ThinkPad T420 Memory Replacement

If your Lenovo T420 is running slowly, complain...

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INTRODUCTION

If your Lenovo T420 is running slowly, complaining about memory usage or does not boot up correctly, the problem may be related to a faulty memory module. This guide will show you how to replace both memory modules in your system.

Note: If you need to access the factory memory module, the keyboard has to be removed. Keyboard removal is not required for the bottom module.

Guide notes

- Use of a matched pair of memory modules is recommended. Mixing and matching modules works, but may cause system instability. My mixed pair seems to work, but I've had two blue screens and I suspect this isn't the last time it'll happen (errors are not related to memory, but memory is suspect). If you mix and match modules, run Memtest 86+ for ~8 hours and test for stability.
- It is important that you do not lose the silver keyboard screw. The RAM door screw also holds the keyboard in, so this isn't the end of the world. However, your keyboard be noticeably loose.

⚒ TOOLS:

[64 Bit Driver Kit](1) (1)
If you want to skip the magnetic project mat, the sorting tray in the top of the 64-bit driver case will work.

[iFixit Opening Tool](1) (1)
[Magnetic Project Mat](1) (1)
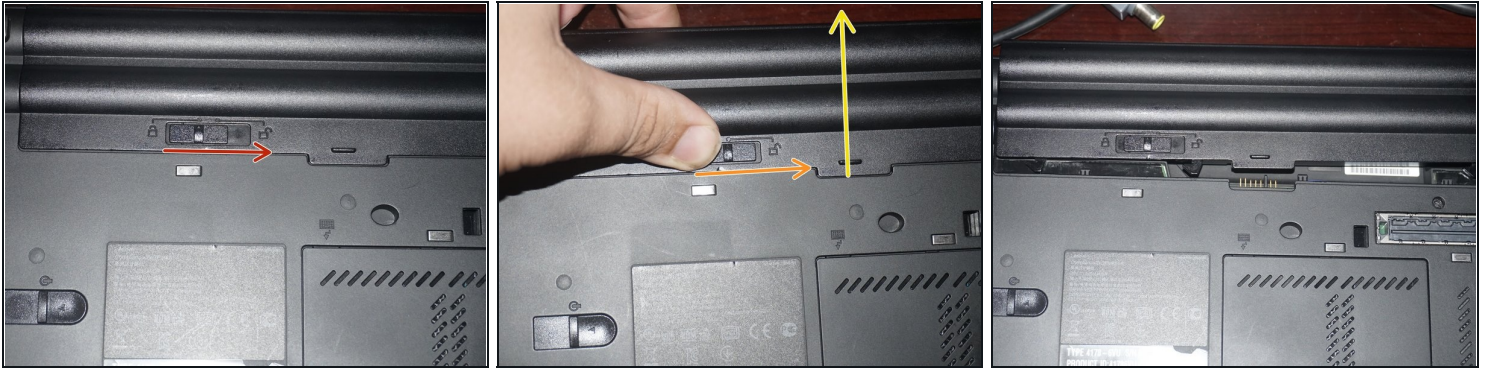*Optional - Not required, but suggested for screw management.*

⚙ PARTS:

[8GB PC3L-1600 (2x 4GB pair)](1) (1)
Standard 1.5V memory. Guaranteed to work.

[16GB PC3L-1600 (2x8GB)](1) (1)
While this is is DDR3L memory, it is backwards compatible with 1.5V compatible systems.

Step 1 — Remove the battery

- Remove the battery from the system. To do this, push the locking tab into the unlocked position.

- Once the battery is unlocked, hold the locking tab in and push the battery out.
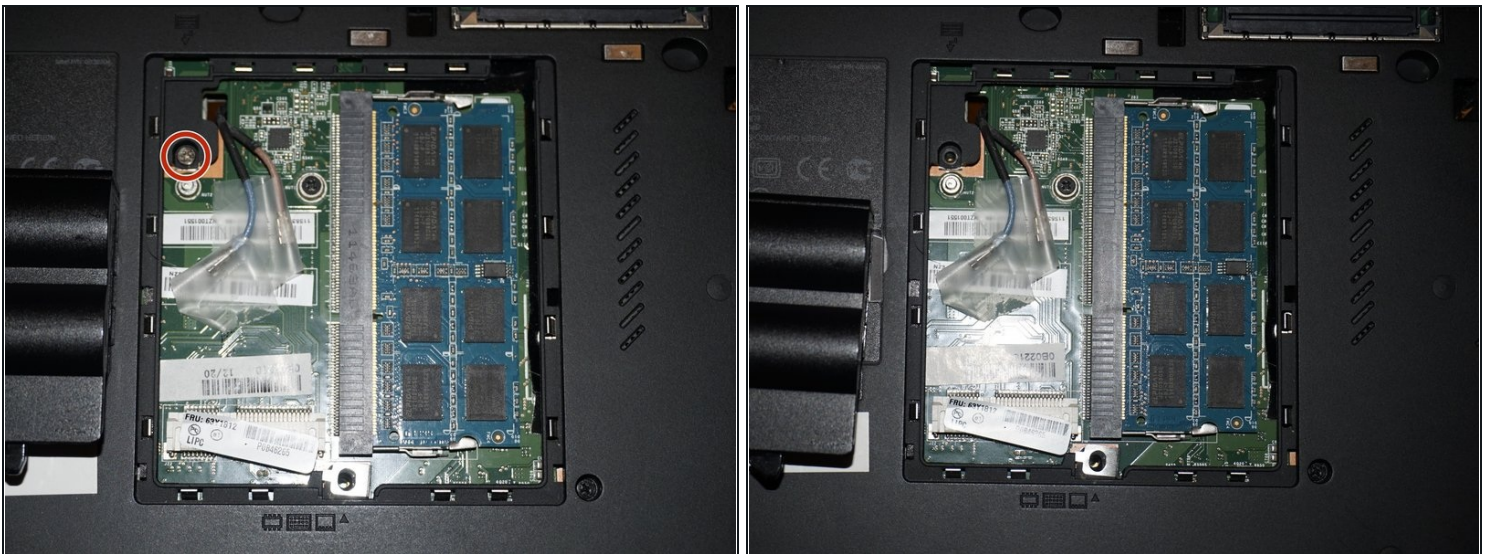
Step 2 — Accessing the lower memory module

- To remove the bottom memory module, open the memory door. Use a **_Phillps #0_** screwdriver.

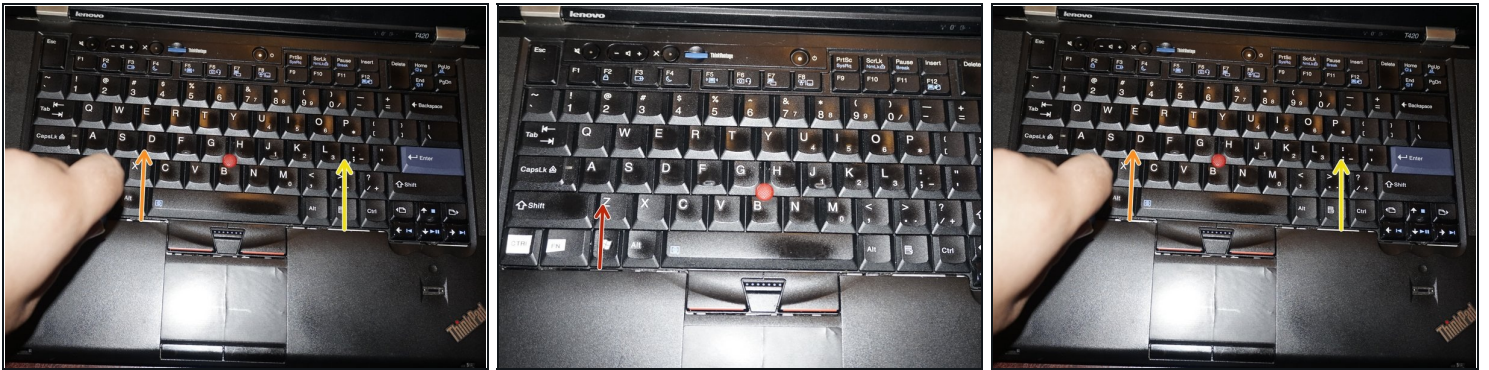## Step 3 — Remove the bottom memory module

- With the bottom RAM door removed, release the bottom memory module. Release both locking tabs and the module can be removed.
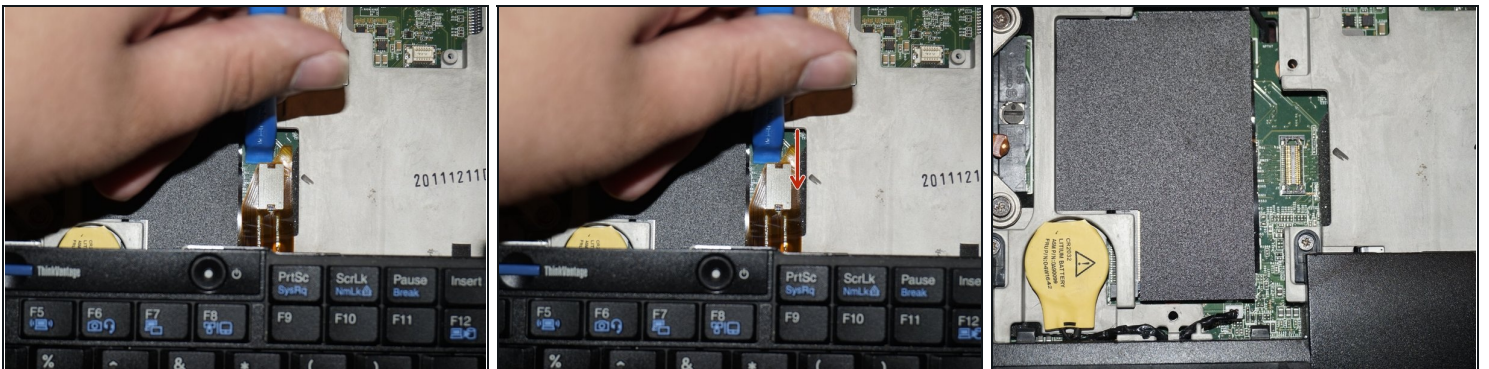
Step 4 — Accessing the upper memory module

- To access the memory module under the keyboard, remove the silver screw securing the keyboard.
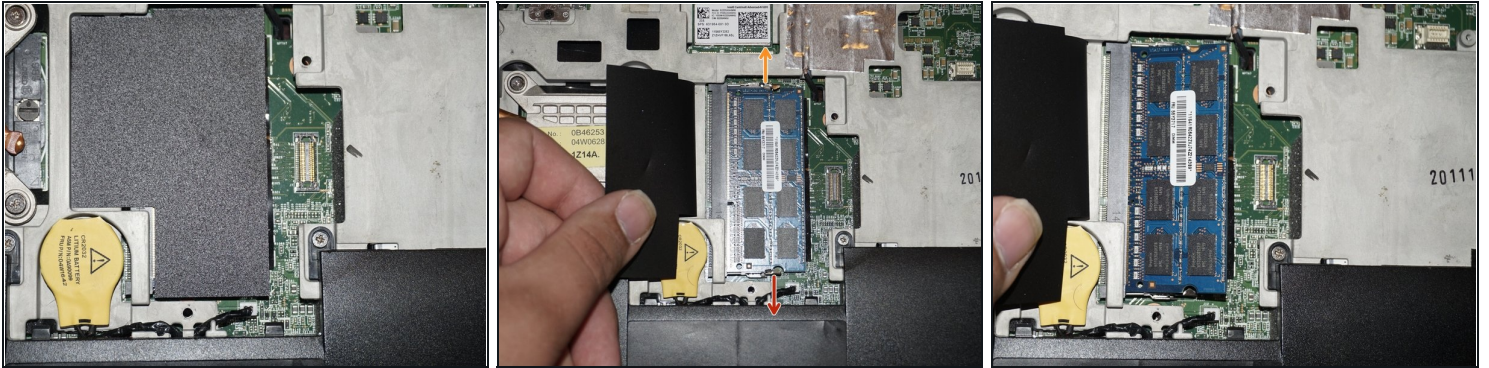
Step 5 — Remove the keyboard

- To remove the keyboard, push up from the bottom first. Once the lower tabs are released, use a plastic pry tool to lift the keyboard up.

Step 6 — Disconnect the keyboard

- Once the keyboard is removed, disconnect the cable from the motherboard. Use a plastic pry tool.

Step 7 — Remove the RAM module

- To remove the RAM module, follow the removal procedure from the bottom lower module.

Step 8 — Keyboard reinstallation

- ⓘ This step only applies if you removed the RAM module under the keyboard. If you did not remove it, you can skip this step.

- To reinstall the keyboard, push the top of the keyboard in first. Once the top is pushed in, slide the keyboard down to secure it. Screw the keyboard back in.

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