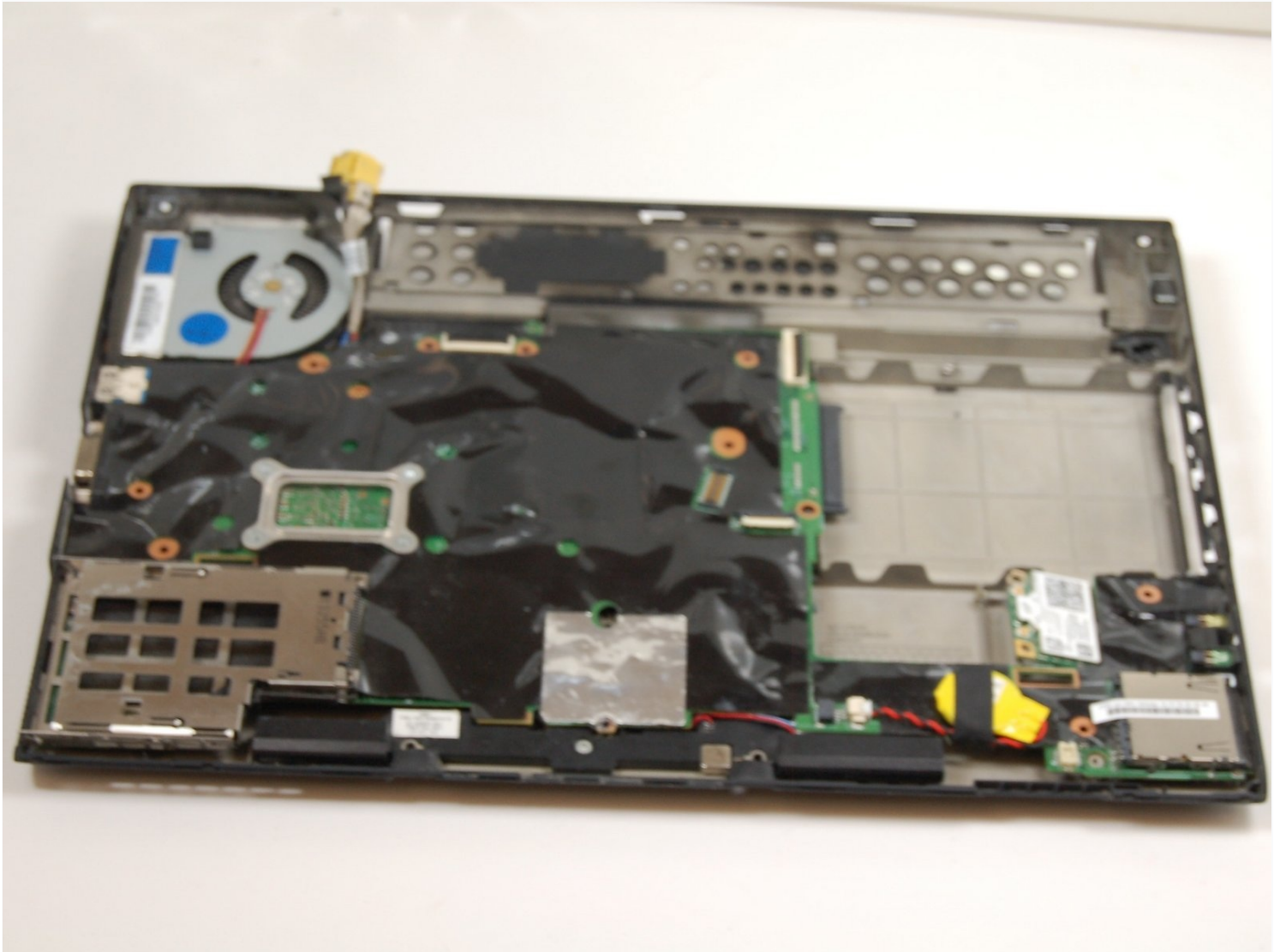




Lenovo Thinkpad x230 Motherboard Replacement

To remove motherboard from this laptop follow...

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INTRODUCTION

To remove motherboard from this laptop follow the following steps carefully.

TOOLS:


[Screwdriver](#) (1)

PARTS:

[Lenovo Thinkpad X230 Motherboard](#)
[Intel Core i5-3320M](#) (1)

Step 1 — Preparations



-  Before you begin, be sure to turn off your laptop and unplug it from the outlet.

Step 2 — Locate the battery



- Flip the computer upside down.
- The red rectangle shows the location of the battery.

Step 3 — Unlock the left switch



- Locate the two switches that lock the battery. Push the left-hand switch outward into the "unlocked" position.

Step 4 — Remove the battery



- Now push and hold the right clip to the right while using your other hand to gently slide the battery away from the computer.

Step 5 — Locate the hard drive enclosure



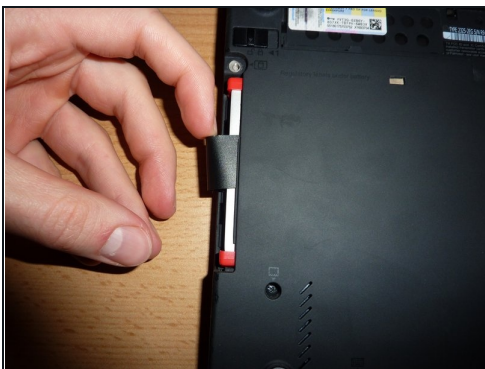
- Locate the hard drive enclosure (marked by the red rectangle).

Step 6 — Remove enclosure



- Use a small Phillips screwdriver to unscrew the single screw that holds down the hard drive enclosure cover.
- ⓘ The screw is designed to remain within the plastic cover. Don't worry about extracting it completely.
- Carefully remove the hard drive enclosure cover.

Step 7 — Remove SSD/hard drive



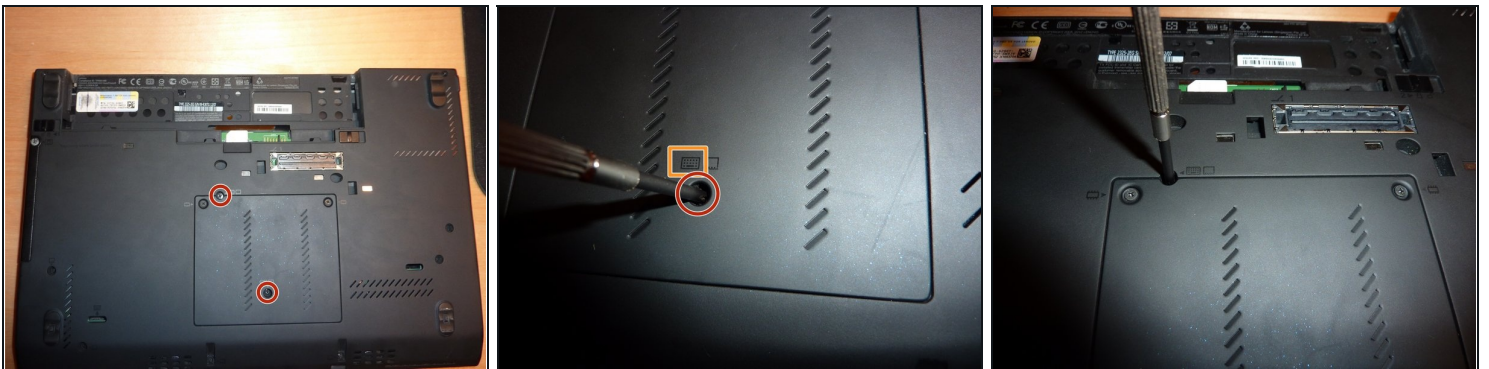
- Gently pull the black pull tab out from above the hard drive. Continue pulling on the pull tab until the hard drive and the two plastic rails come out of the enclosure.
- ⓘ Pull on the tab firmly but slowly. The hard drive should come out of the enclosure effortlessly.

Step 8 — Remove plastic rails



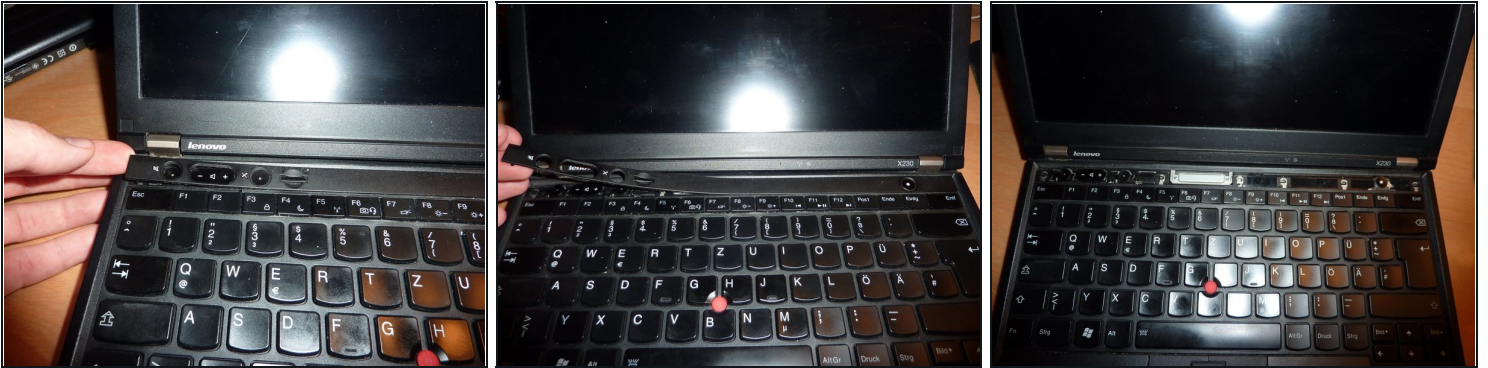
- Remove the plastic rails from the old SSD/hard drive and place them on the new SSD/hard drive.

Step 9 — remove screws



- ① There are 2 screws securing the keyboard. You can identify them by a small keyboard symbol (marked by an orange rectangle in the second picture).
- Once you have located the two screws, remove them with a small Phillips screwdriver.

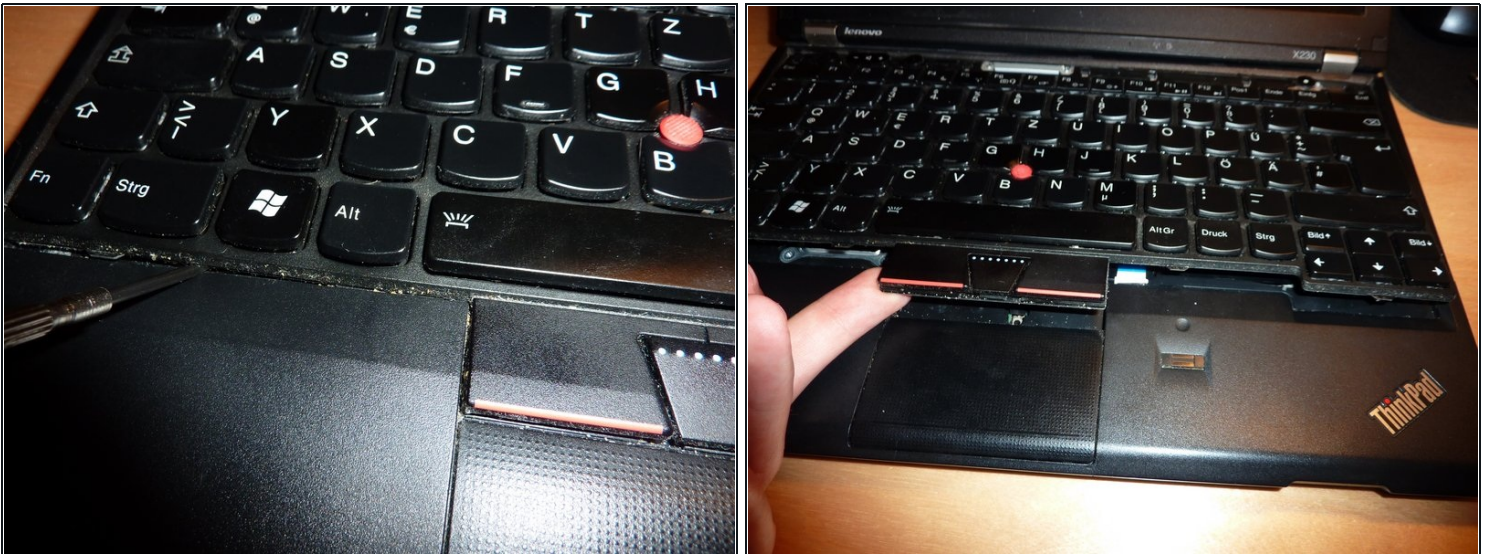
Step 10 — remove strip above keyboard



⚠ This step is not required.

- Gently pull the strip out from the case.

Step 11 — pop keyboard out of the casing



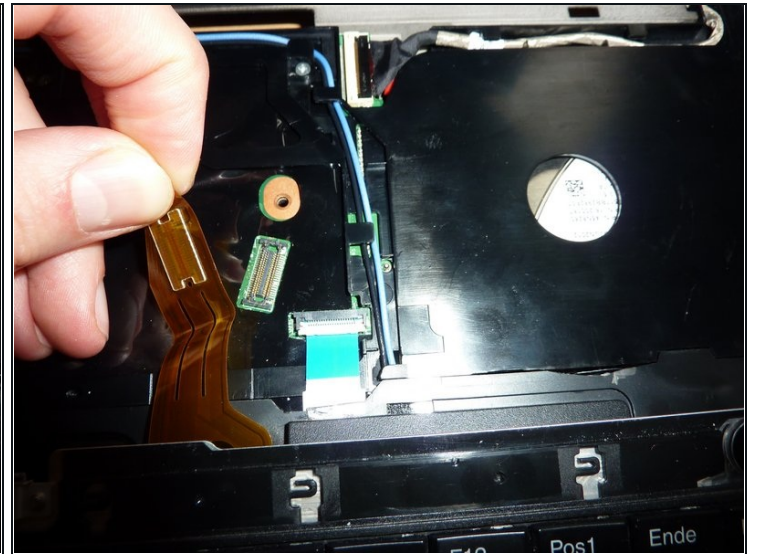
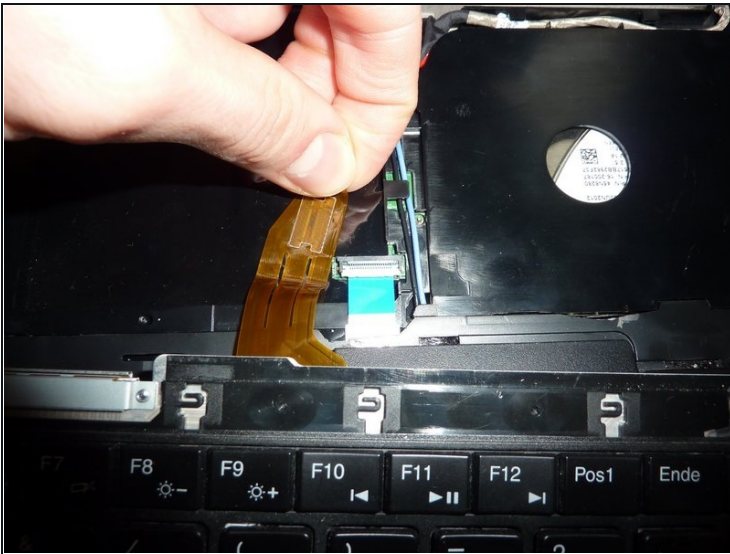
- Use a plastic spudger (or a flat screwdriver) to push the keyboard towards the screen. This will pop the bottom of the keyboard out of the casing.

Step 12 — lift keyboard



- Carefully lift the keyboard so that you can access its connector.

Step 13 — Unplug keyboard



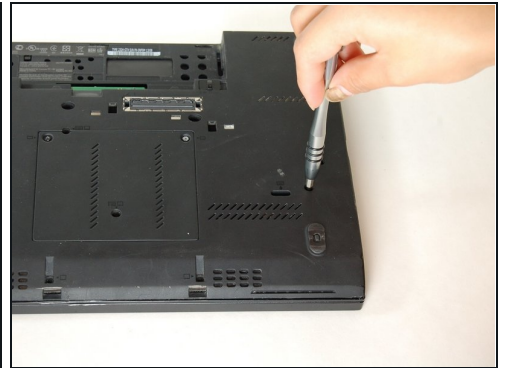
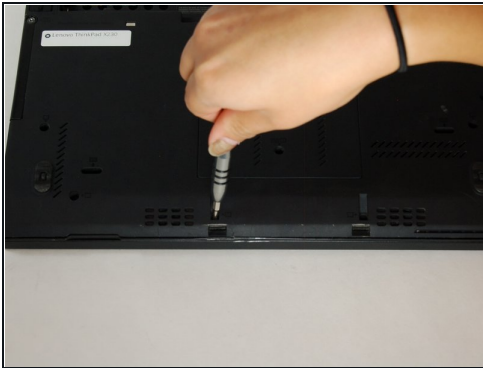
- Carefully unplug the connector by pulling.

Step 14 — done



- You are done - the keyboard is not connected to the laptop any more and can be replaced.

Step 15 — Screen Module



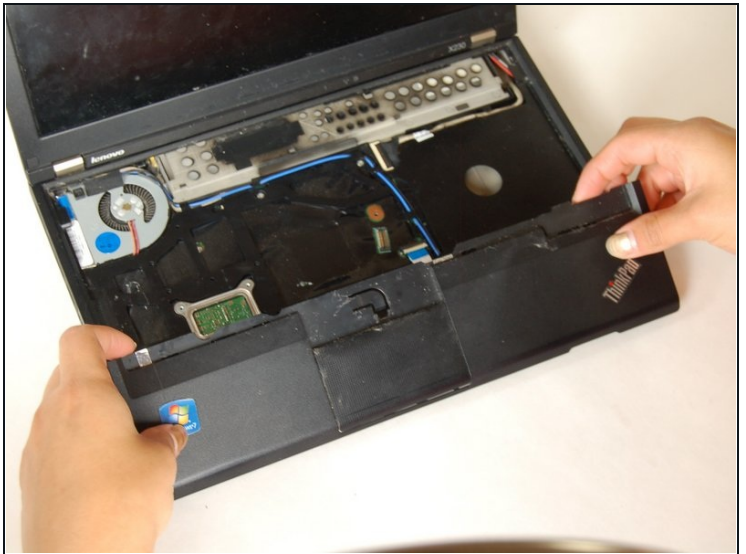
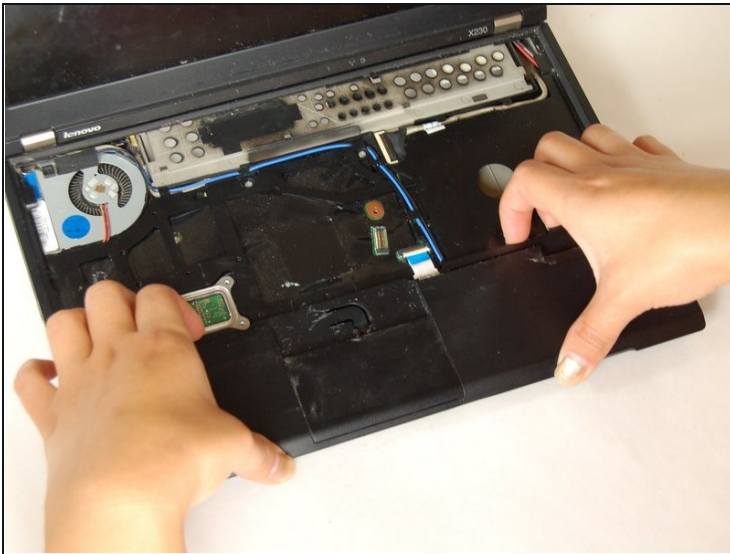
- Remove five 5.7mm screws from the bottom.

Step 16



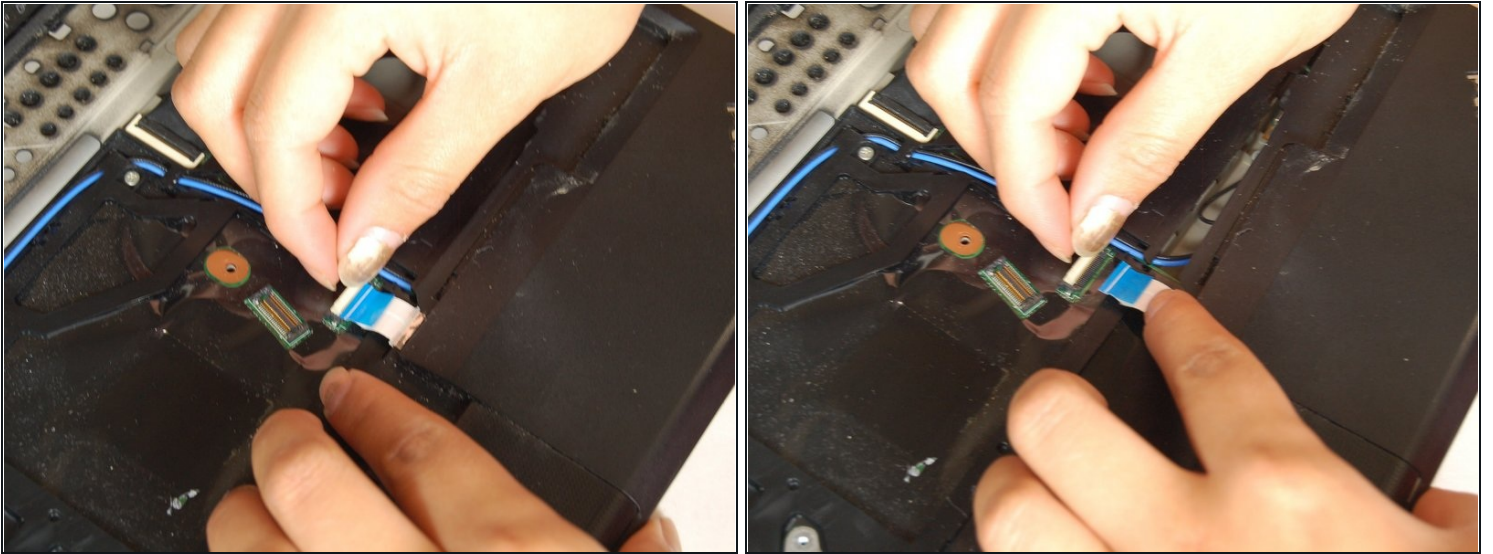
- Unscrew two 5.7mm screws from the top of the bottom of the laptop.

Step 17



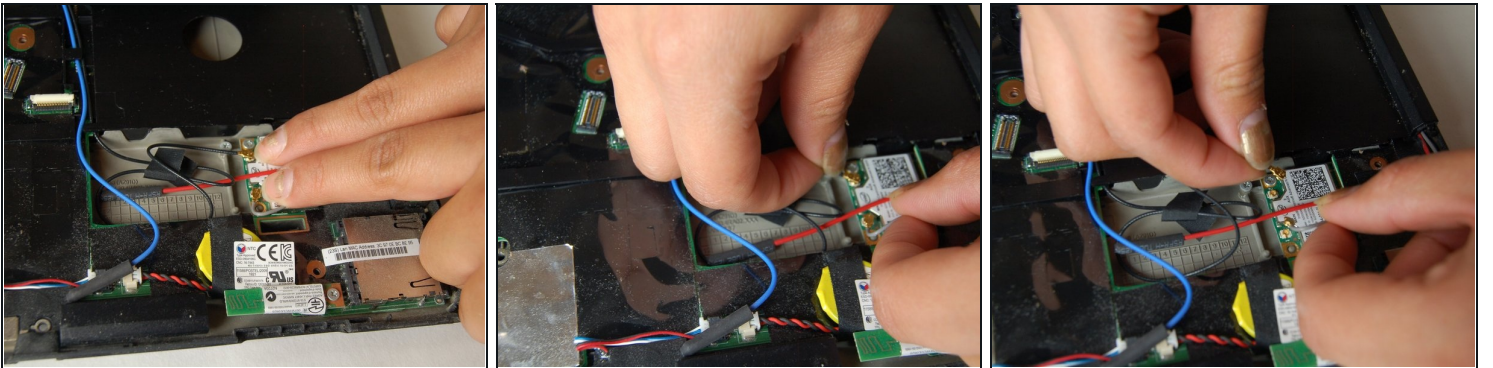
- Pull the palm rest off the laptop board.

Step 18



- Unlock the white seal and disconnect the blue cable.

Step 19



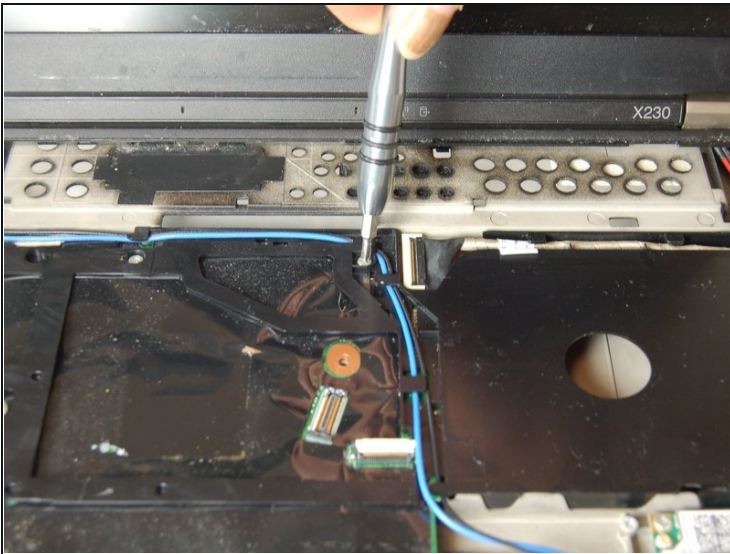
- Carefully disconnect blue and red cables and remove them from plastic case.

Step 20



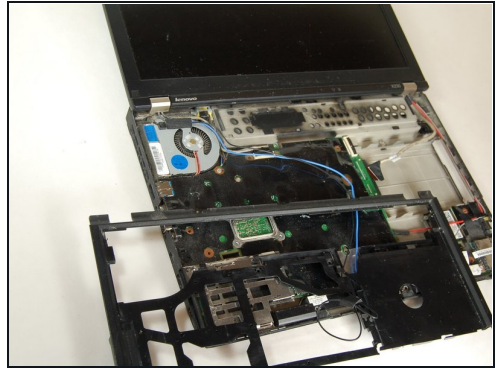
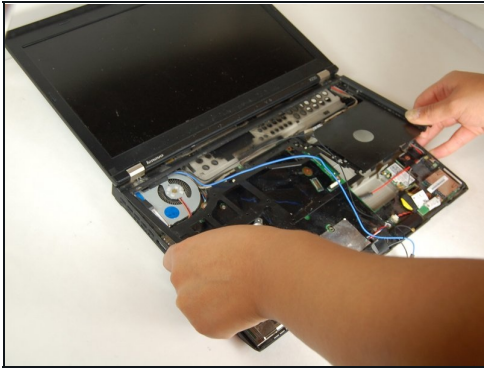
- Unlock white seal and diconnect blue cable from upper corner.

Step 21



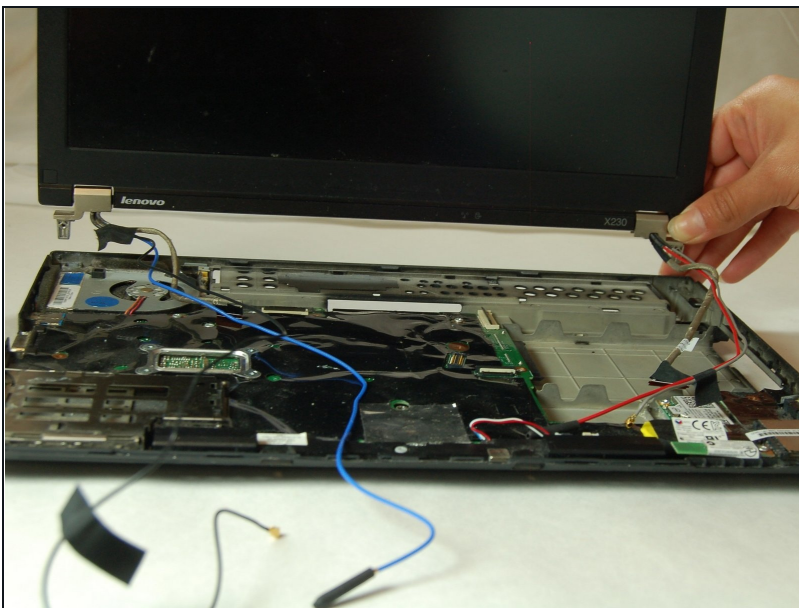
- Remove two 4.1mm screws from the black frame.

Step 22



- Carefully pull off black frame from laptop board.

Step 23



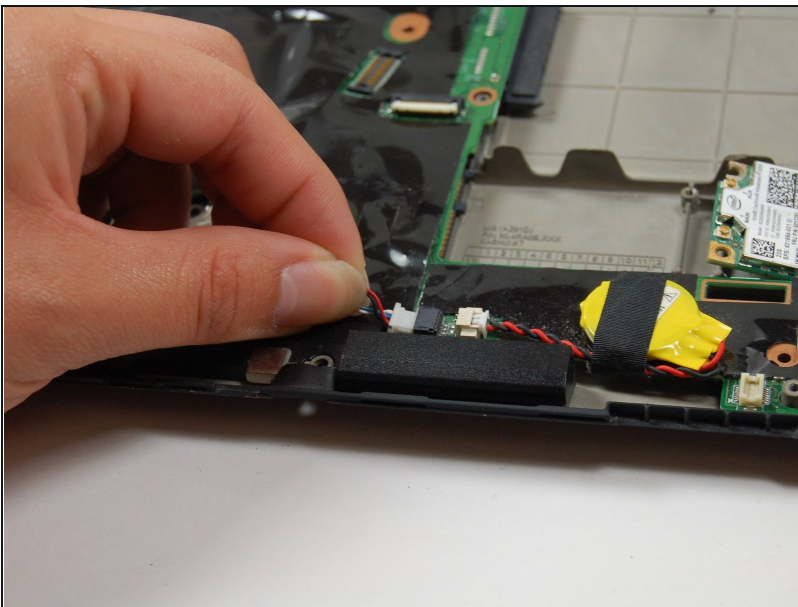
- Carefully lift the screen module straight up to detach from board.

Step 24 — Motherboard



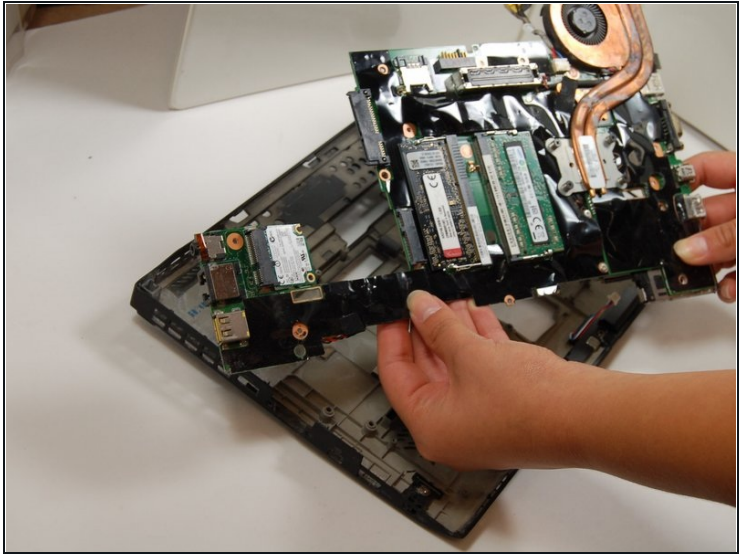
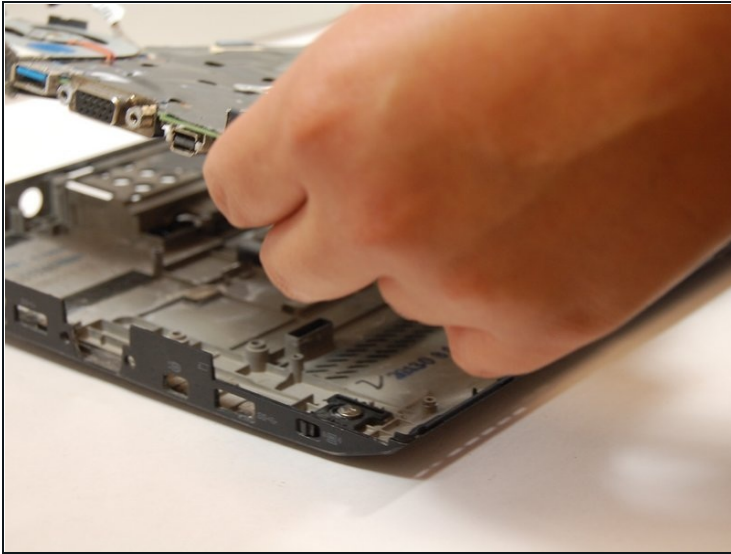
- Remove a total of twenty-three 4.1mm screws from around the black plastic in the board.

Step 25



- Disconnect black and red wires from bottom right corner.

Step 26



- Carefully detach the motherboard (black plastic) from the laptop.

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