computer to match the image.
- Locate the battery release switch, as indicated in the image by the red rectangle. Slide the switch from right to left, and remove the battery.

Step 2 — Hard Drive



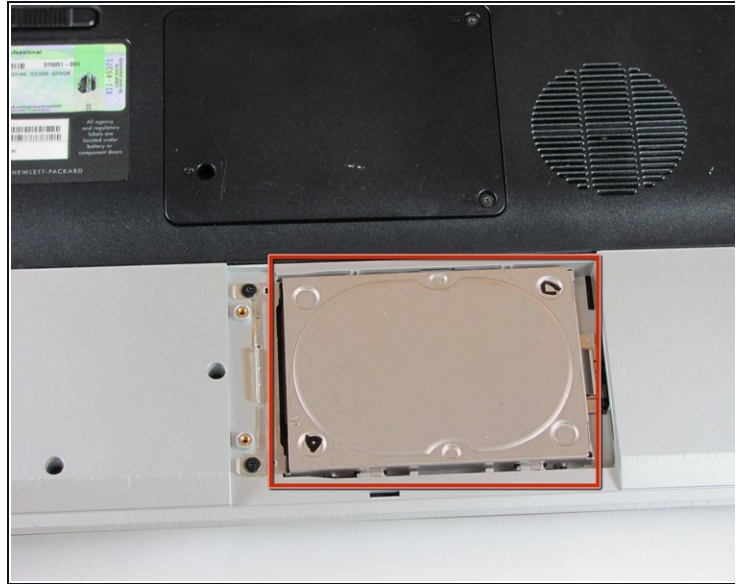
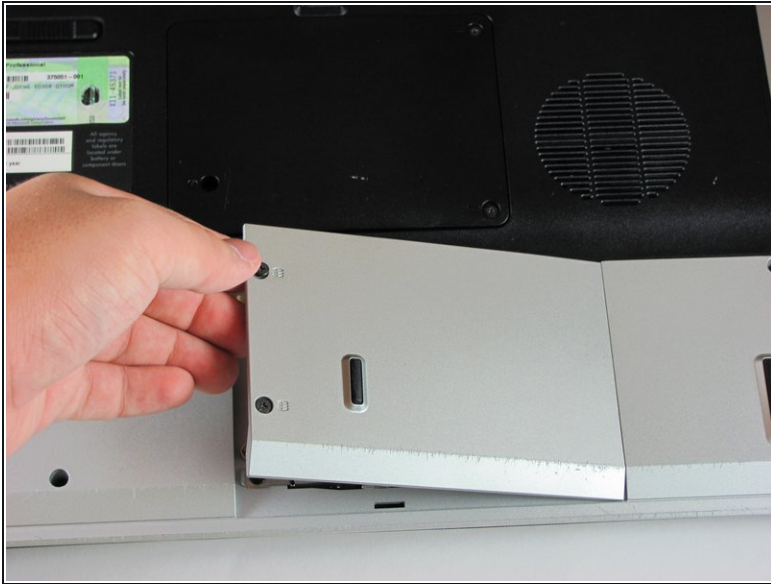
- Locate the hard drive cover. Note that in this image, the RAM cover is still in place.

Step 3



- Remove the two screws securing the hard drive cover.

Step 4



- Remove the hard drive cover.

i The hard drive is now accessible.

Step 5



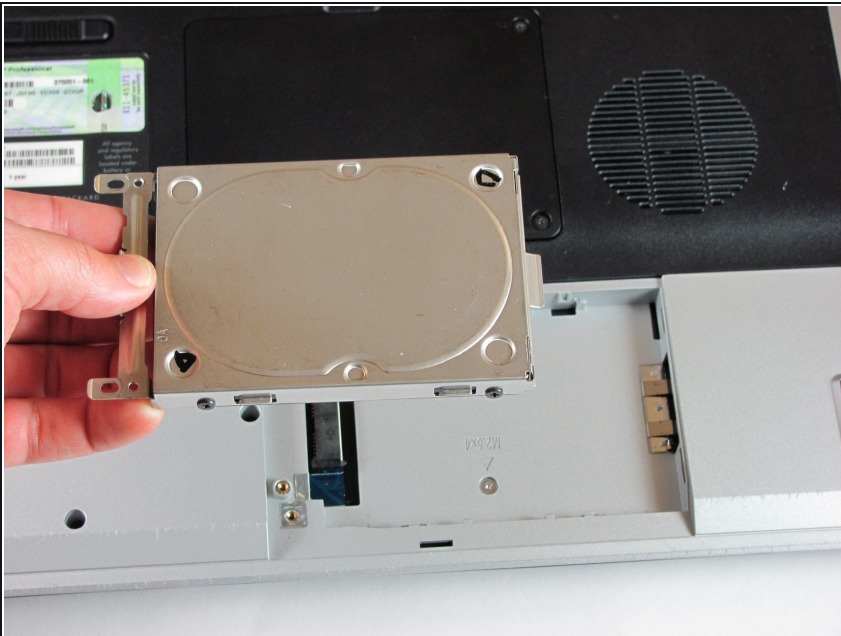
- Remove the two 5.0mm screws securing the hard drive bracket.

Step 6



- Slide the hard drive to the right until the edge of the hard drive is flush with the computer frame.
- Lift the hard drive out of the hard drive bay, left side first.

Step 7



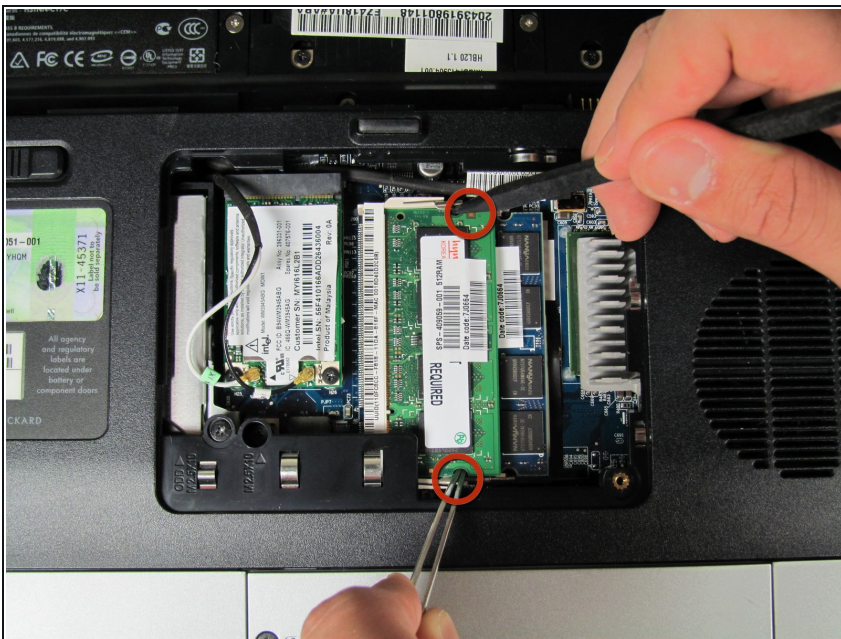
- Remove the hard drive.
- ❗ If you are replacing the hard drive, remove the four additional screws (two on each side) securing the metal shield to the hard drive. Then, remove the shield from the drive.

Step 8 — RAM Cover



- Remove the two 5mm Phillips screws on the right side of the RAM cover.
- Lift the right side of the RAM cover, and remove it.

Step 9 — RAM



- Release the RAM by pressing the metal heads of the RAM clips to the sides. Use tweezers and the spudger to spread the clips until they are completely off the RAM.
- ⓘ There are two RAM cards in this device.

Step 10



- Remove the RAM.

Step 11



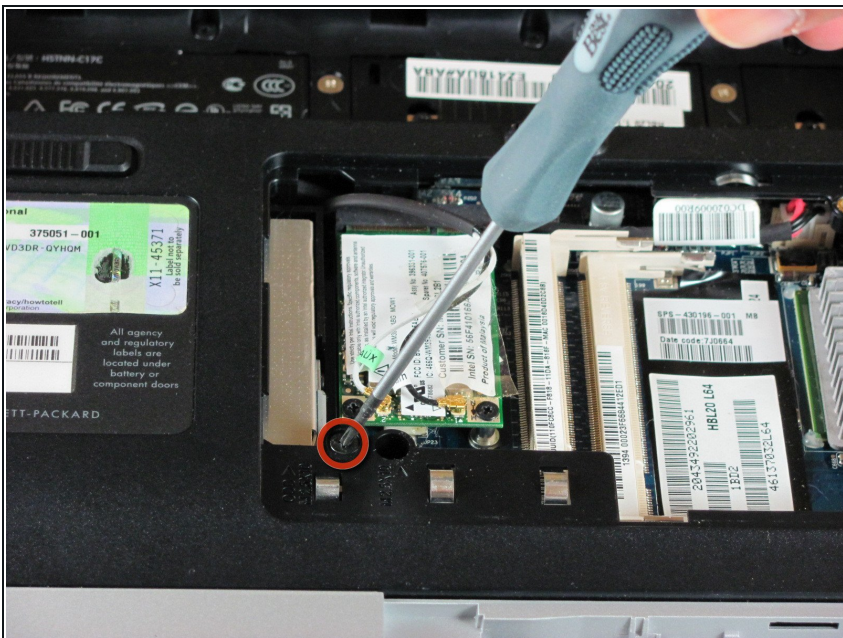
- As in step 3, press the clips on both sides to release the second RAM clip.

Step 12



- Remove the RAM.

Step 13 — Optical Drive



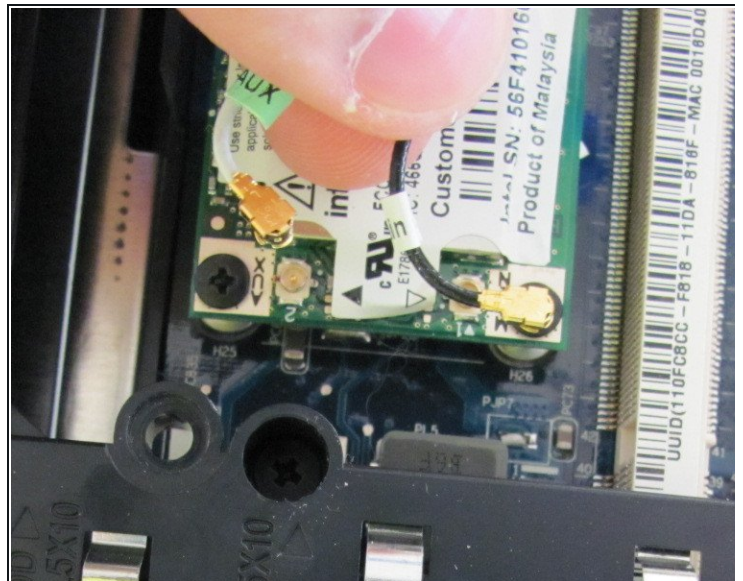
- Remove the 11.0mm screw securing the optical drive to the computer.

Step 14



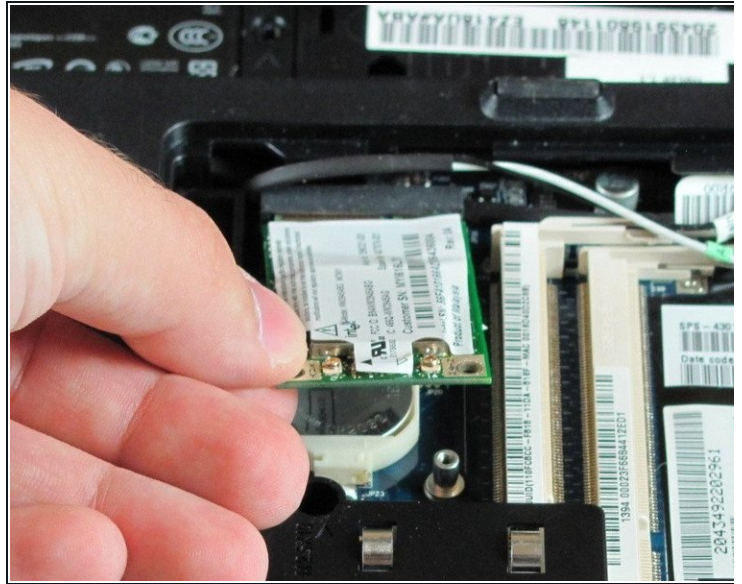
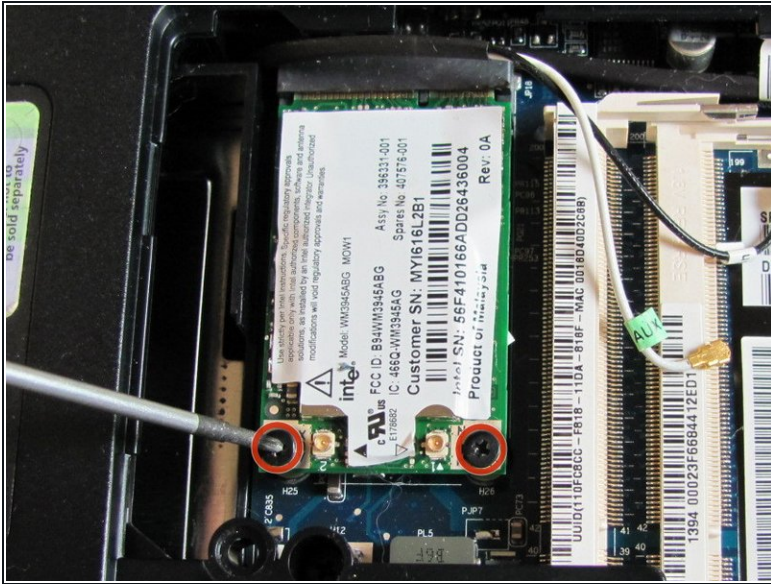
- Locate the optical drive. The optical drive is located on the left side of the RAM bay.
- Press the exposed edge of the optical drive gently with the spudger until the drive releases from the computer frame.
- Pull the optical drive completely out of the computer frame.

Step 15 — Wifi Card



- Disconnect the antenna leads from the wifi card by lifting the gold ends of the wires off the prongs on the wifi card.
 - The white wire connects to the AUX terminal.
 - The black wire connects to the MAIN terminal.

Step 16



- Remove the two 6.0mm Phillips screws from the wifi card.
- Remove the wifi card.

Step 17 — Keyboard



- Remove the two 11.0mm screws at the corners on either side of the battery compartment.
- Remove the three 6.0mm screws.
- Remove the two 5.0mm screws.
- Remove the 6.0mm screw in the middle of the battery compartment.

Step 18



- Turn the computer over and open the screen. This provides access to the screen hinges.
- The keyboard switch cover is attached to the computer with a series of snaps. With a flathead screwdriver, pry up the switch cover until it pops free.

Step 19



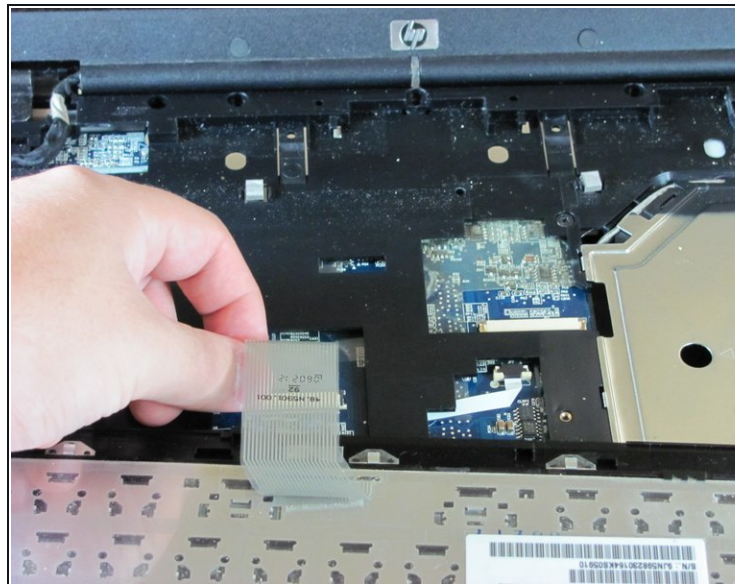
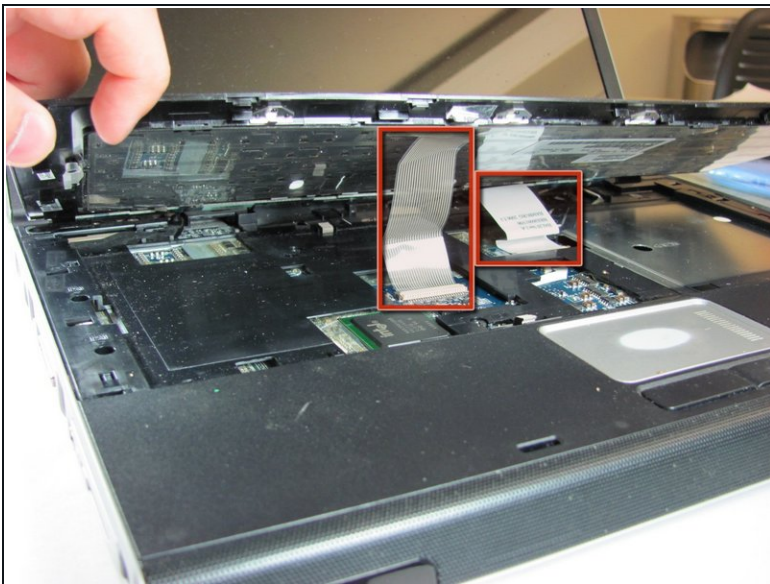
- Be careful not to bend the keyboard switch cover too far when removing it.

Step 20



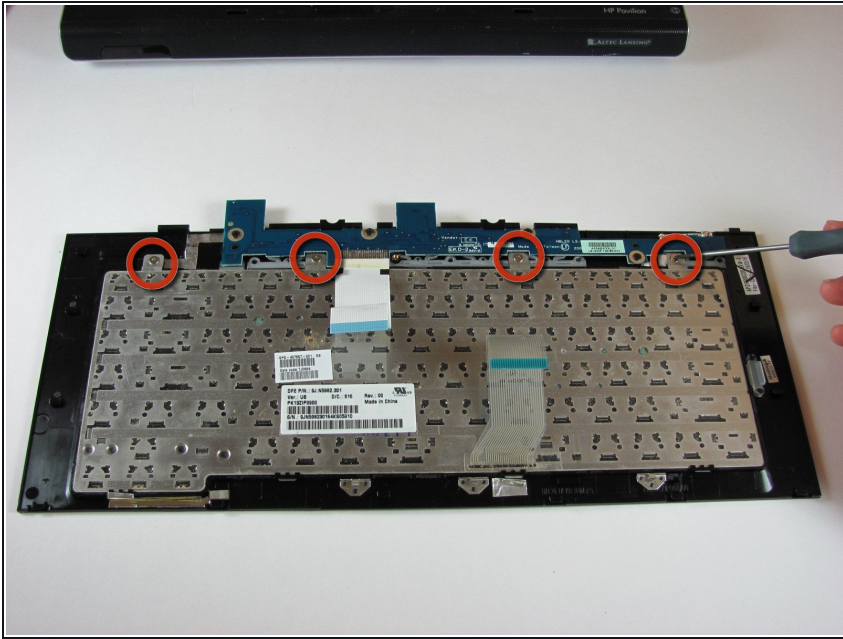
- Next, remove the keyboard. Push on the keyboard frame above the function keys and slide the keyboard toward the screen.

Step 21



- Carefully lift the trackpad-side edge of the keyboard to reveal the LED and keyboard cable connectors.
- Detach the cable connectors from the computer by gripping each cable connector close to the computer contact point and pulling up gently.

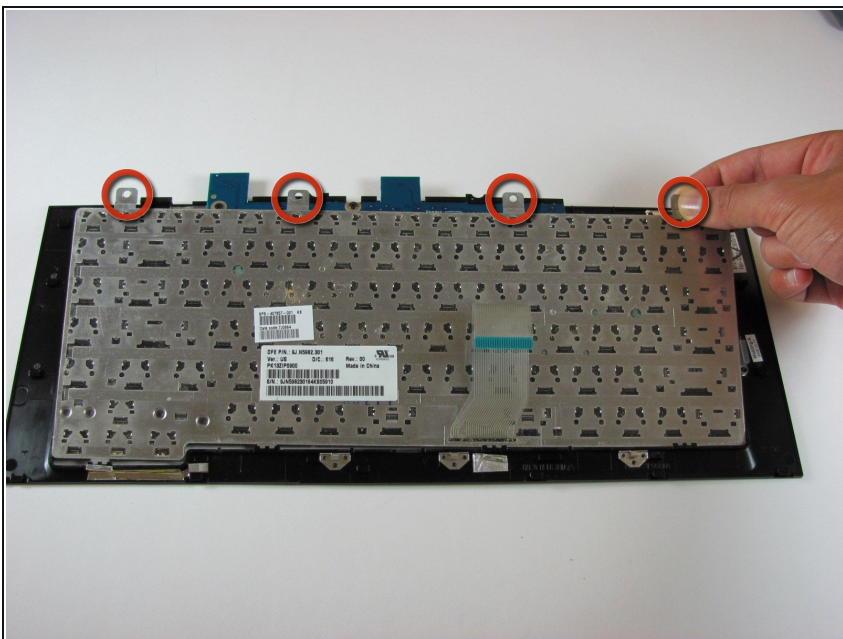
Step 22



i This step is for replacing the keyboard only. If you are not replacing the keyboard, skip this step.

- Lay the keyboard face down.
- Remove the four 3.00mm screws that attach the keyboard to the keyboard frame.

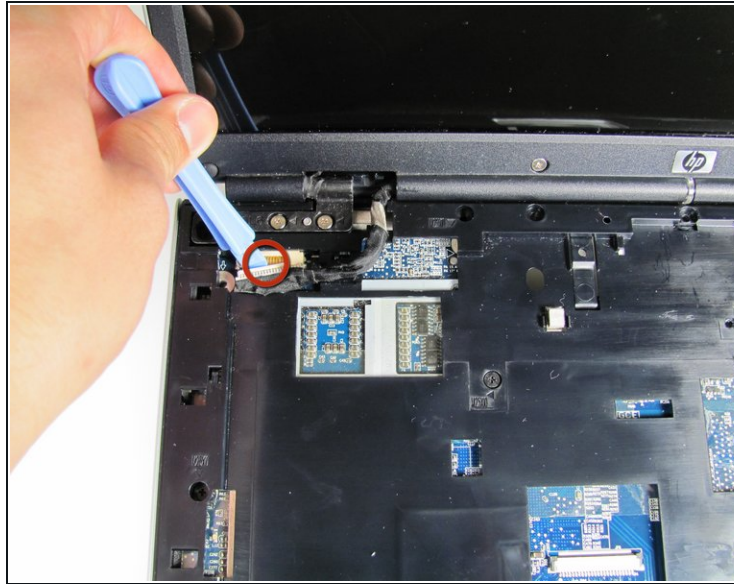
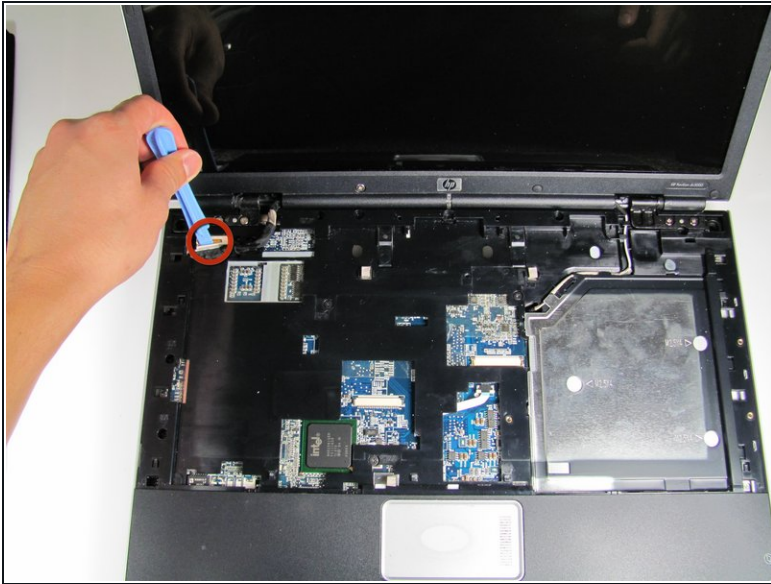
Step 23



i This step is for replacing the keyboard only. If you are not replacing the keyboard, skip this step.

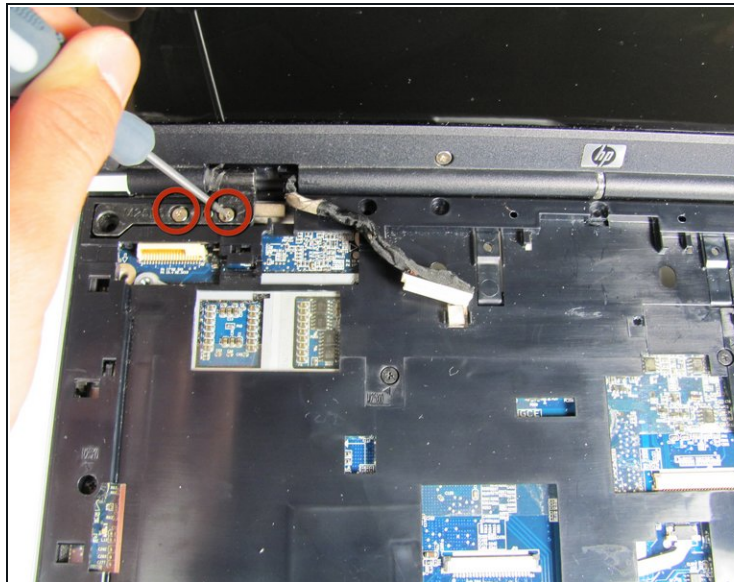
- Lift the keyboard off the keyboard frame.

Step 24 — Screen



- Use the plastic prying tool to disconnect the screen cable from the system board.

Step 25



- Remove the four 7.0mm screws securing the screen to the computer.

Step 26



- Separate the screen from the computer frame by lifting the screen straight up.
- Disconnect the PCI wires by pulling them free of the computer.

Step 27 — Motherboard



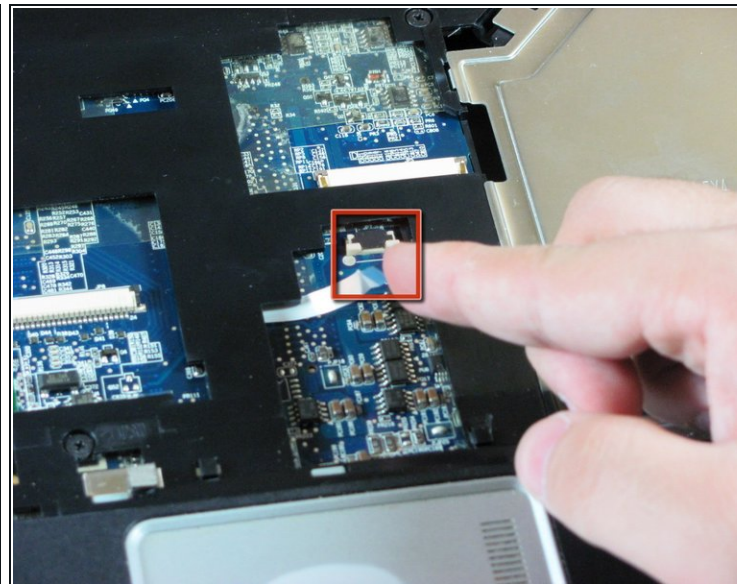
- Flip the computer over to access the screws on the underside of the frame.
- Remove the two 3.0mm screws.
- Remove the 5.0mm screw.

Step 28



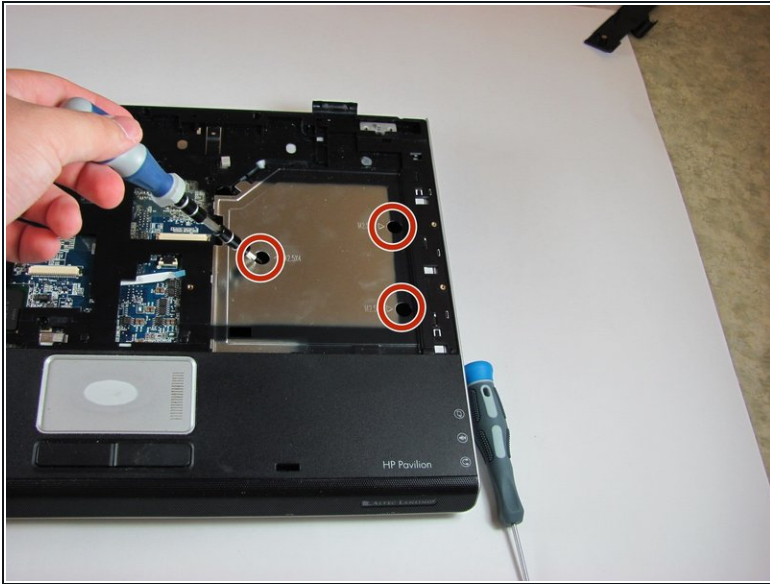
- Remove the eight 10mm screws.

Step 29



- Flip the computer over so the touchpad is accessible.
- Disconnect the touchpad cable by pulling on it gently.

Step 30



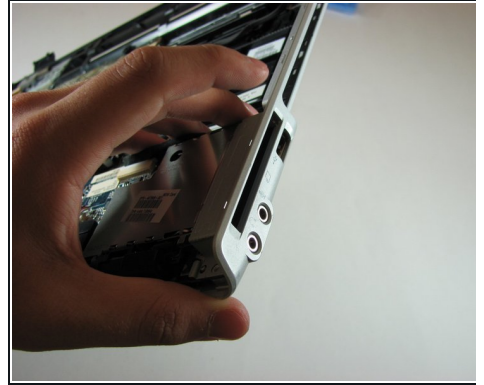
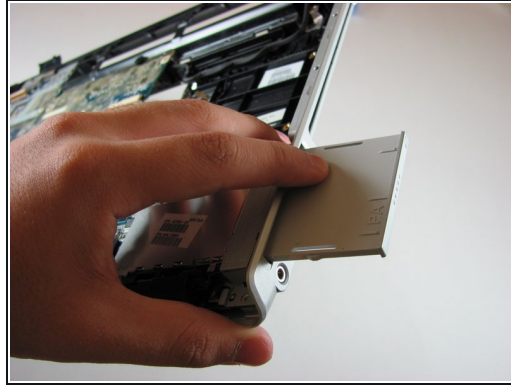
- Remove the three 5.0mm screws in the silver panel.
- Remove the seven 10.0mm screws.

Step 31



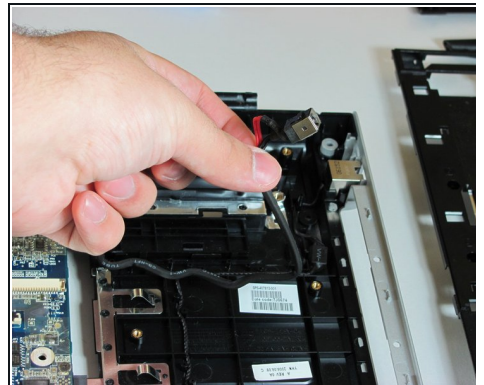
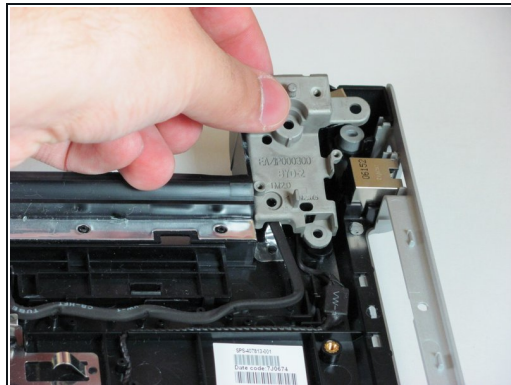
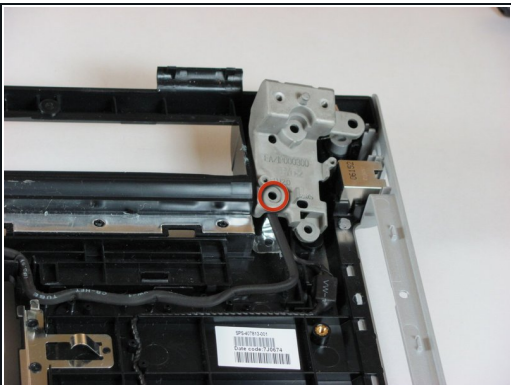
- Lift the top cover off of the rest of the computer frame.

Step 32



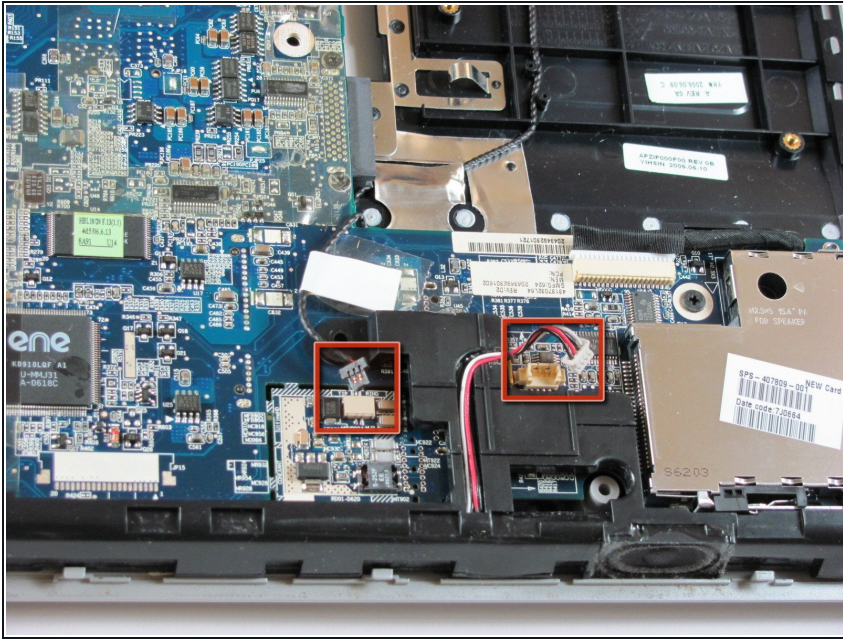
- Press gently on the textured front of the Express Card, then release it. It will pop out of the slot.
- Remove the Express Card from the Express Card slot.

Step 33



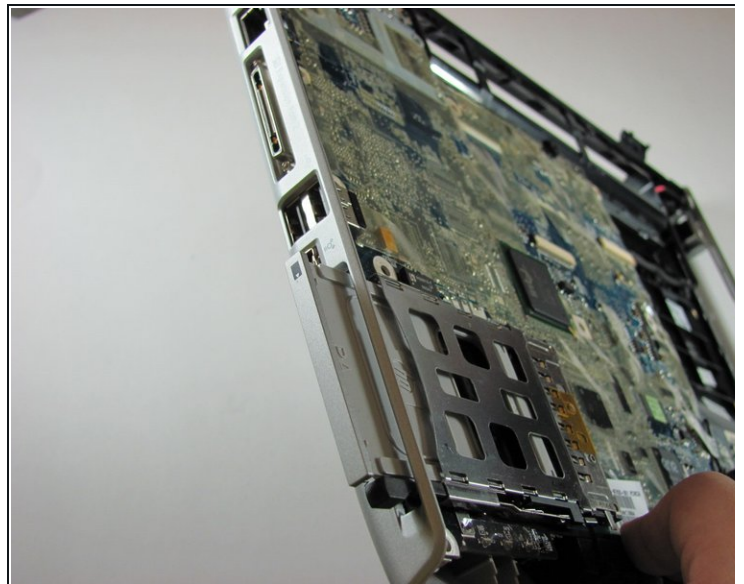
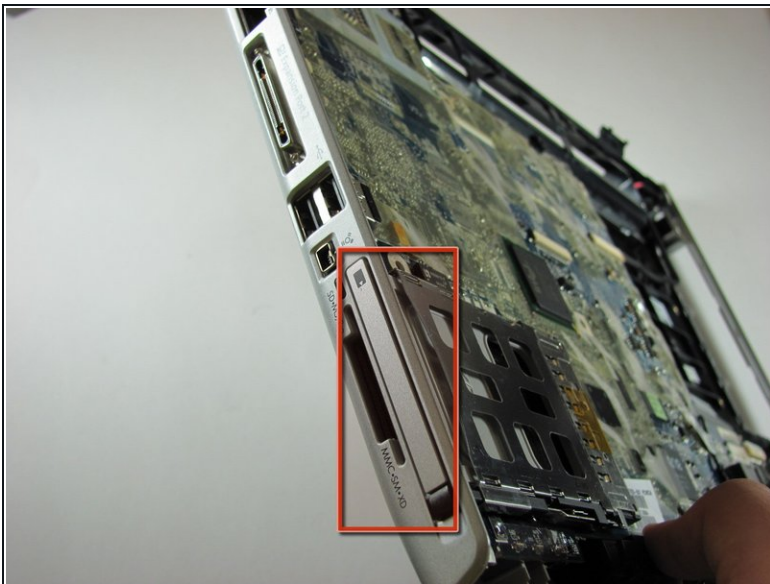
- Remove the 6.0mm screw that secures the display hinge support to the computer frame.
- Remove the display hinge support.
- Disconnect the power connector cable.

Step 34



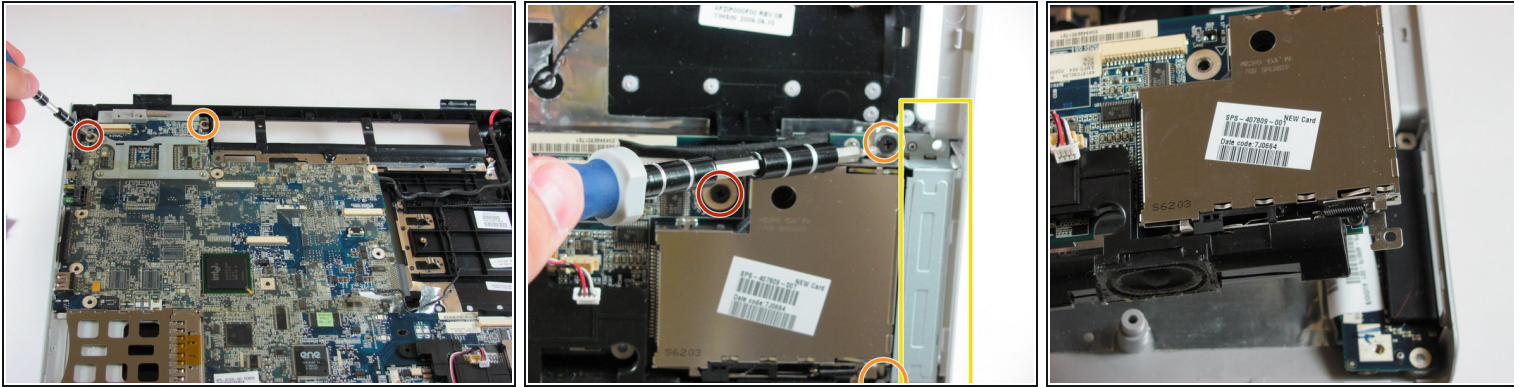
- Disconnect the USB audio cable and the modem cable.

Step 35



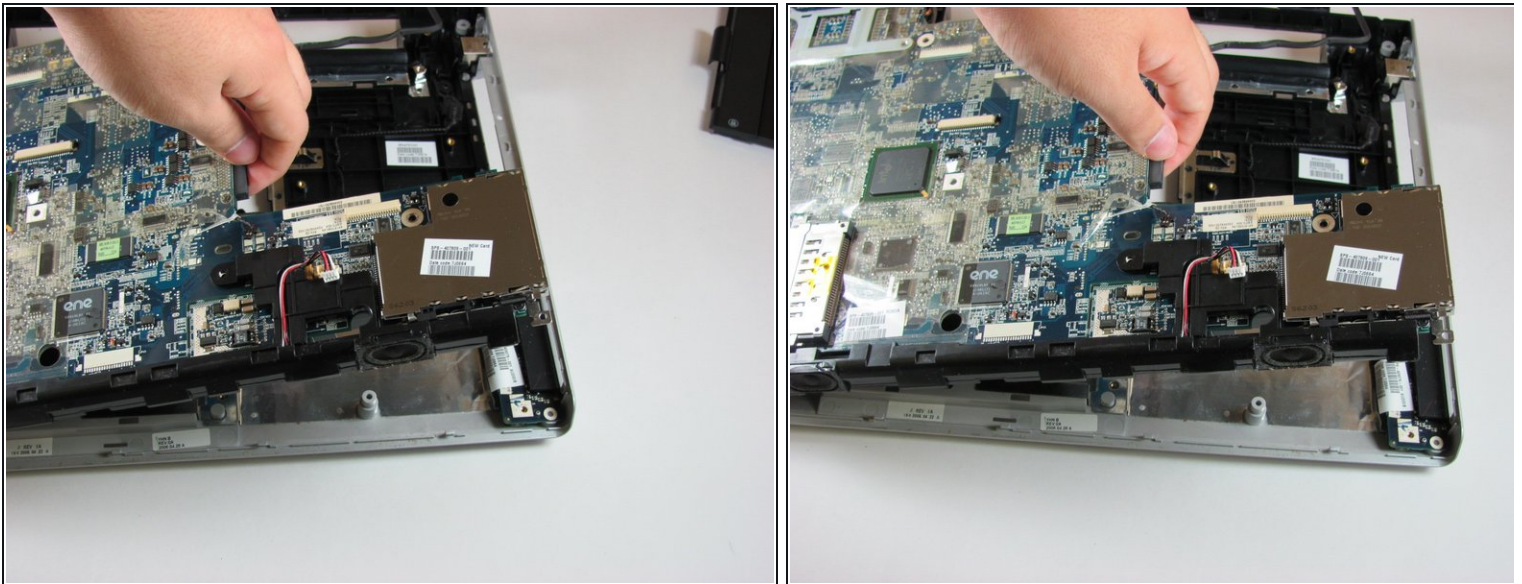
- Press gently on the front of the wireless card, then release it. It will pop out of the slot.
- Remove the wireless card from the wireless card slot.

Step 36



- Remove the 10.0mm screw.
- Remove the two 6.0mm screws securing the Express Card bracket.
- Remove the Express Card bracket

Step 37



- Lift the system board off the computer frame.

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