

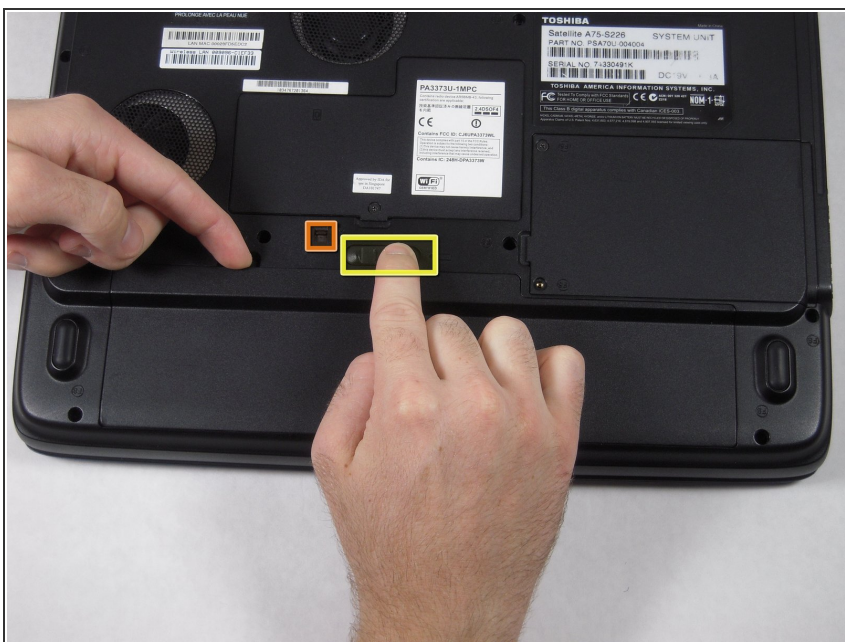
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## TOOLS:

- [Phillips #1 Screwdriver](#) (1)
  - [iFixit Opening Tools](#) (1)
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## Step 1 — Battery



- Make sure battery-lock is in the unlock position.
- Slide button to the left.

## Step 2



- Lift battery out of the computer.

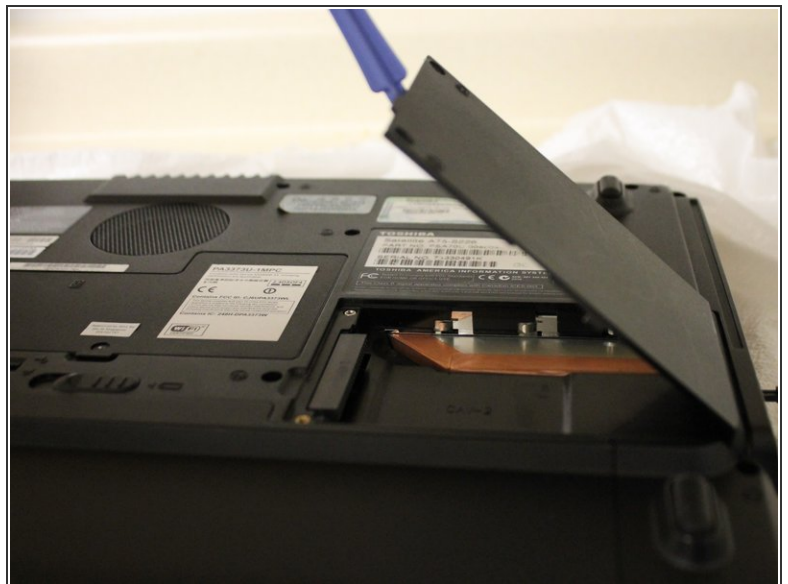


## Step 3 — Optical Drive



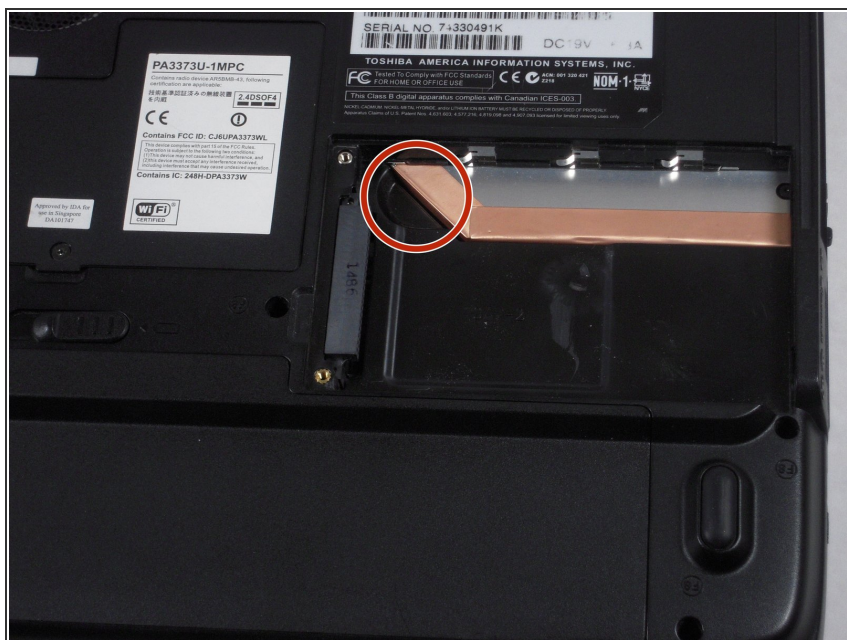
- Remove the two 5.62 mm screws from the optical drive cover.

## Step 4



- Remove the optical drive cover.
- A plastic opening tool or a fingernail may be helpful in lifting it from its groove.

## Step 5



- Using the inset divot, push the optical drive out of the laptop to remove.

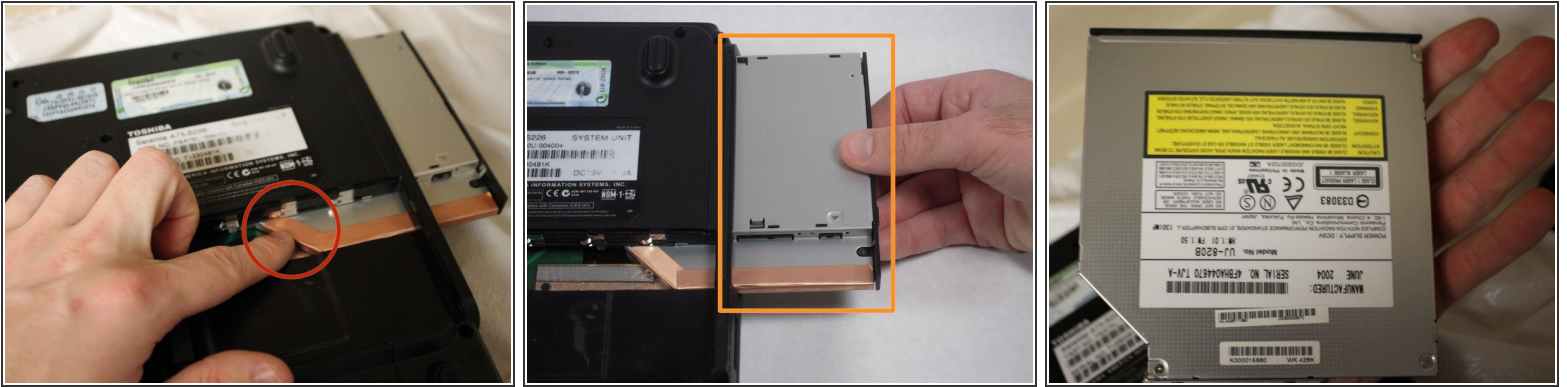
## Step 6 — CD Drive



- Remove the 8.6 mm screw.



## Step 7



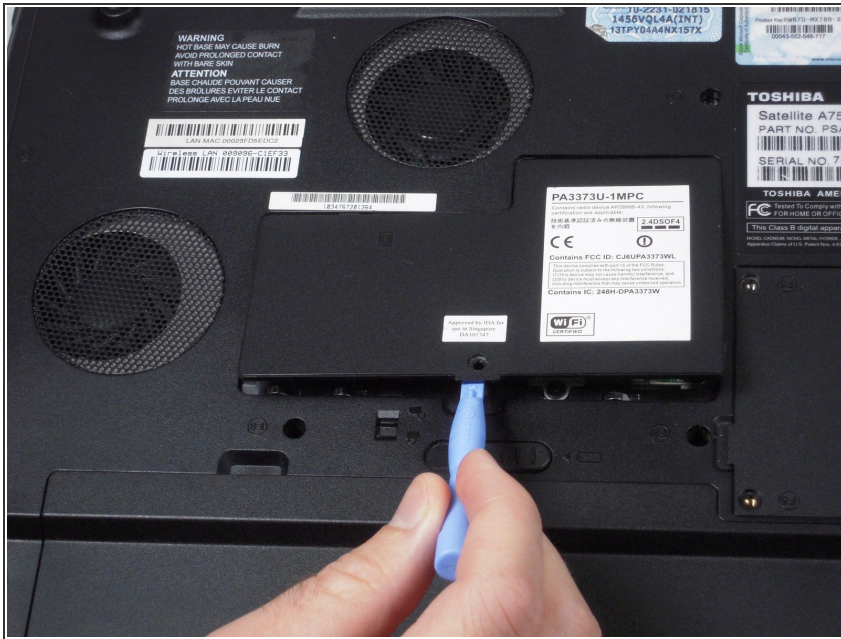
- Push the bottom left corner of the CD Drive until the drive protrudes from the case.
- When a good amount of the CD Drive is showing on the right side, gently pull it out completely.

## Step 8 — Wi-Fi/Memory Cover



- Remove the 5.75 mm screw from the cover panel.
- ① Turn the laptop over with the screen facing down.

## Step 9



- Lift up the cover panel using a plastic opening tool.

## Step 10 — Wi-Fi Card



- Remove the 5.64 mm screw from the bottom of the crossing bar.
- Remove the crossing bar.



## Step 11



- Use a plastic opening tool to disconnect the black and white antenna cable's connectors from the Wi-Fi card.
- ⓘ Note that the black wire is connected to the port that is labeled main.

## Step 12



- Use fingers to push the clips away from memory card.



## Step 13



- Use fingers to remove the Wi-Fi card.

## Step 14 — Keyboard



- Use the plastic opening tool to lift up the top panel all the way along the keyboard until it loosens.
- ⓘ It may be helpful to first pry at the rear of the hinge covers (not shown) to release them. Then Insert the plastic opening tool underneath the top panel's sides and then front edge.

## Step 15



- Remove the top panel by popping the panel out the top left socket, then do the same with the right side.

## Step 16




- Remove the two 3.67 mm screws from the top corners of the keyboard.



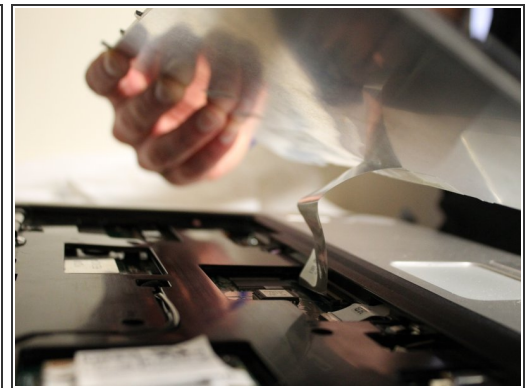
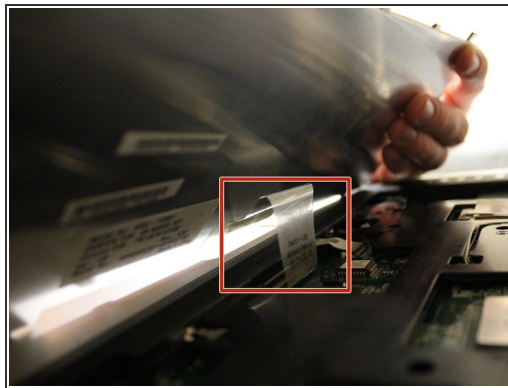
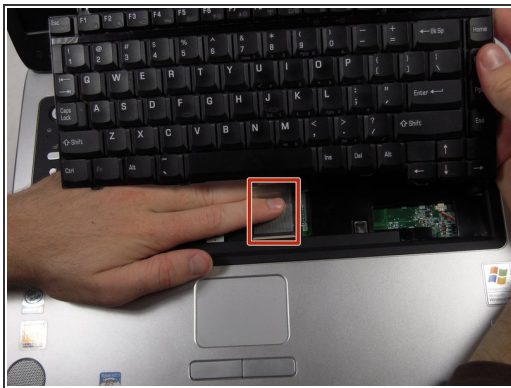
## Step 17




- Use fingers to lift up the keyboard from the top.

 Do not try to remove the keyboard completely because it is still attached to the motherboard.

## Step 18



- Remove the cable connecting the keyboard with the motherboard.

 Be aware of the locking tabs on each side of the ribbon-cable connector—they slide back about 2mm to free the cable.

- Lift up and remove the keyboard.

## Step 19 — Display Assembly



- Remove the 3.76mm screw from the ground wire.

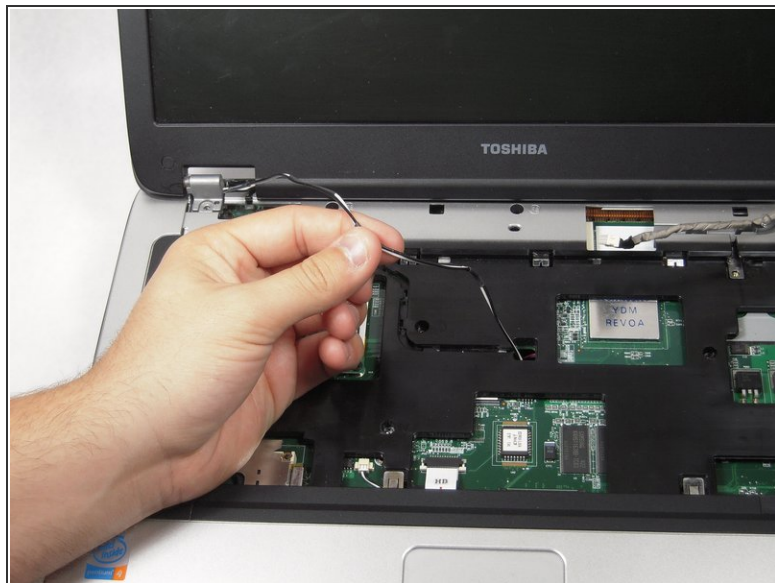
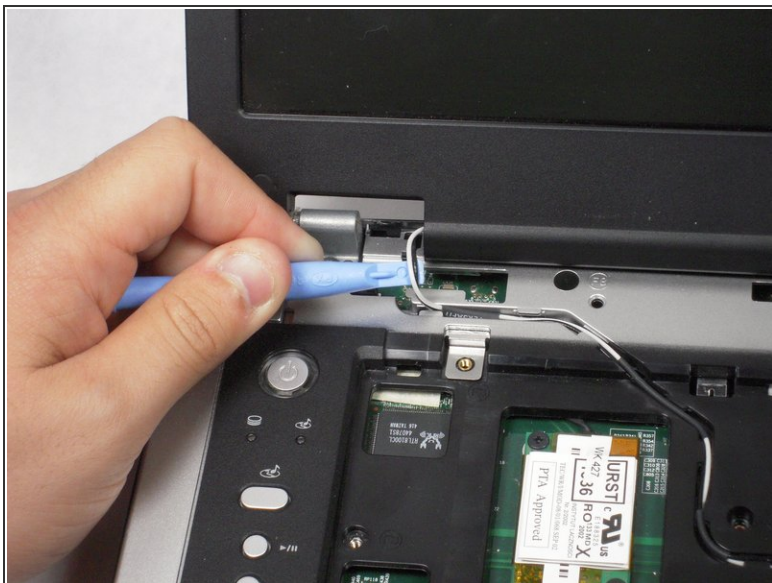
## Step 20



- Use the plastic opening tool to remove the wire.



## Step 21



- Gently pull the black and white wires out of the upper case.

⚠ Do not pull the wire too much, or you can damage the wire.

## Step 22



- Remove the 8.6 mm screw on left side of upper case.

## Step 23



- Remove two 8.6 mm screws on the back corners of the laptop.

## Step 24



- Lift up the display assembly to remove it.



## Step 25 — Upper Case



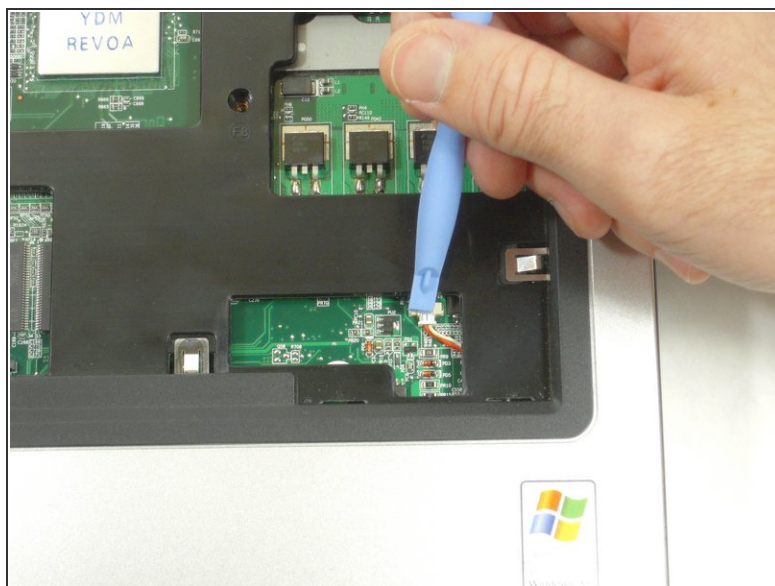
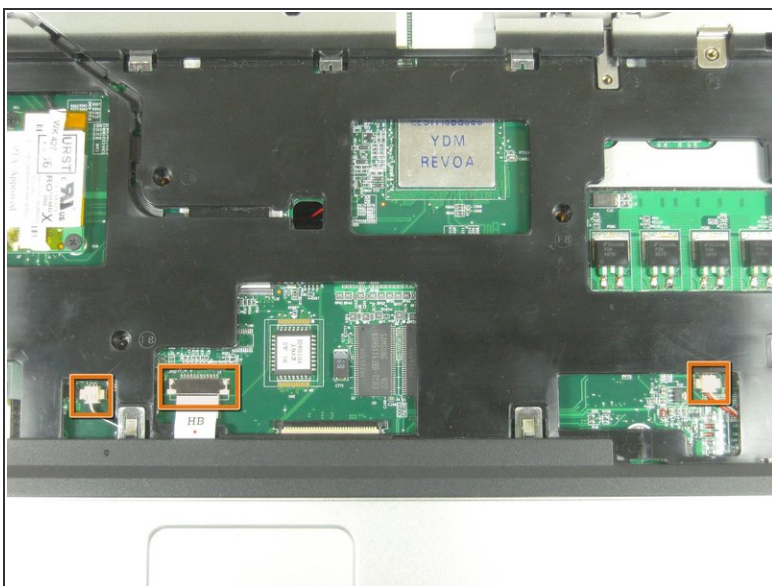
- Use the Phillips screwdriver to remove the two 3.7 mm screws from the battery compartment.
- Then remove the fourteen 8.6 mm screws from the bottom of the case.

## Step 26



- Use the screwdriver to remove six 8.6 mm screws from the top of the case.

## Step 27



- Use the plastic opening tool to remove the two speaker wire connectors and the trackpad connector from the motherboard.

## Step 28



- With the plastic opening tool, pry around the entire laptop to separate the upper case.



## Step 29



- Lift up the upper case to remove.

## Step 30 — Motherboard



- Using the Phillips Screwdriver, remove the two 8.6 mm screws from the front edge of the motherboard.

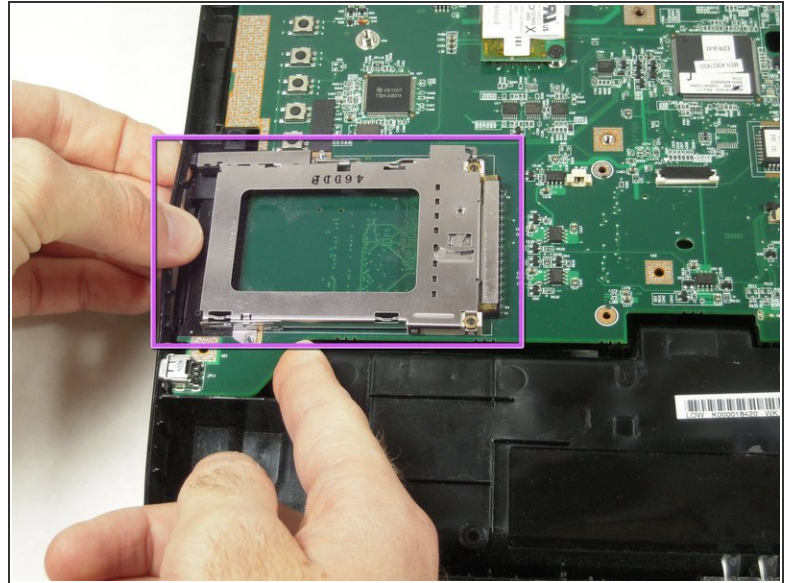
## Step 31



- Remove the four screws holding the ports to the rear panel using the 3/16" Wrench.

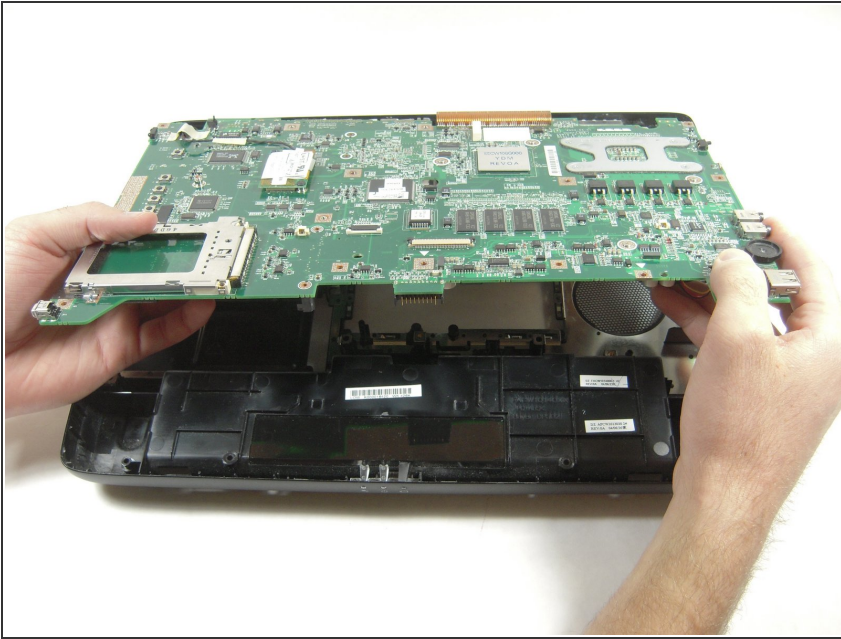


## Step 32



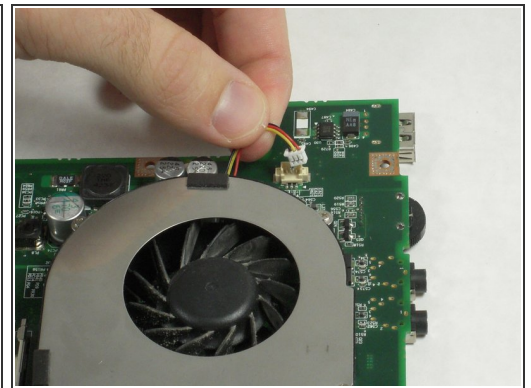
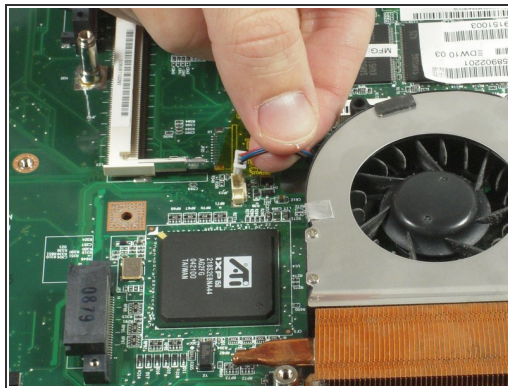
- Lift up on the front edge of the motherboard while gently prying the case away from the ports on the right side of the computer.
- Repeat with the left side.
- ❗ There is a button for the card slot on the left side of the computer that may pop out if pressed. This button must be held in place while removing the motherboard.

## Step 33



- Lift the motherboard's front edge up and then slide it forward.

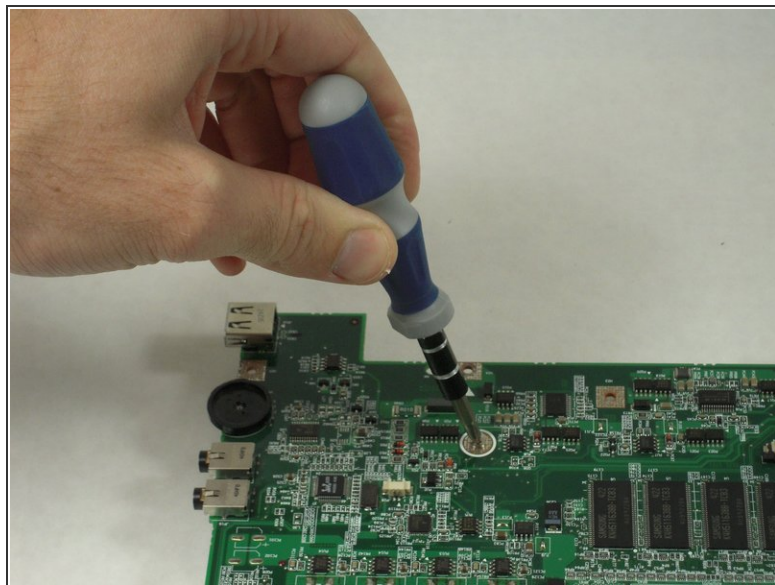
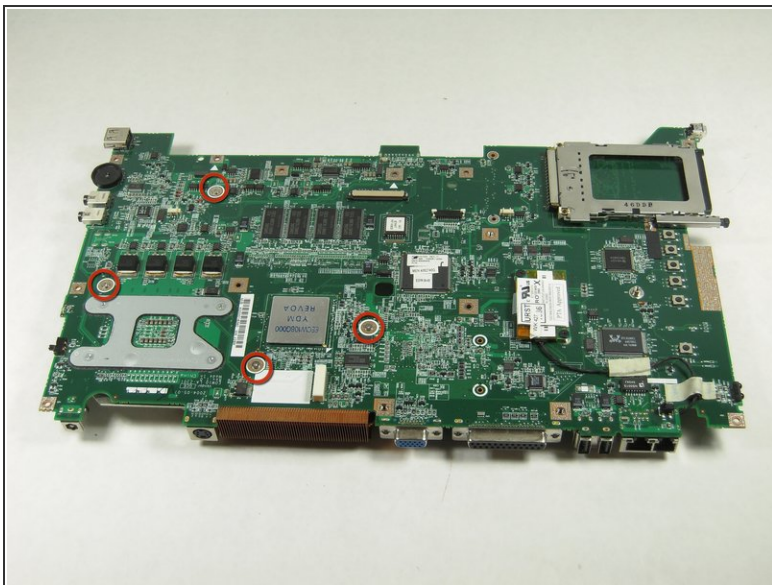
## Step 34 — Fans



- Remove cables connecting the fans with the motherboard.



## Step 35



- Turn over the motherboard.
- Remove the four silver screws with a Phillips screwdriver.

## Step 36



- Turn over the motherboard.
- Lift the fans up to remove them from the motherboard.

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