



# HP 15-f009wm Cooling System Replacement

Replace your malfunctioning Cooling System in your HP 15-f009wm notebook computer.

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## INTRODUCTION

This guide explains how to remove the Cooling System from the HP 15-f009wm notebook computer. This could be done to replace a malfunctioning Cooling System.

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### TOOLS:

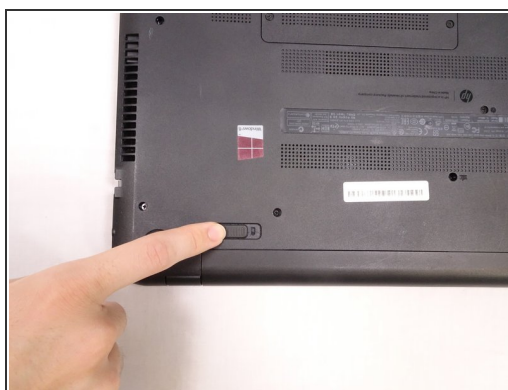
- [Phillips #1 Screwdriver](#) (1)
  - [iFixit Opening Tools](#) (1)
  - [Phillips #00 Screwdriver](#) (1)
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## Step 1 — Battery



- Turn laptop upside down.
- Flip the lock switch to the unlocked setting.

## Step 2



- Flip the release switch.
- Once the flip is switched, the battery should pop out.

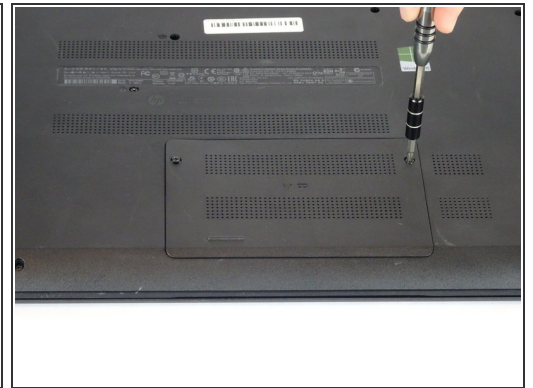
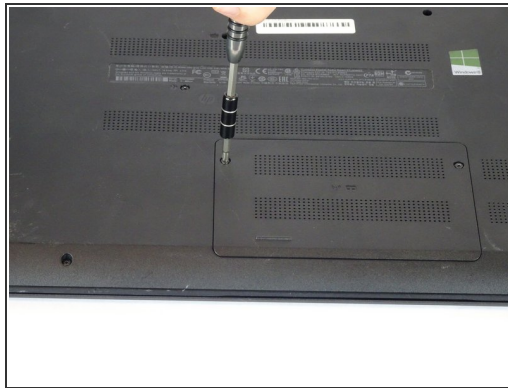


### Step 3



- Slide the battery out.

### Step 4 — RAM



- Remove the two Phillips #1 screws from the RAM panel.

## Step 5



- Use the plastic opening tool to pop the panel off.

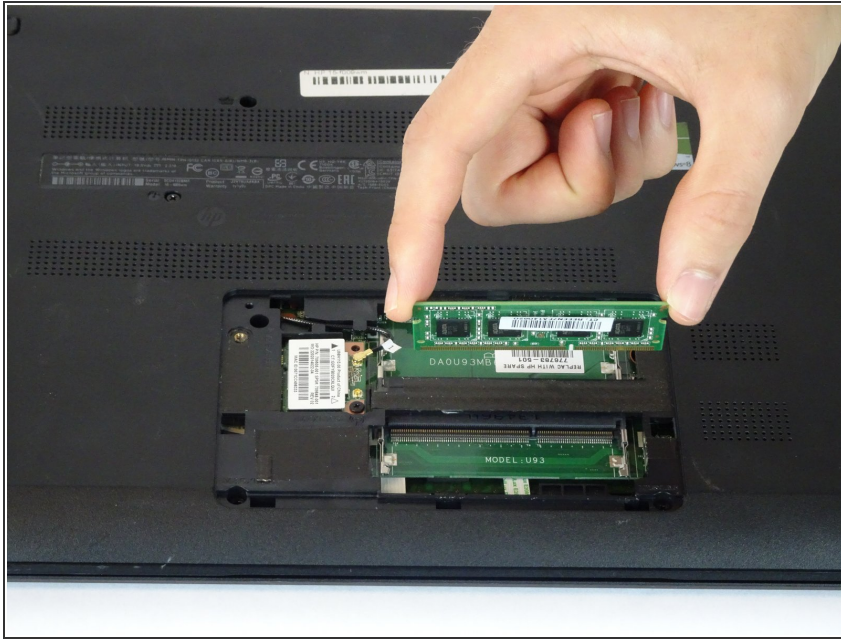
## Step 6



- Release the tabs on each side of the chip by simultaneously pushing each tab away from the RAM.

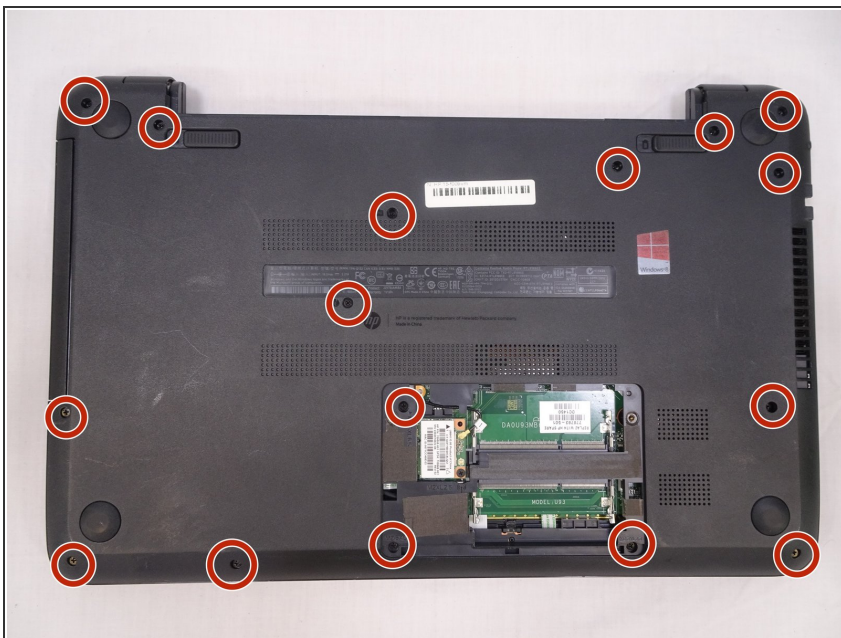
 These tabs lock the chip in place and releasing them will cause the chip to "pop" up.

## Step 7



- Remove the RAM chip from the laptop.

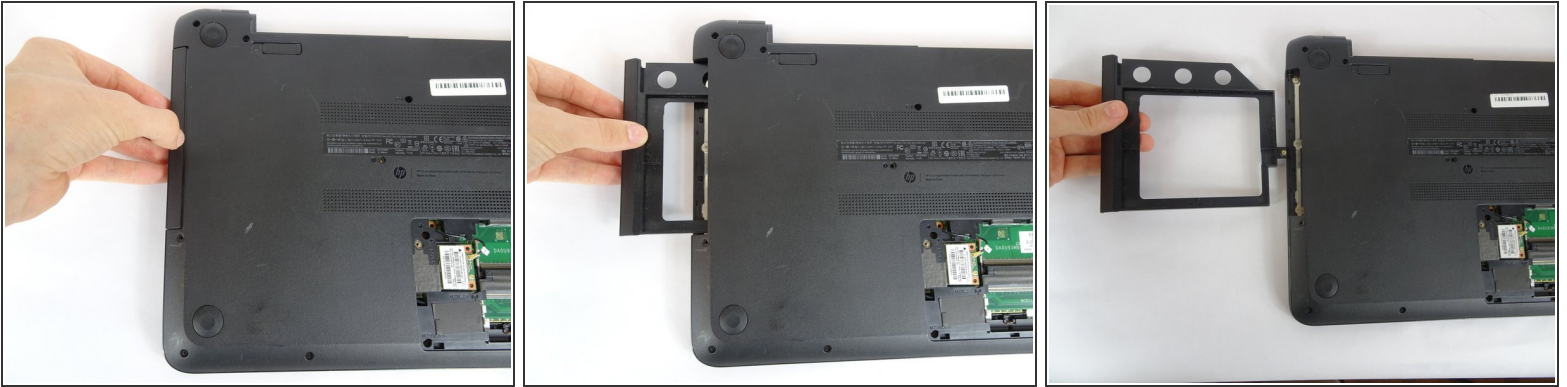
## Step 8 — Hard Drive



- Remove the sixteen 7mm Phillips #1 screws from the bottom panel.



## Step 9



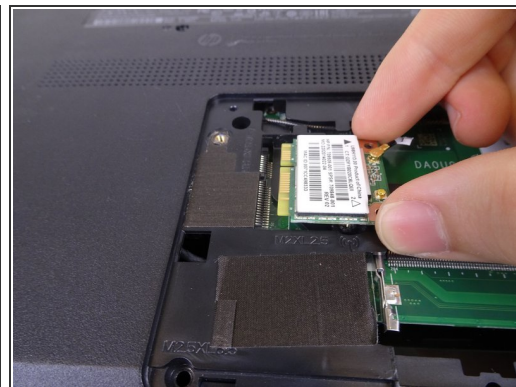
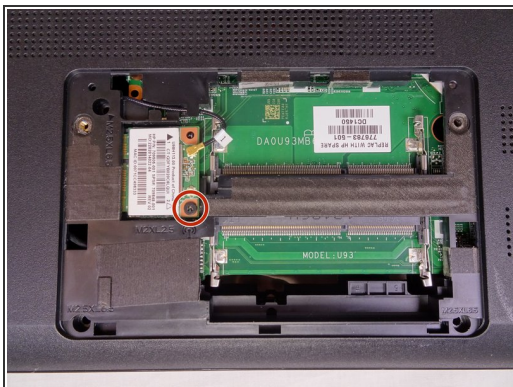
- Pull the disk drive out of the laptop.

## Step 10



- Remove the three 2mm Phillips #00 screws found underneath the disk drive.

## Step 11



- Remove the single 4mm Phillips #1 screw from the Wi-Fi card.
- Pull the Wi-Fi card out of the motherboard.

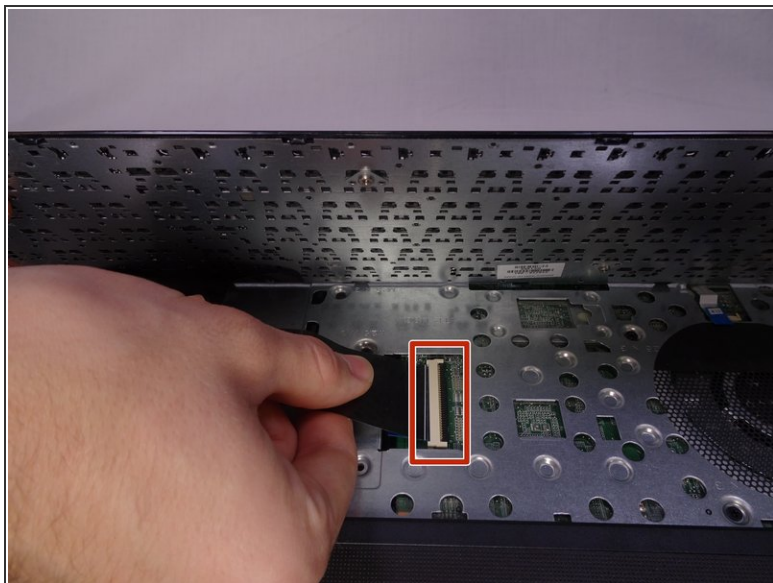
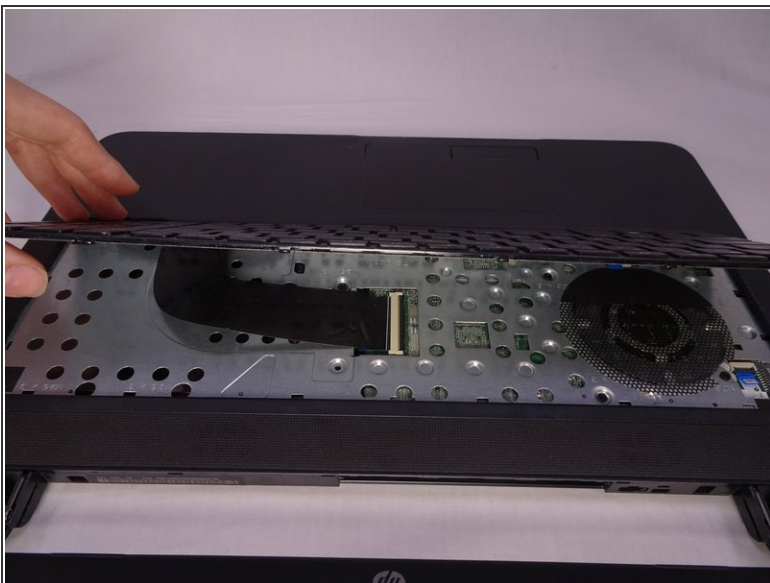
## Step 12



- Open the laptop.
- Use a plastic opening tool to pop out the keyboard by starting at the top and working your way around the perimeter.

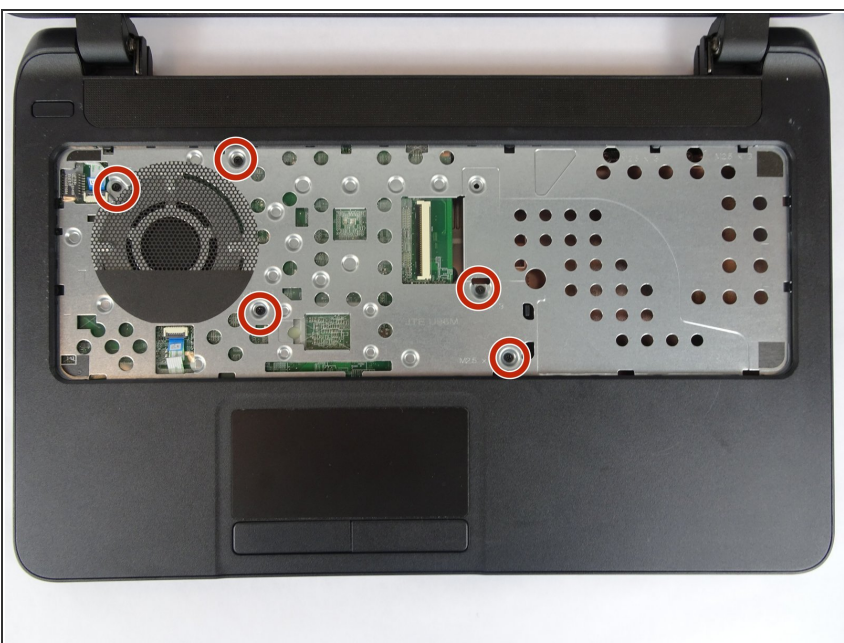


## Step 13



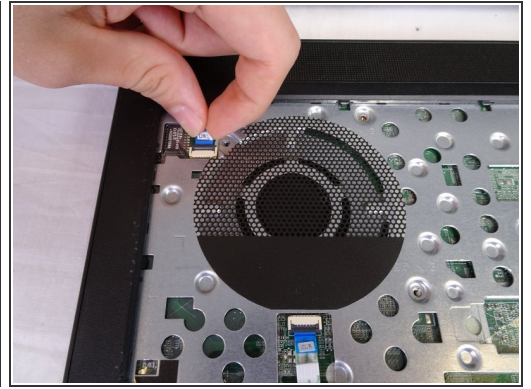
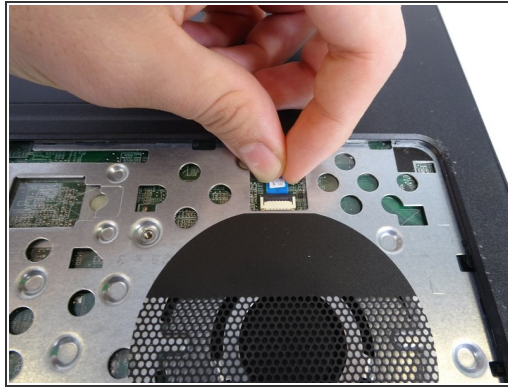
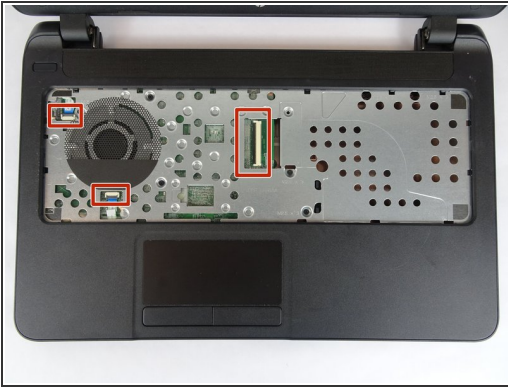
- Open the screen up until it lays flat and rotate the laptop until the screen is closest to you.
- Lift the keyboard from the laptop.
- Use a spudger to lift up the black latch on the ZIF connector and remove the ribbon cable.

## Step 14



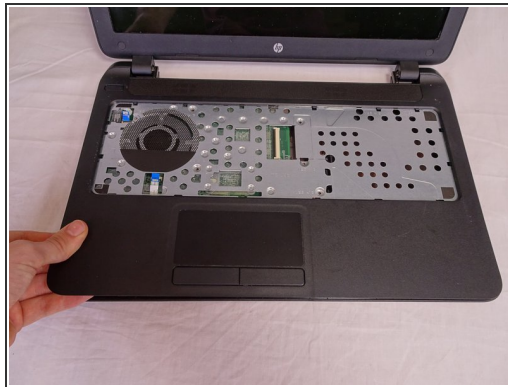
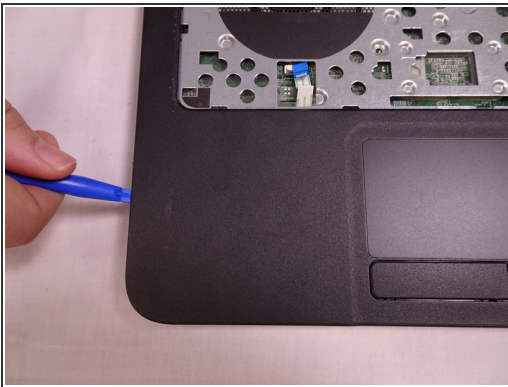
- Remove the five 7mm Phillips #1 screws found underneath the keyboard.

## Step 15



- Use a spudger to lift the black tabs on the ZIF connectors.
- Remove the ribbon cables from the ZIF connectors.

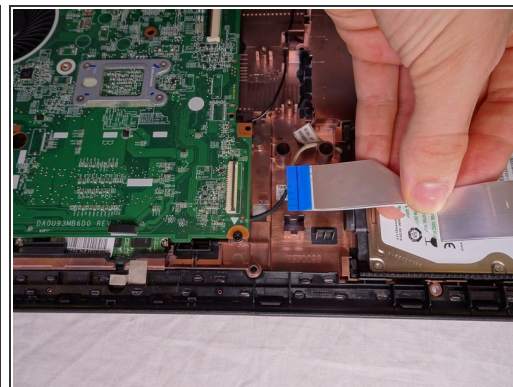
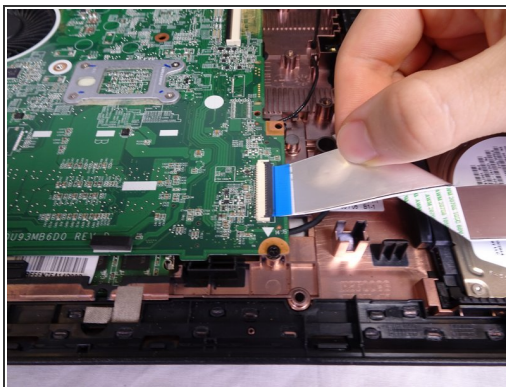
## Step 16



- Use a plastic opening tool to pop the palm rest off of the laptop.
- Lift and remove the palm rest.



## Step 17



- Use a spudger to lift up the black latch on the ZIF connector.
- Remove the USB/AUX port ribbon cable from the ZIF connector on the motherboard.

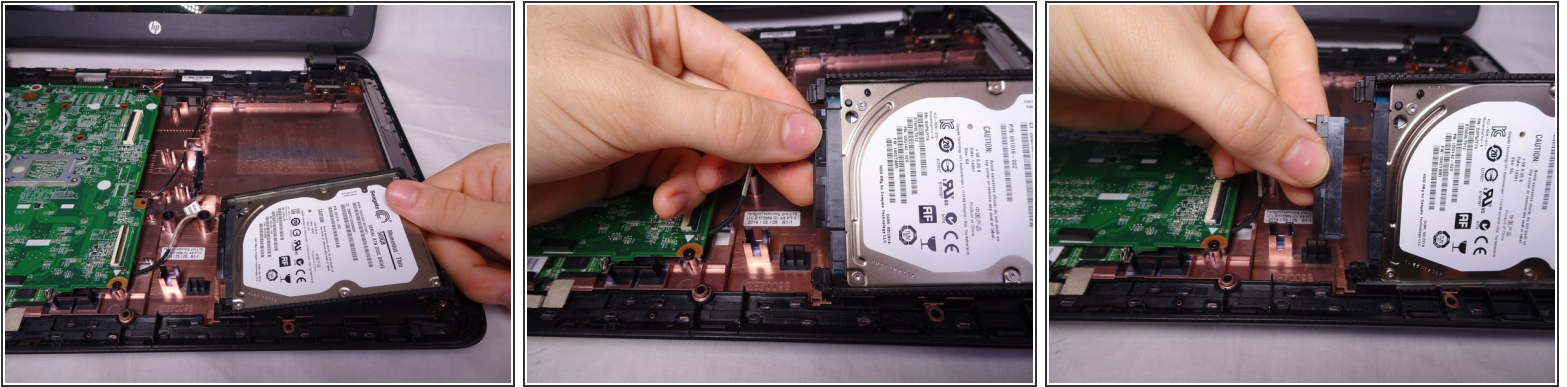
## Step 18



- Remove the single 7mm Phillips #1 screw from the USB/AUX board.
- Remove the USB/AUX board from the laptop.

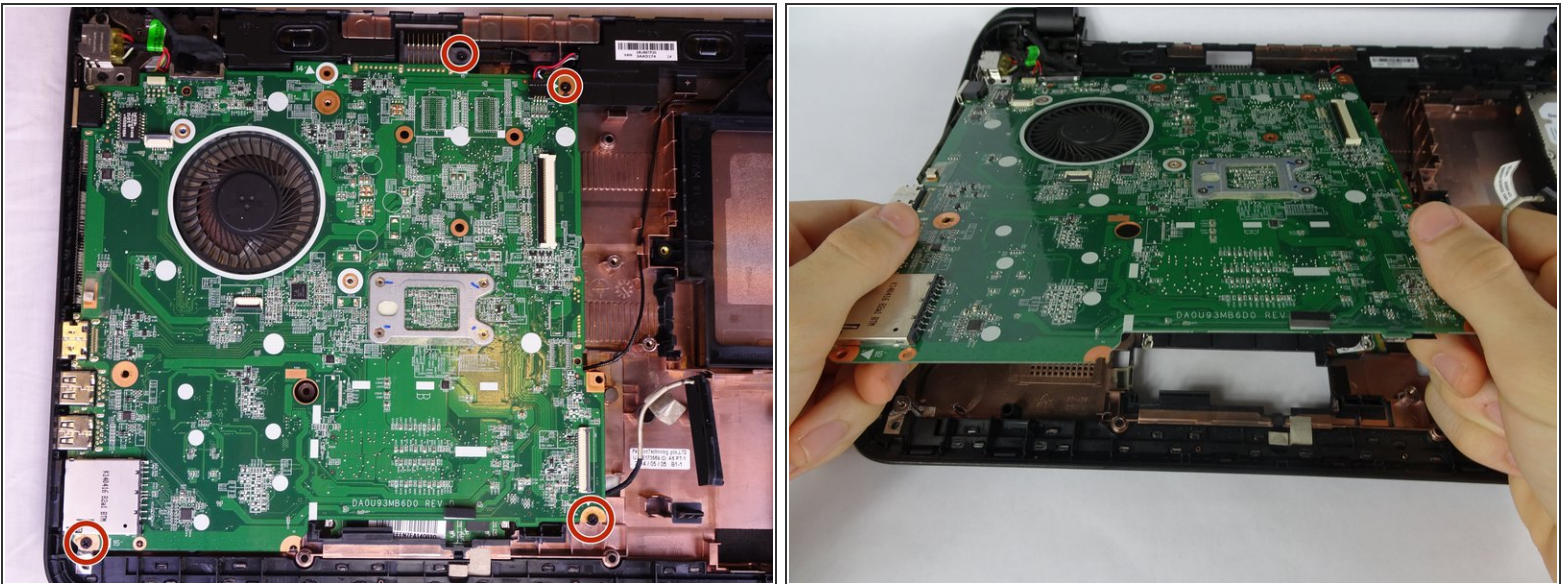


## Step 19



- Lift the Hard Drive from the laptop.
- Disconnect the hard drive from the motherboard.

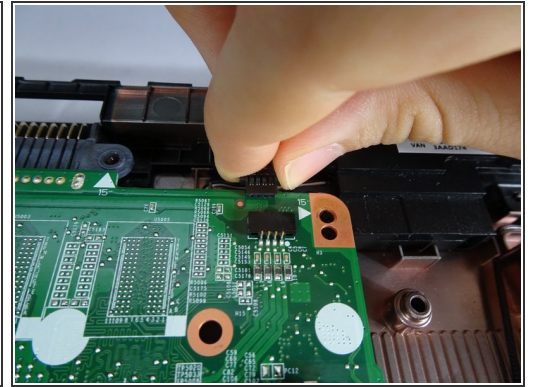
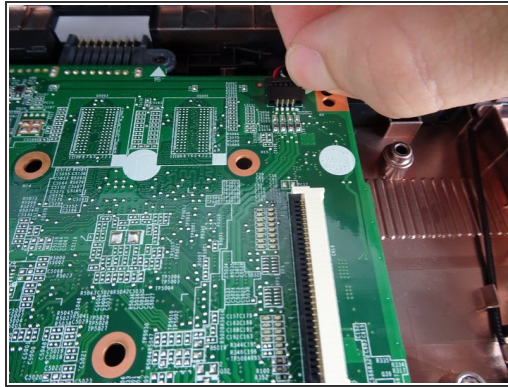
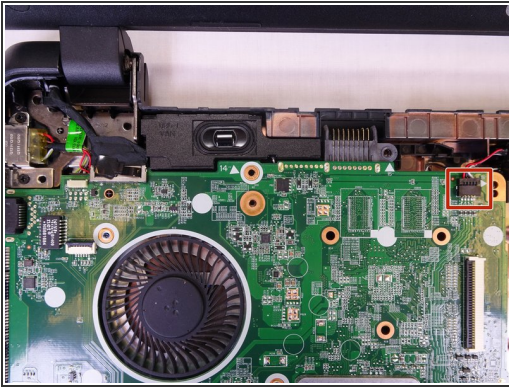
## Step 20 — Motherboard



- Remove the four 4mm Phillips #1 screws from the motherboard.
- Lift the motherboard up from the computer.
  - ⓘ There will be three wires connected underneath.

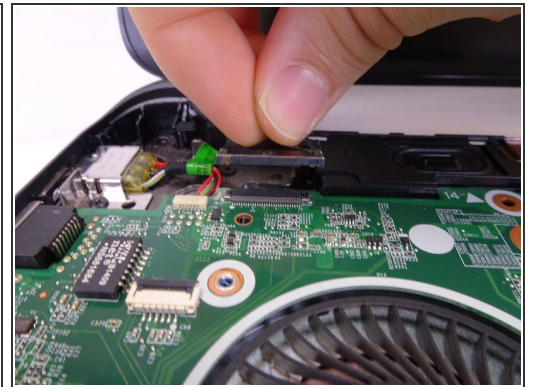
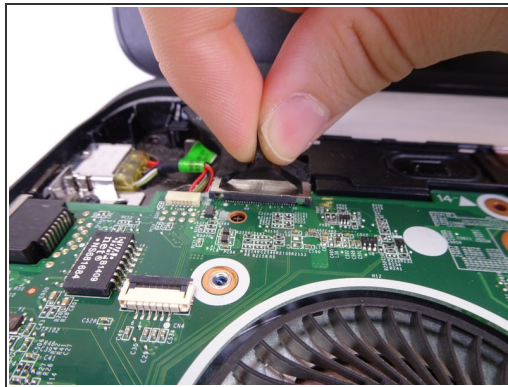
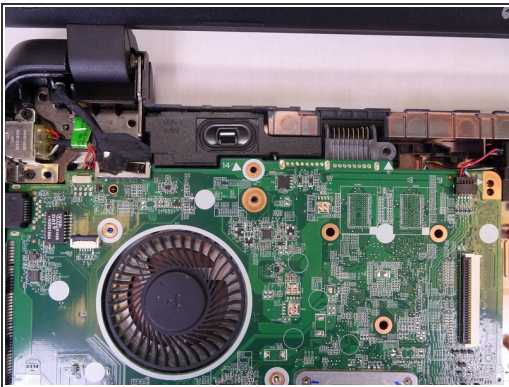


## Step 21



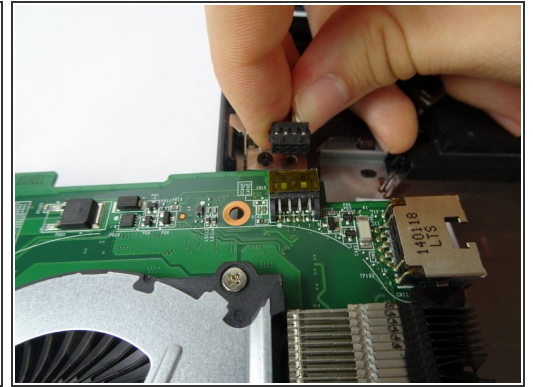
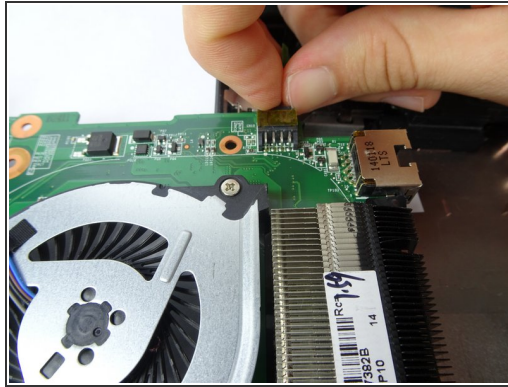
- Disconnect the speaker.

## Step 22



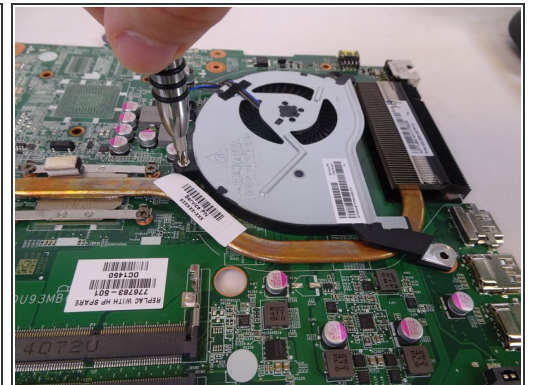
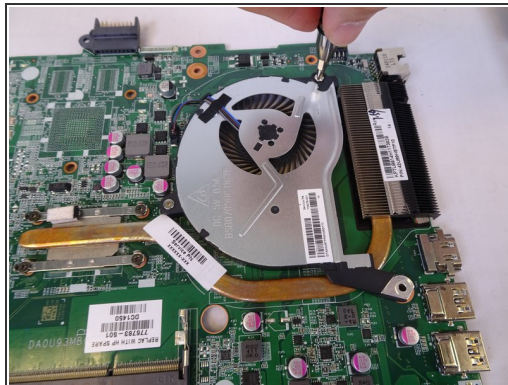
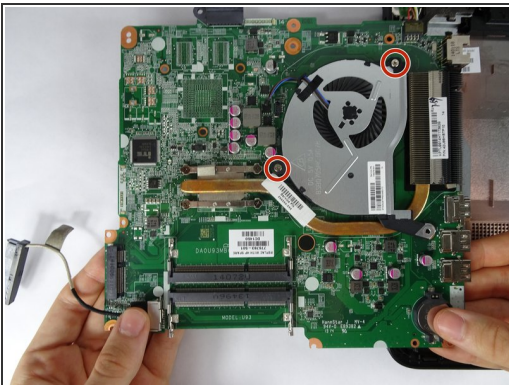
- Remove the display connection wire. Lift the connection straight up from the motherboard.

## Step 23



- Flip the motherboard over.
- Disconnect the charging port wire from the motherboard.

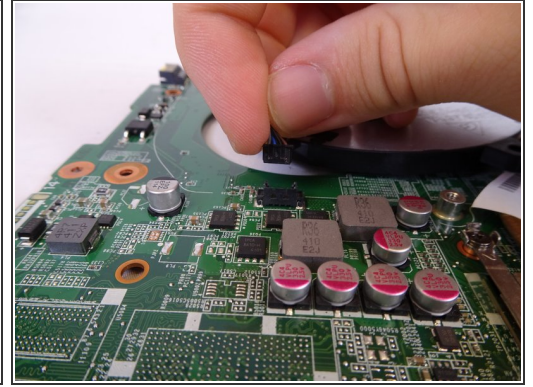
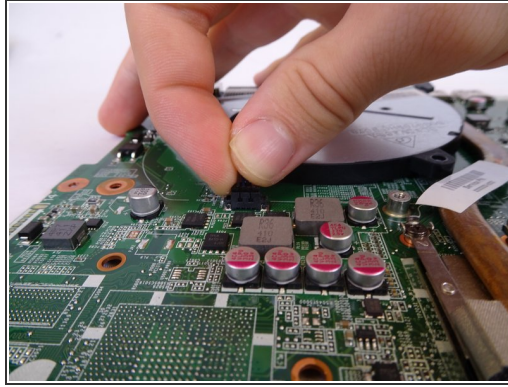
## Step 24 — Cooling System



- Use the PH1 Screwdriver to remove the two screws (7 mm) which hold the fan in place.



## Step 25



- The fan will now only be connected via its connection wire.
- Unplug the connection wire.

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