Lenovo X1 Carbon Laptop Keyboard Replacement

This guide will show how to replace a full keyboard on a Lenove X1 Carbon Series Laptop.

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INTRODUCTION

This guide outlines how to replace a keyboard on a 2nd generation Lenovo X1 Carbon laptop. These laptops are quite compact, which results in a keyboard replacement being a very involved process. This process includes removing almost every other part of the laptop first.

🔧 TOOLS:

- Spudger (1)
- Arctic Silver Thermal Paste (1)
- Phillips #000 Screwdriver (1)
- Phillips #0 Screwdriver (1)

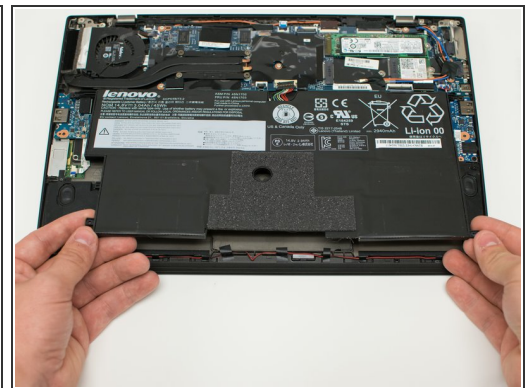This document was generated on 2020-01-29 10:47:45 PM (MST).

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Step 1 — Keyboard

ⓘ These screws can't be fully removed; they will stay attached to the back cover.
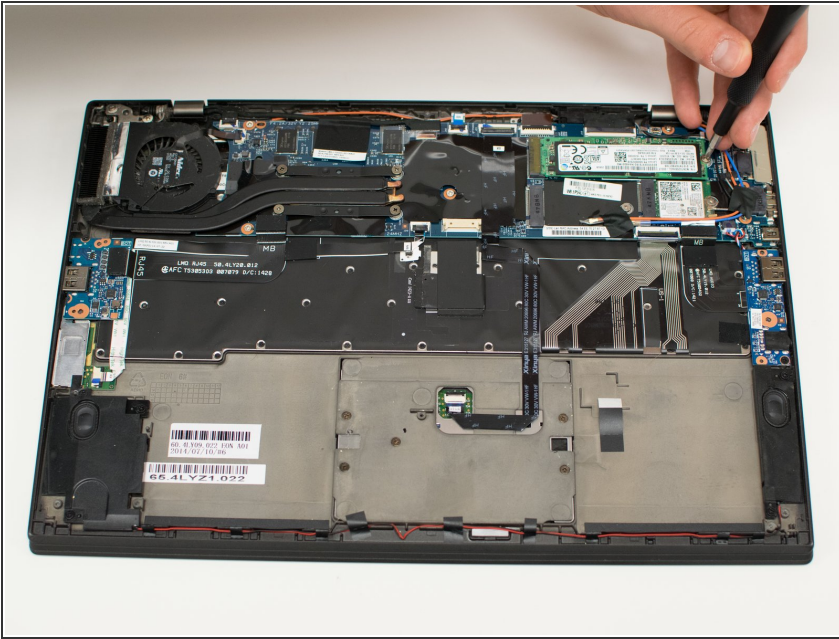
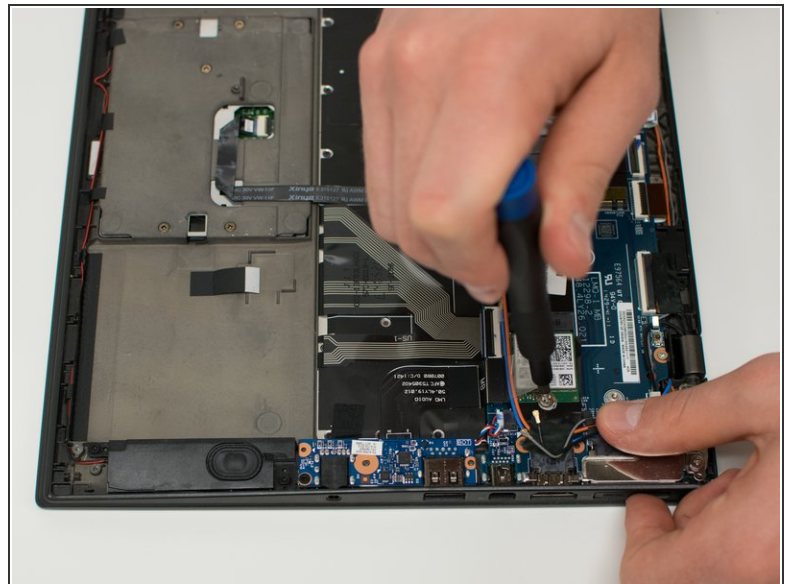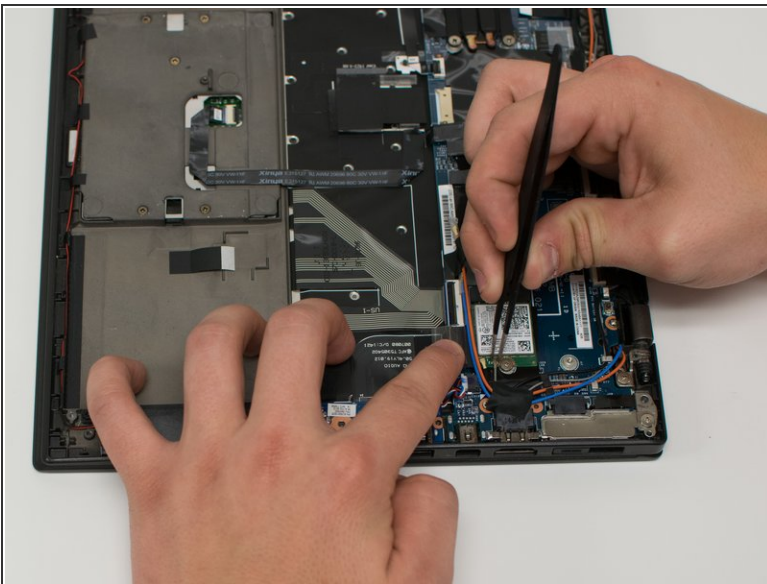● Loosen the seven screws from the back cover.

Step 2

● Unplug the bundled cable connector attached to the battery by pulling evenly from each side of the plug.

● Remove the four 4mm screws from the corners of the battery.

● Remove the 2.5mm screw from the center of the battery.

● Remove the battery by lifting from the bottom edge and pulling towards the front edge.

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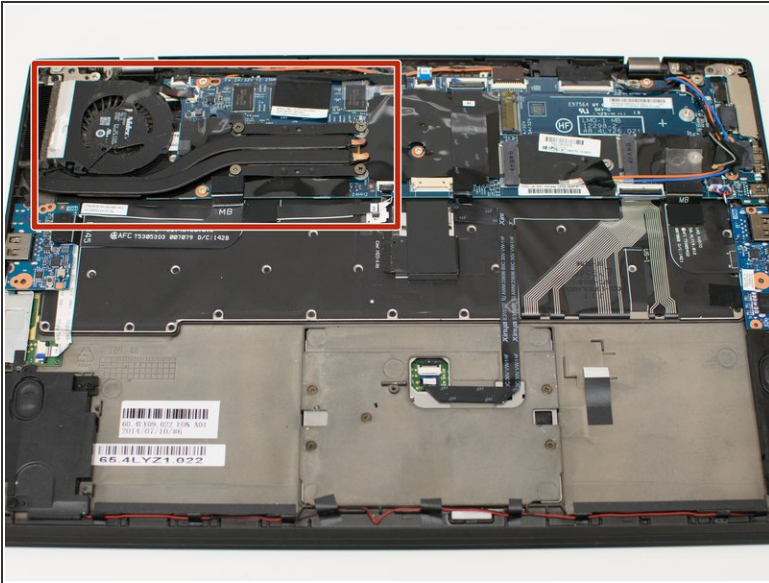
Step 3

- Remove the 3mm screw from the solid state drive.

- Pull the solid state drive straight out from its connector to remove it.
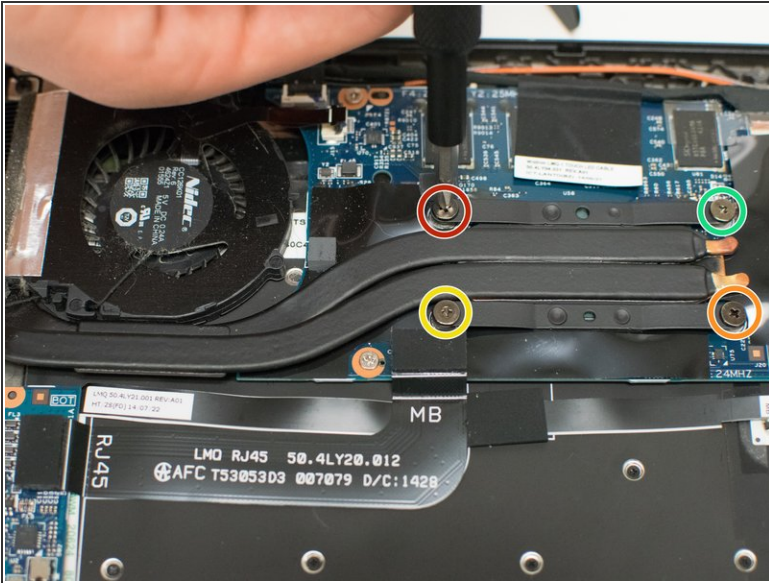
Step 4

- Unplug the Local Area Network Card by prying the coaxial connectors straight up from the board.

- Unscrew the 3mm screw from the LAN card.

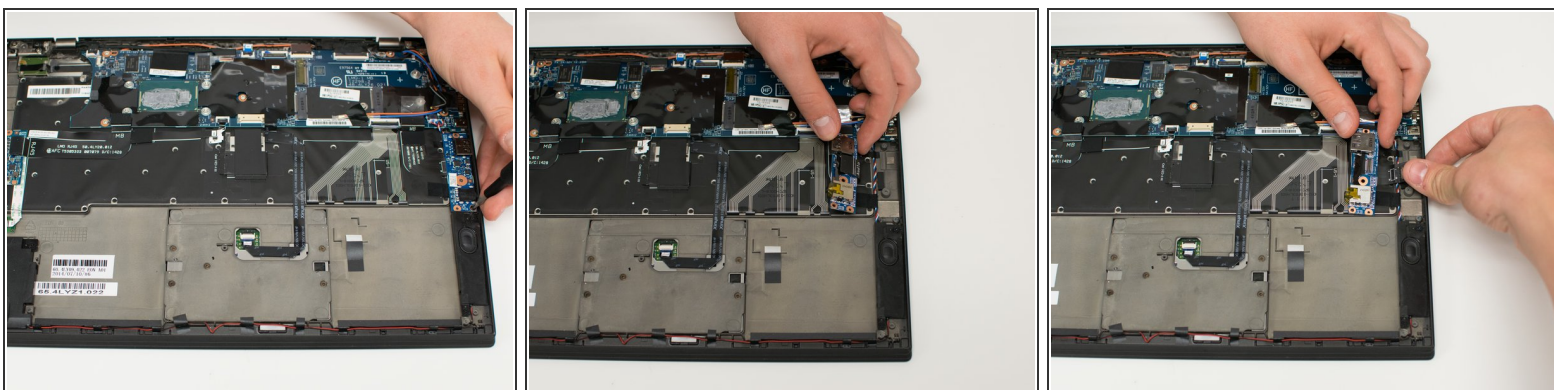- Pull the LAN card straight out from its connector to remove it.

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Step 5

- Unplug the CPU heatsink fan by flipping up the small locking flap on the ZIF connector and gently removing the cable.

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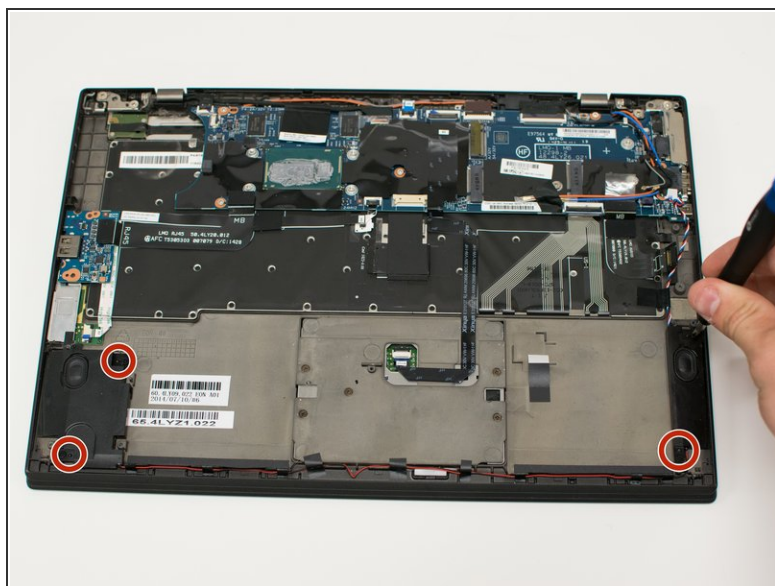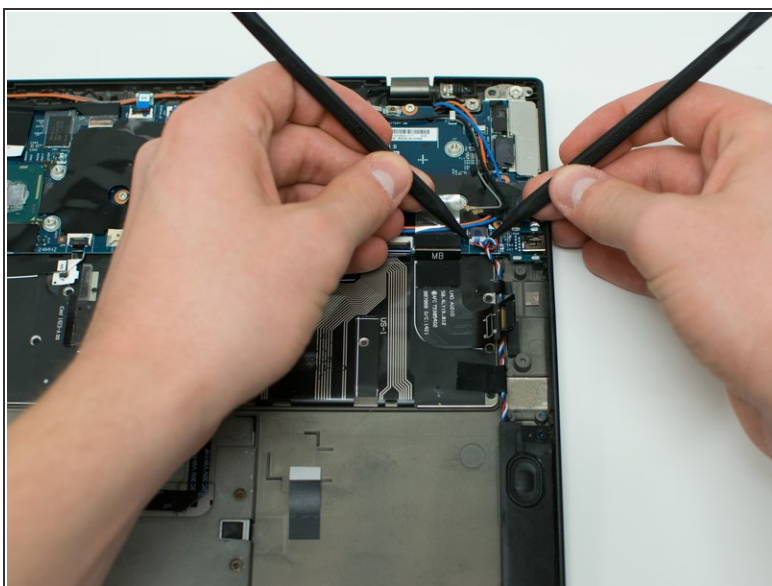
Step 6

- Loosen the upper-left heat pipe screw.

- Loosen the lower-right heat pipe screw.

- Loosen the lower-left heat pipe screw.

- Loosen the upper-right heat pipe screw.

- Lift the CPU cooler straight up to remove it.

- Thermal paste will need to be applied during reassembly.

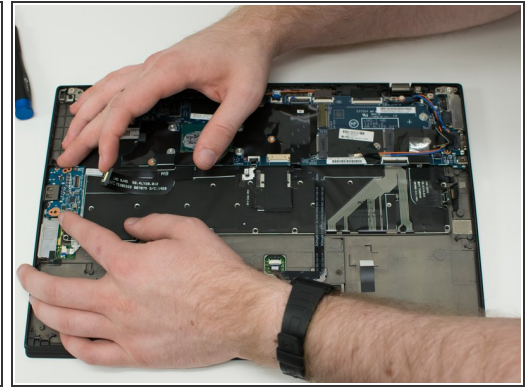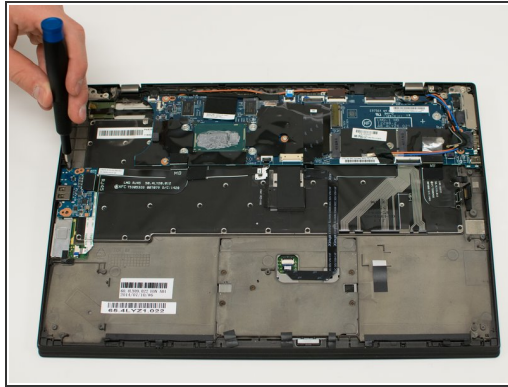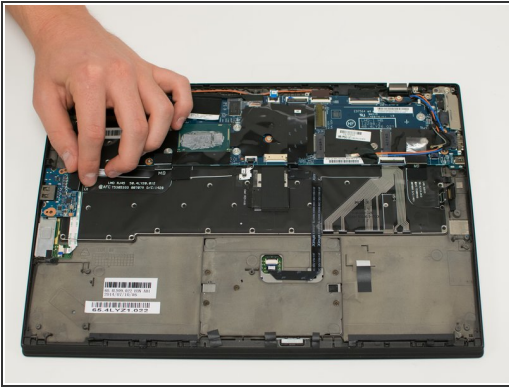 - Apply a small amount of thermal paste across the processor case.

Step 7

- Unscrew the 4mm screw from the audio card.

- Pull the audio card straight back from the side of the laptop and flip it over, exposing the flat topped connector.

- Disconnect the flat topped connector by pulling straight up from its socket.
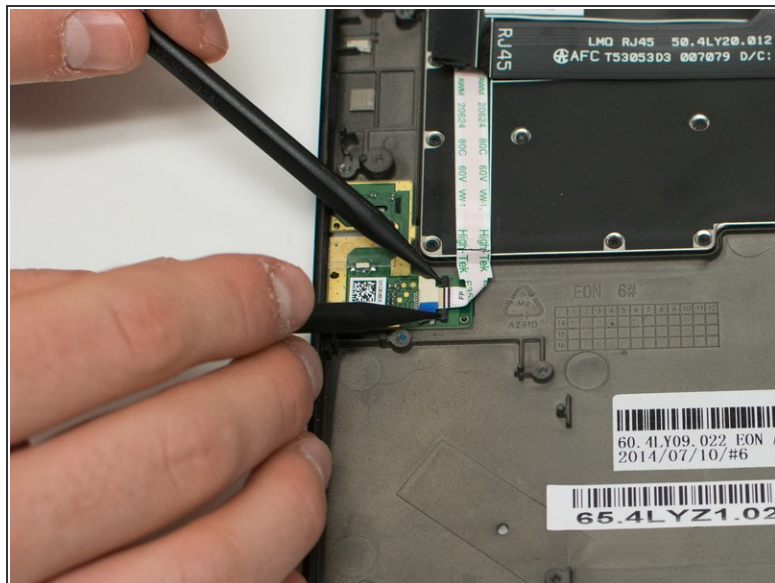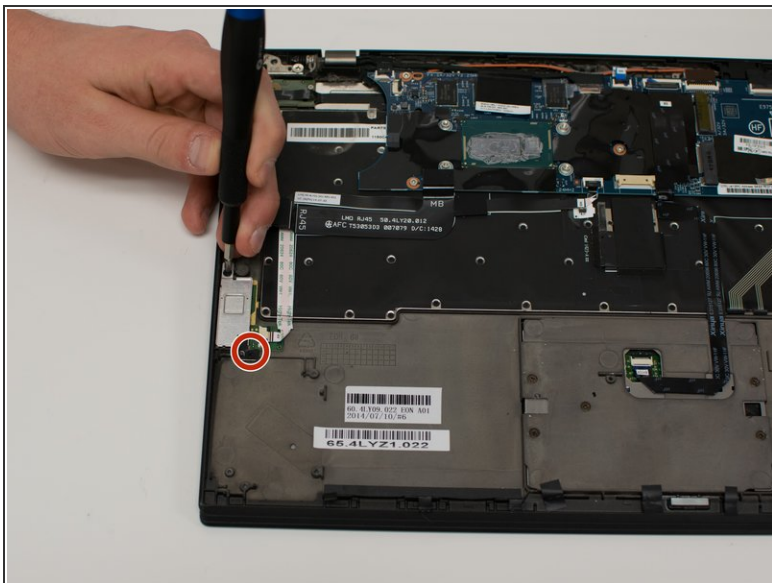
- Remove the audio card.

Step 8

- Unplug the laptop speakers by pulling evenly on each side of the bundled cable connector.

- Remove the four 4mm screws from the speakers.

- Remove the speaker wires from under the tape loops along the front of the laptop.

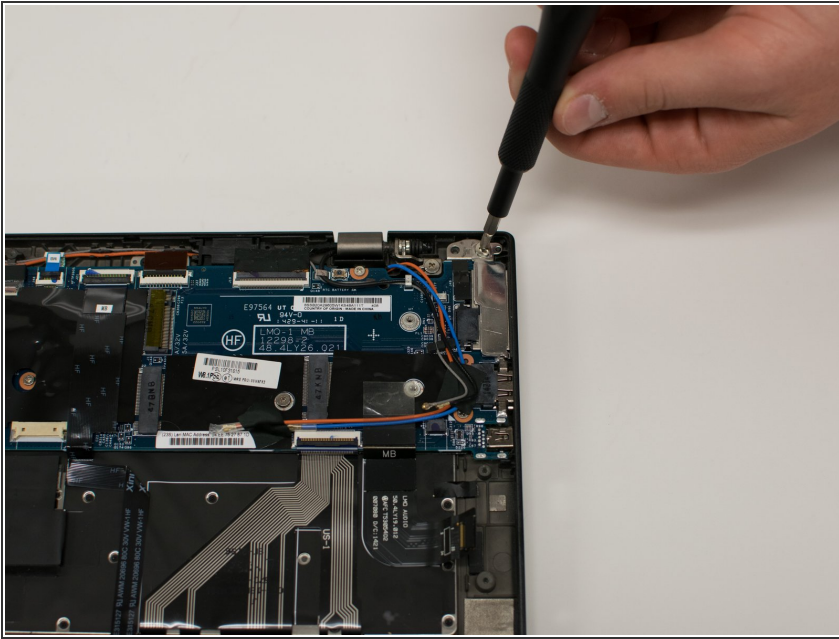- Lift the speakers and speaker wires straight up to remove them.

Step 9

- Disconnect the RJ45 ribbon cable by pulling straight up.

- Remove the 4mm screw from the RJ45 card.

- Move the RJ45 card slightly to the right and pull up to remove it.

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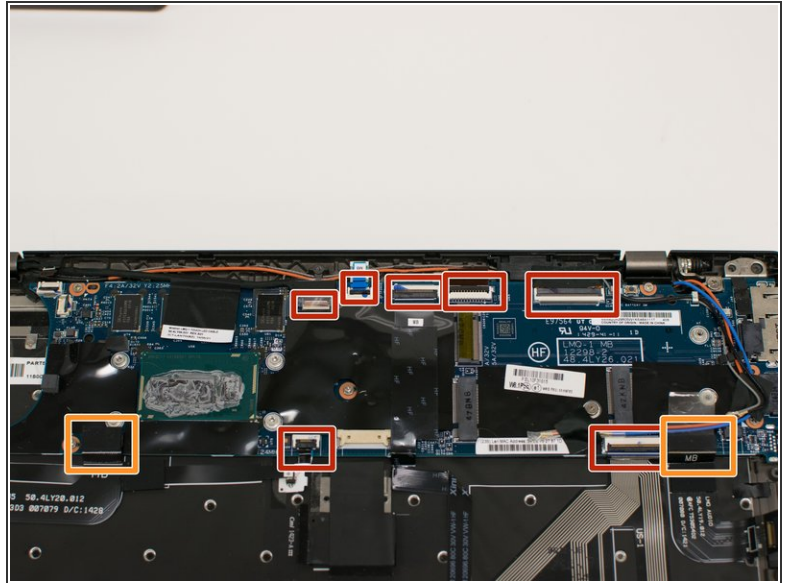
Step 10

- Remove the two 2.5mm screws from the guard.

- Pull the guard straight up to remove it.

- Slide the bottom plastic part of the ribbon cable socket forward.

- Disconnect the ribbon cable.

- Lift the fingerprint reader assembly straight up to remove it.

Step 11

⚠️ Do not subject the system board to excessive shock or electrostatic discharge of any sort.

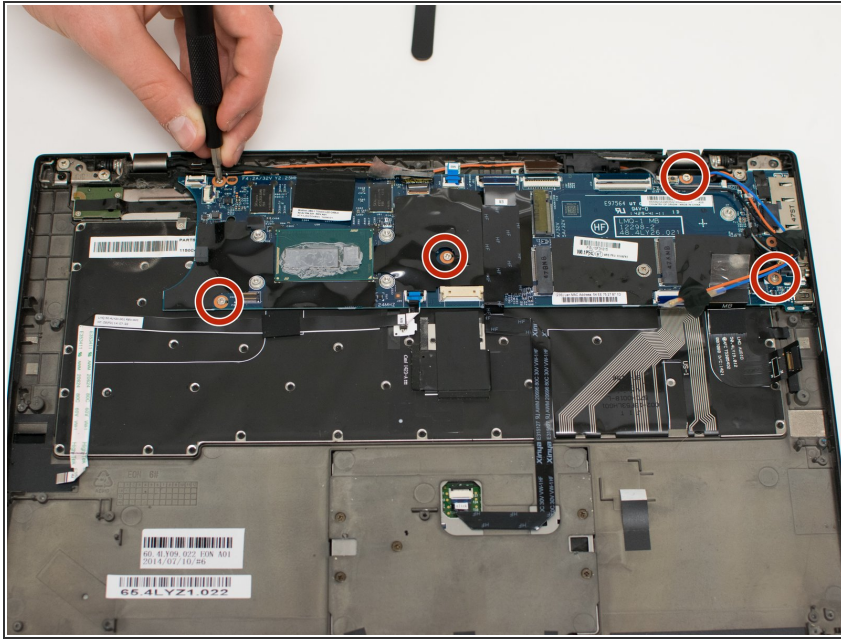● Remove the 4mm screw from the guard in the upper-right corner of the laptop.

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Step 12

⚠️ Do not subject the system board to excessive shock or electrostatic discharge of any sort.

● Lift the ribbon cable locking mechanism.

● Disconnect the ribbon cables by pulling straight out from the socket.

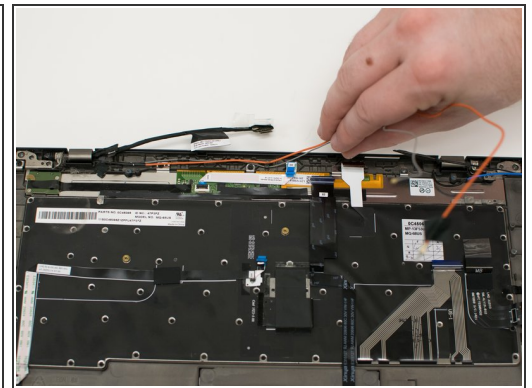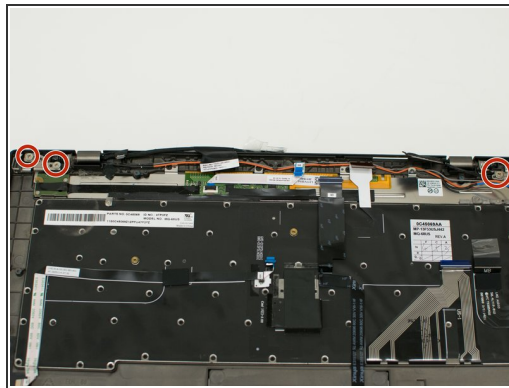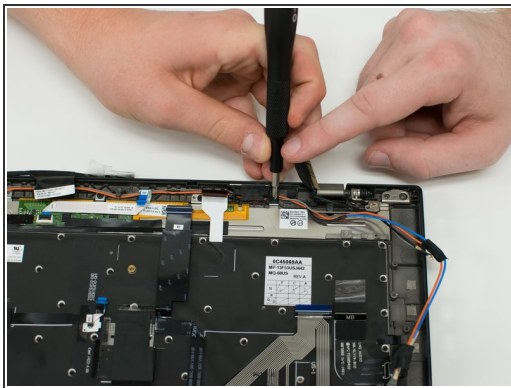● Disconnect the ribbon cables by pulling straight up.

Step 13

⚠️ Do not subject the system board to excessive shock or electrostatic discharge of any sort.
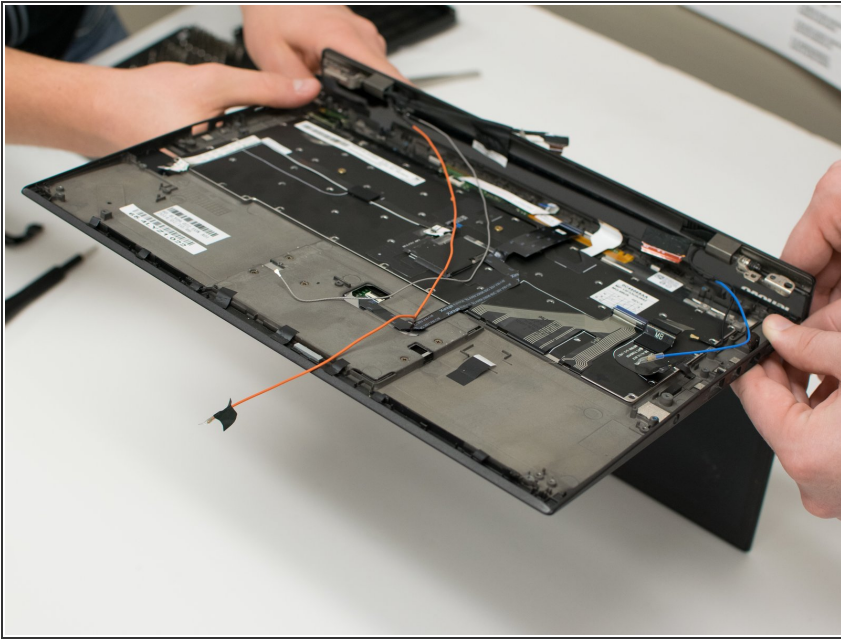
● Remove the five 3mm screws from the system board.

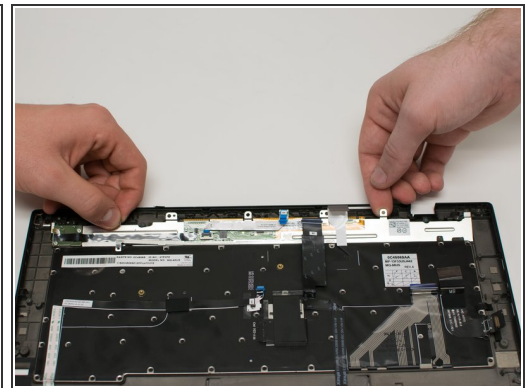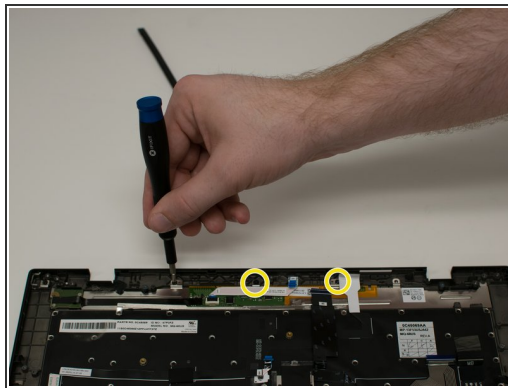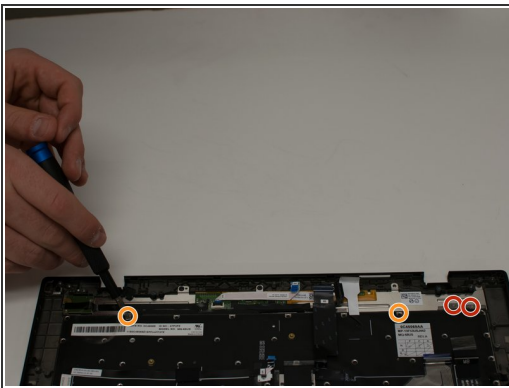● Move the system board slightly to the left and pull up to remove it.

Step 14

● Remove the 4mm screw from the guard.

● Pull the guard straight up to remove it.

● Remove the three 4mm screws from the LCD hinges.

● Pull the antenna wires away from the hinges.

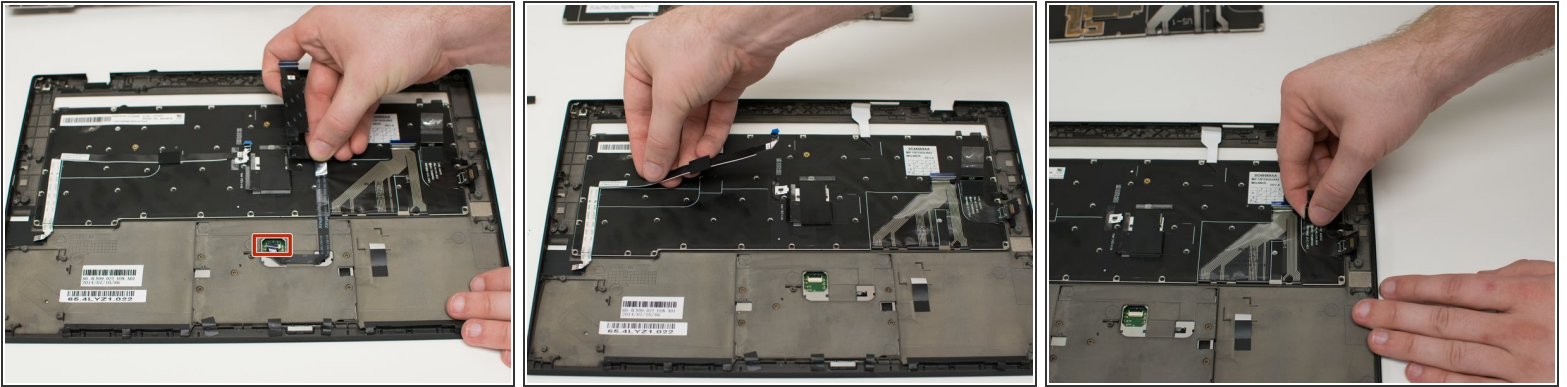This document was generated on 2020-01-29 10:47:45 PM (MST).

Step 15

- Lift the laptop and open the screen 90 degrees.

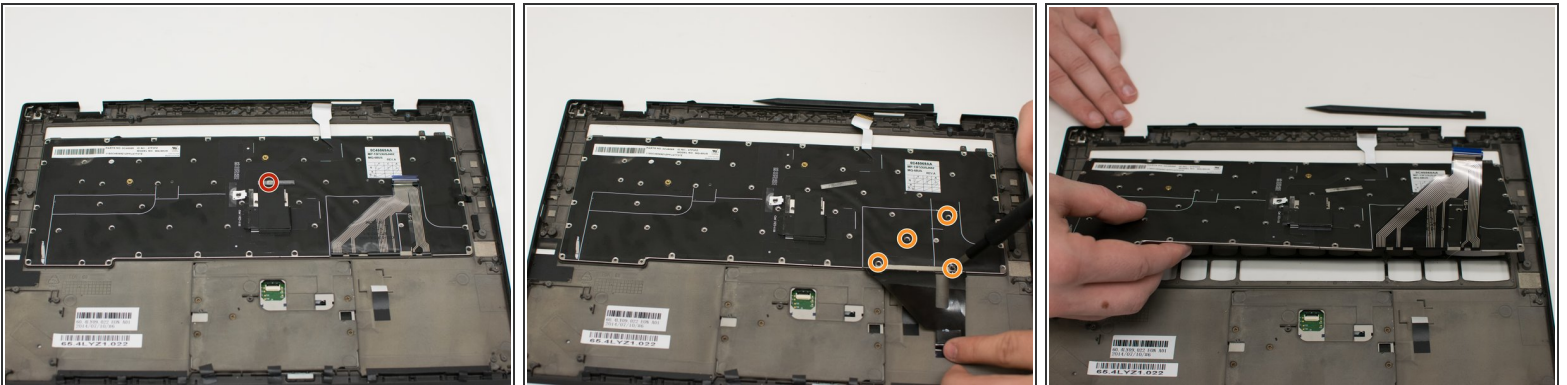- Lift the LCD unit straight up to remove it.

Step 16

- Remove the two 1.7mm screws from the bracket.

- Pull the guard straight up to remove it.

- Remove the two 1.7mm screws from the adaptive keys panel.

- Remove the three 2.5mm screws from the adaptive keys panel.

- Lift the adaptive keys panel from the rear of the laptop and pull to remove it.

Step 17

- Lift the ribbon cable locking mechanism.

- Disconnect the ribbon cable.

- Remove the remaining ribbon cables from the back of the keyboard.

Step 18

- Remove the 45 Xmm screws from the back of the keyboard that are visible.

- Remove the tape covering one of the Xmm screws and remove that screw.

- Peel back the large ribbon cable and remove the four Xmm screws underneath it.

- Lift the keyboard straight up to remove it.

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

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