IFIXIT

ThinkPad T420 Keyboard Replacement

If your Lenovo T420 has keyboard or thermal...

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INTRODUCTION

If your Lenovo T420 has keyboard or thermal issues, this guide will show you how to replace the keyboard and gain partial fan access.

Guide notes

- ***If you are removing the keyboard for fan access, being too close or using too much air can damage the fan.*** If the damage is particularly severe the system will give you a fan error and shut off to protect the processor (and dGPU, if equipped). ***If the system says Fan error when it is rebooted***, the fan is damaged and will need to be replaced in order for the system to boot. ***Use caution if you suspect the fan is failing prior to cleaning the heatsink.*** The fan in the author's system was rattling before cleaning and it has not happened since. ***If the fan ends up getting damaged, this is NOT your fault; all you did was reveal a hidden failure.***
- If you are replacing the keyboard, check the Lenovo HMM to determine what keyboard you need. This can also be found on the back of your old keyboard as well. ***I am not referencing a part because every country uses a different FRU.***
- While this is not a hard repair, you may wish to sort your screws. ***Multiple screw types are used.***
- ***Watch the ground on the chassis by the RAM door, especially if it has been serviced before.*** This can get in the way or come loose from the chassis. If this happens push it back into place. ***It will eventually come out again, so the only cure is to replace the lower chassis***.

🔧 TOOLS:

[64 Bit Driver Kit](#) (1)
[iFixit Opening Tool](#) (1)
[Magnetic Project Mat](#) (1)
Optional - Not required, but recommended.
[Canned Air](#) (1)
Only needed if you are cleaning the processor fan. Can be found at most stores locally.

⚙ PARTS:

[Keyboard](#) (1)
US FRU: 45N2141
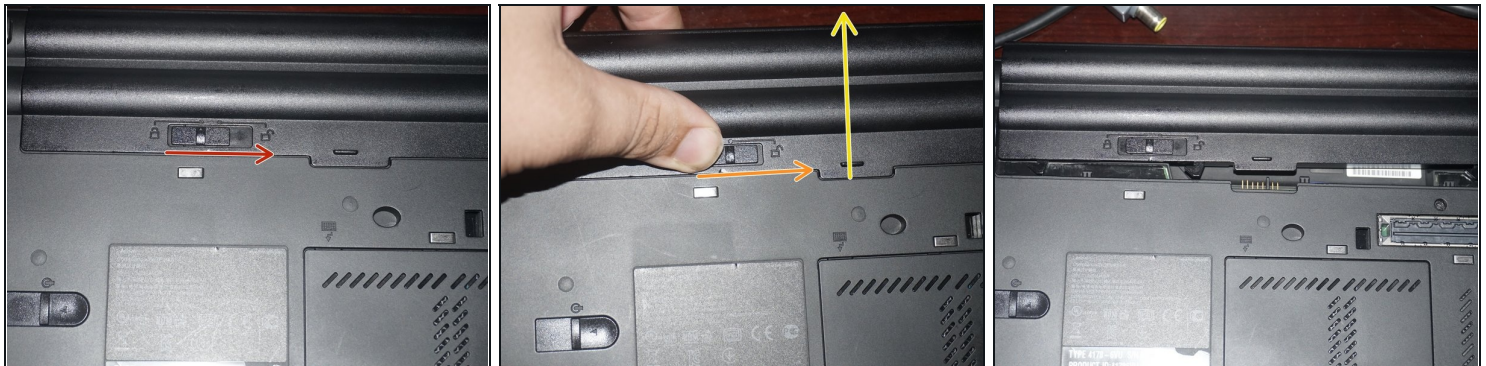*Reference the HMM or old part for other coutries.*

Step 1 — Find your keyboard FRU

Language	FRU no.		
Arabic	45N2076	45N2146	45N2216
Belgian	45N2077	45N2147	45N2217
Brazilian Portuguese	45N2075	45N2145	45N2215
Bulgarian	45N2078	45N2148	45N2218
Canadian French (058)	45N2073	45N2143	45N2213
Canadian French (Acnor)	45N2072	45N2142	45N2212
Czech	45N2079	45N2149	45N2219
Danish	45N2080	45N2150	45N2220
Finnish, Swedish	45N2097	45N2167	45N2237
French	45N2082	45N2152	45N2222
German	45N2083	45N2153	45N2223
Greek (U. S. English and Greek layout)	45N2084	45N2154	45N2224
Hebrew	45N2085	45N2155	45N2225
Hungarian	45N2086	45N2156	45N2226
Icelandic	45N2087	45N2157	45N2227
Indian	63Y0219	63Y0221	63Y0223
Italian	45N2088	45N2158	45N2228
Japanese	45N2102	45N2172	45N2242
Kazakhstan	45N2089	45N2159	45N2229
Korean	45N2103	45N2173	45N2243
Latin American Spanish	45N2074	45N2144	45N2214
Norwegian	45N2091	45N2161	45N2231
Polish	45N2092	45N2162	45N2232
Portuguese	45N2093	45N2163	45N2233
Russian	45N2094	45N2164	45N2234
Slovak	45N2095	45N2165	45N2235
Slovenian	45N2096	45N2166	45N2236
Spanish	45N2081	45N2151	45N2221
Swiss	45N2098	45N2168	45N2238
Thai	45N2105	45N2175	45N2245
Traditional Chinese	45N2104	45N2174	45N2244
Turkish	45N2099	45N2169	45N2239
U.K. English	45N2100	45N2170	45N2240
U.S. English	45N2071	45N2141	45N2211
U.S. English (International, with a Euro symbol)	45N2101	45N2171	45N2241

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Table 11. Parts list—Keyboard (continued)

Language	FRU no.			CRU ID
Netherlands	45N2090	45N2160	45N2230	
Turkish (F Type)	60Y9552	60Y9554	60Y9550	

⚠️ ***Each country has a different keyboard FRU part number.*** Refer to the guide photos or the [Lenovo HMM](#) if you live outside of the US.

📌 ***The old part can also be used as a reference.***
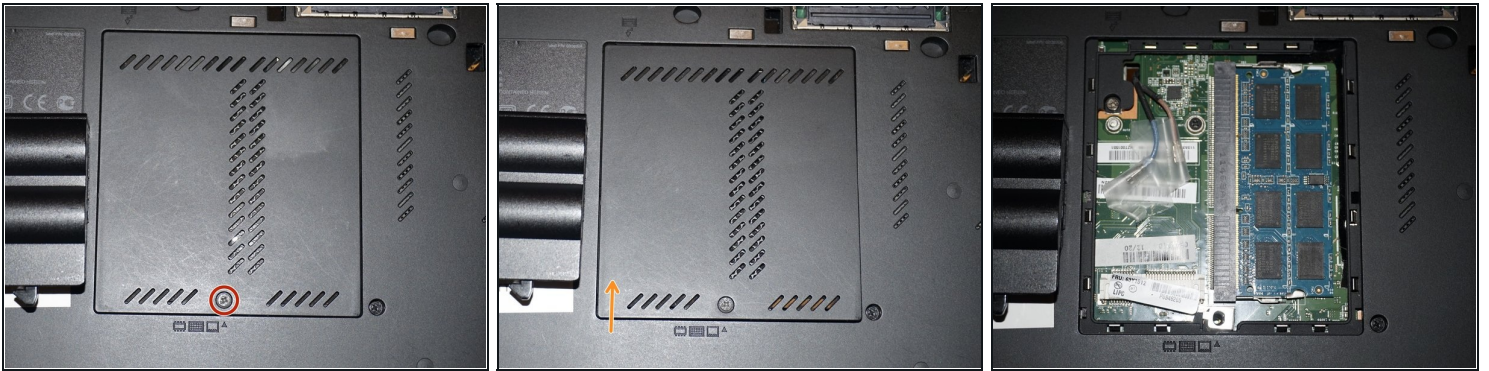
Step 2 — Remove the battery

- Remove the battery. Push the locking tab to the unlocked position.

- Once the battery is unlocked, hold the battery release tab in and pull the battery out.
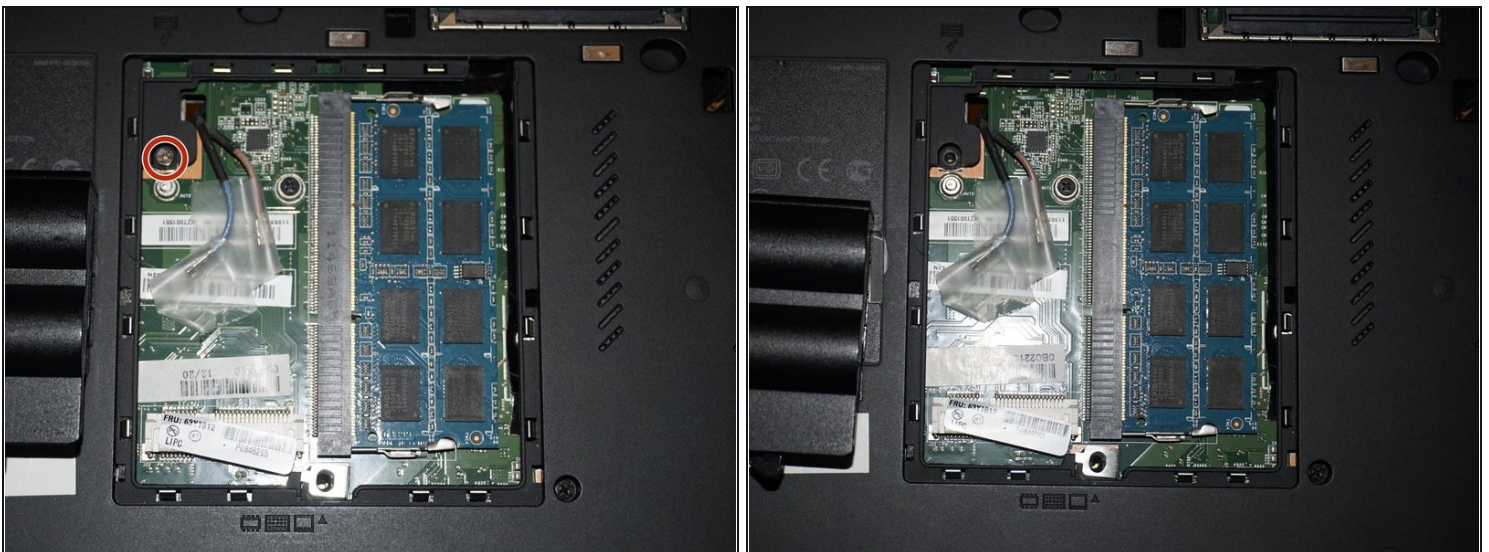
Step 3 — Remove the RAM door

⬡ WWAN ready systems ship with antenna covers over these cables. Someone installed a WLAN card in this T420 which disabled the better card and was removed.

● To remove the RAM door, use a **Phillips #0** bit. Unscrew the RAM door and set the screw aside in a safe location.

● To remove the RAM door, pull it off from the side. This can be done with a plastic pry tool or your fingernail.
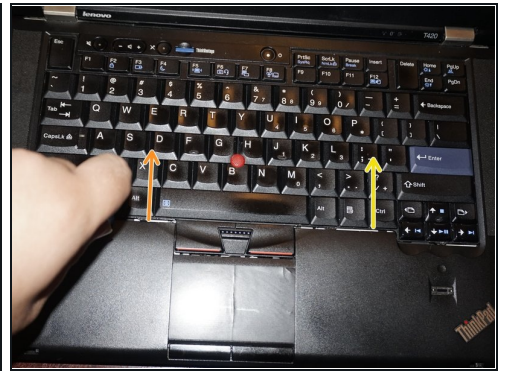
Step 4 — Remove the keyboard screw

⚠ *A magnetic screwdriver is highly recommended.* This screw has a tendency to not come out unless a magnet is used.
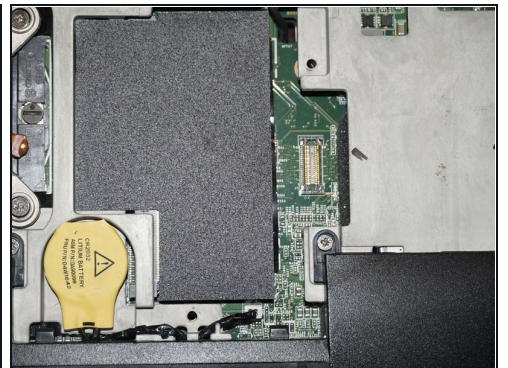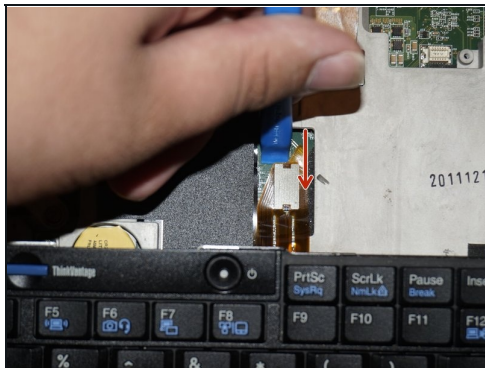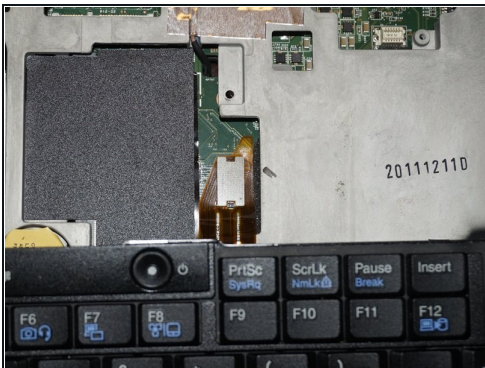
● To remove the keyboard, remove the final screw. This will be located under the RAM door.

Step 5 — Remove the keyboard

- Open the laptop.

- To remove the keyboard, release the keyboard hooks using a plastic pry tool.

- Once the keyboard is loose, remove it from the chassis.

Step 6 — Disconnect the keyboard

📌 If you have a can of compressed air available, some of the dust can be removed at this point. ***Further disassembly is required for a full cleaning.***

- Disconnect the keyboard from the motherboard. Use a plastic pry tool for this step.

Step 7 — Keyboard re-installation

- Reconnect the keyboard to the motherboard. Once connected, slide the top (volume controls) in first.

- Once the top of the keyboard is pushed in, slide the keyboard down to re-engage the lower clips until they are not visible.

- Replace the silver screw and RAM door.