



HP Pavilion 15-p046nr Motherboard Replacement

How to replace the motherboard of an HP Pavilion 15-p046nr.

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INTRODUCTION

If your motherboard no longer works, you've come to the right place. This guide will walk you through how to replace your notebook's motherboard. The motherboard is the main hub for all of the components of your computer and is critical for operation. You may need to replace your motherboard if your [computer won't boot after already replacing the power adapter](#) or [if the screen is black and the caps lock is flashing](#). You will need a magnetic project mat, Phillips 00 screwdriver, and a plastic opening tool to be able to successfully replace the motherboard. Before you get started, be sure to [completely disconnect power from your device](#).



TOOLS:

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



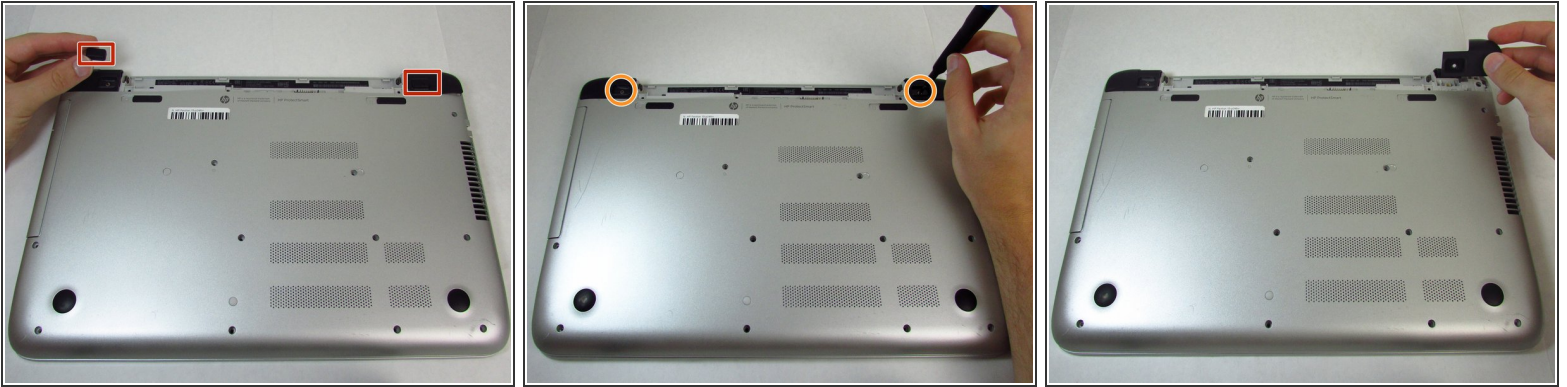
- Flip the laptop over so the bottom is facing up.
- Place your finger on the top left-hand slide button with the lock symbol.
- i* Moving the slide does require some force.
- Slide the button to the right so that an unlocked symbol is visible.

Step 2



- Place your finger or thumb on the top right-hand slide with the battery symbol visible.
- Slide the button to the left.
- i* Moving the slide will require some force.
- Lift the battery off the computer with your thumb.
- i* You will not need to slide the right button with the battery to reinstall the battery.

Step 3 — Integrated Keyboard



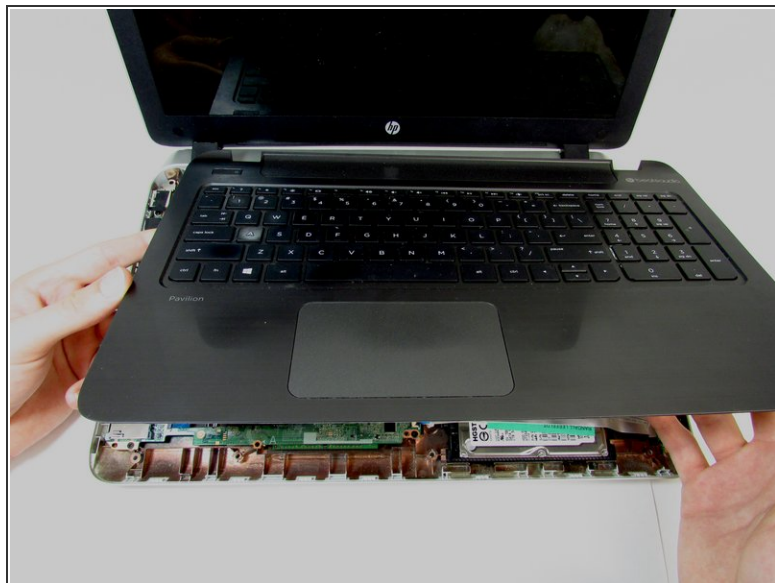
- Remove screw covers from the hinge covers on the upper left and right side.
- Unscrew one 7 mm screw from each hinge cover using the Phillips #00 screwdriver.
- Remove hinge covers by pulling up and out on the top of the cover.

Step 4



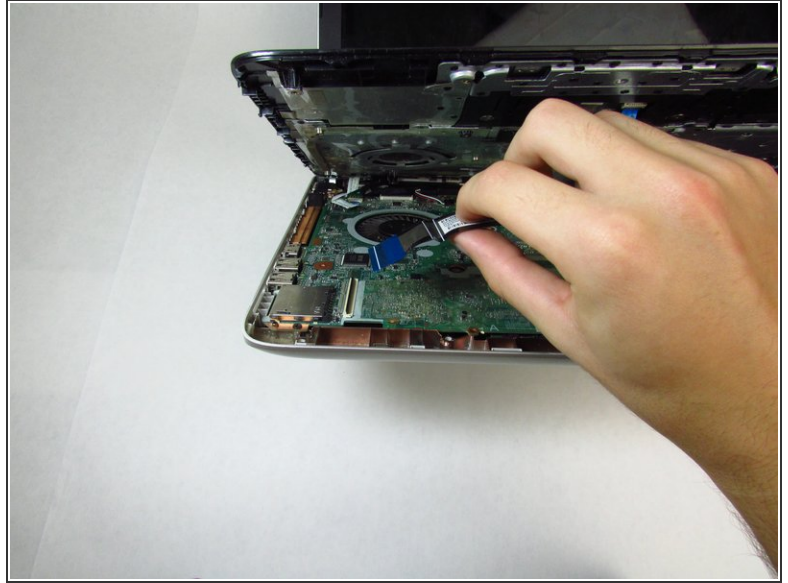
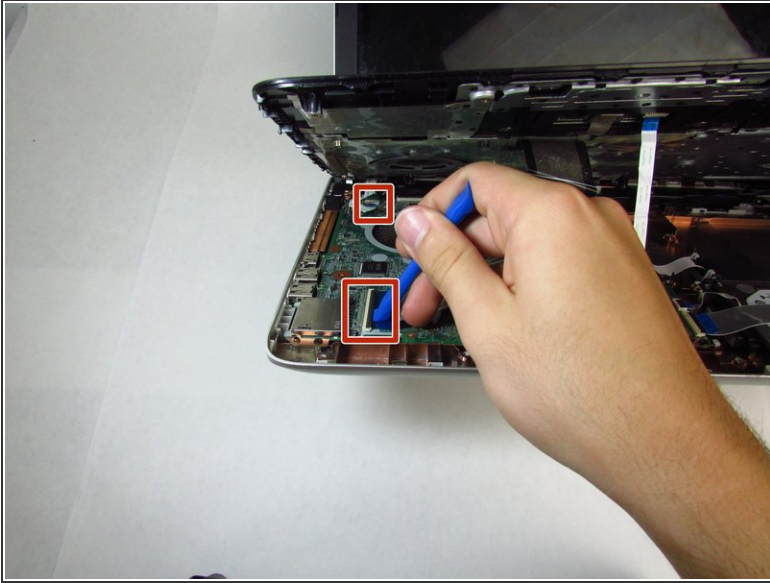
- Remove thirteen 7 mm screws from the back panel using the Phillips #00 screwdriver.
- Remove three 5 mm screws from the back panel using the Phillips #00 screwdriver.
- Grab the disk drive on the left side and pull the disk drive out completely.
- Flip the laptop over and open the display.

Step 5



- Run the plastic opening tool along the entire edge of the keyboard to separate the keyboard from the base of the laptop.
 - Gently lift the keyboard tray up.
- ⚠ Use care to lift the keyboard off of the device. The keyboard is still attached by ribbon cables.

Step 6




- Use the tip of the blue plastic opening tool to gently flip-up the grey locking flap of the two ribbon cables connecting the keyboard to the device.
- ⚠ Make sure to only lift the flap and not the connector socket because the socket easily breaks off.
- Grab the ribbon cable and gently pull away from the socket.
- 🔧 To reinstall, insert the ribbon cable into the connector and close the flap on the black line.

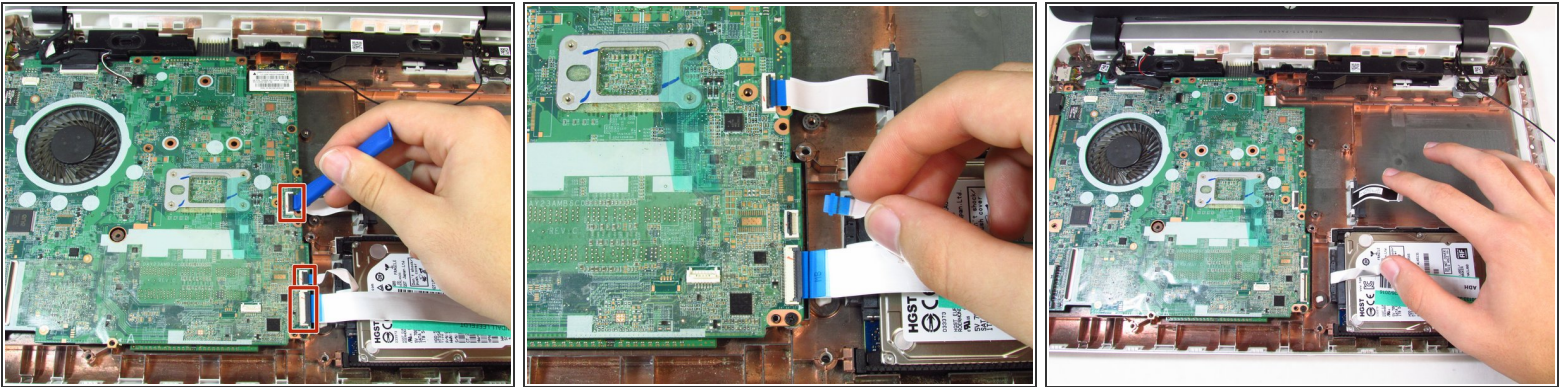
Step 7




- Lift the keyboard up and away from the device.

 Removing the keyboard exposes the motherboard and its sensitive components. Ensure no tools or items are set on the motherboard or it could cause damage.


Step 8 — Motherboard



- Use the tip of the blue plastic opening tool to gently flip-up the grey locking flap of the three ribbon cables on the bottom right corner of the motherboard.

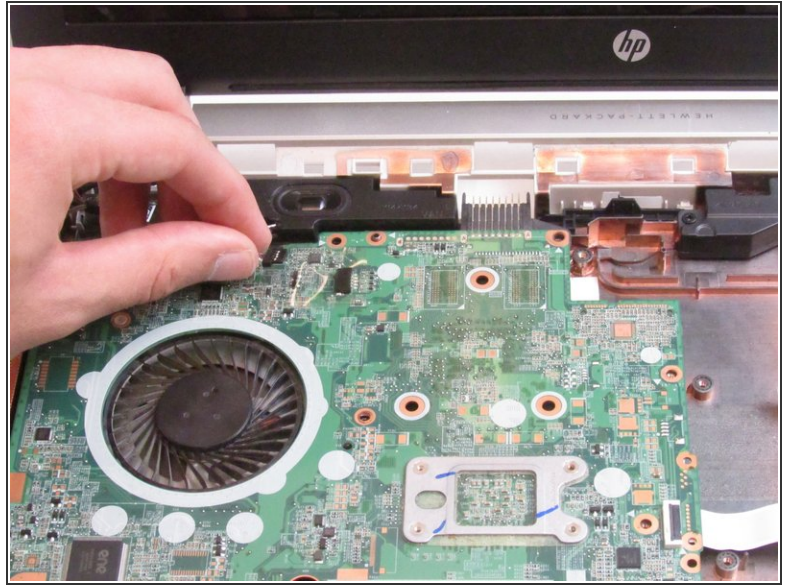
 Make sure to only lift the flap and not the connector socket because the socket easily breaks off.

- Grab each ribbon cable and gently pull away from the socket.

 To reinstall, insert the ribbon cable into the connector and close the flap on the black line.

- Move the ribbon cables away from the motherboard.

Step 9

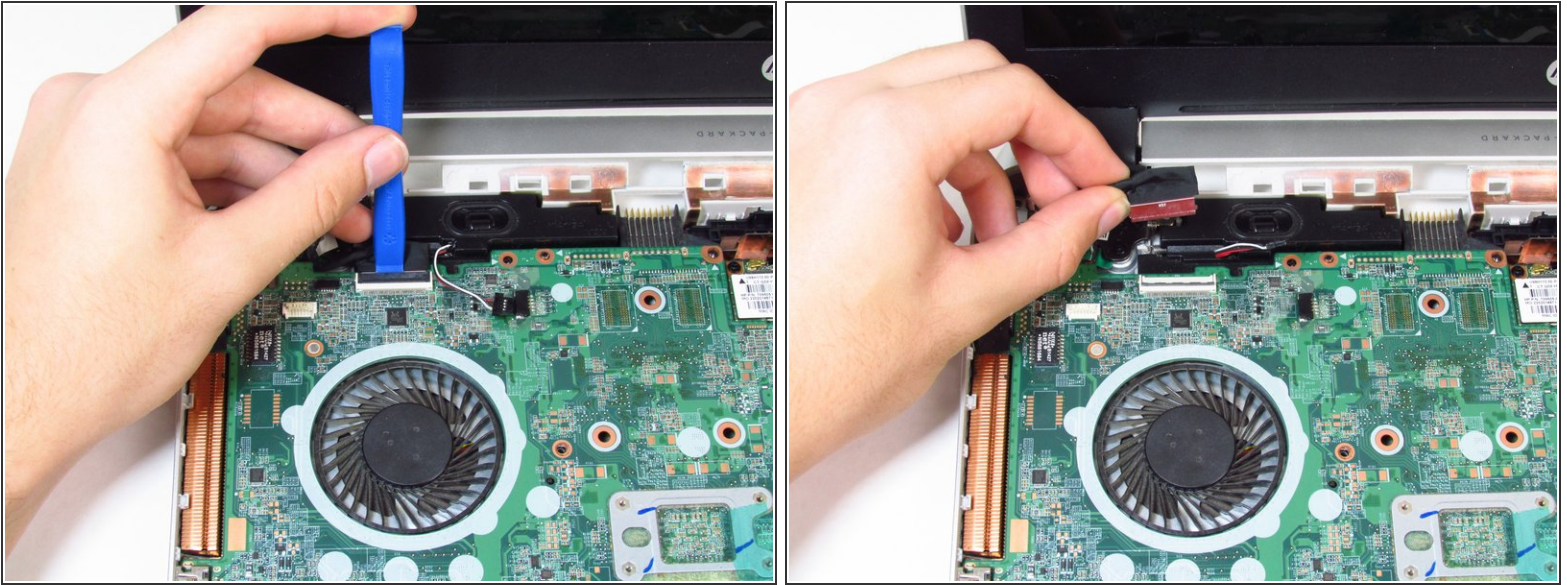


- To disconnect the speakers, carefully pull on the cables that connect to the motherboard from the speaker system.

⚠ Be careful not to yank or jerk the cables because they can be easily broken.

- Move the speaker cables away from the motherboard.

Step 10



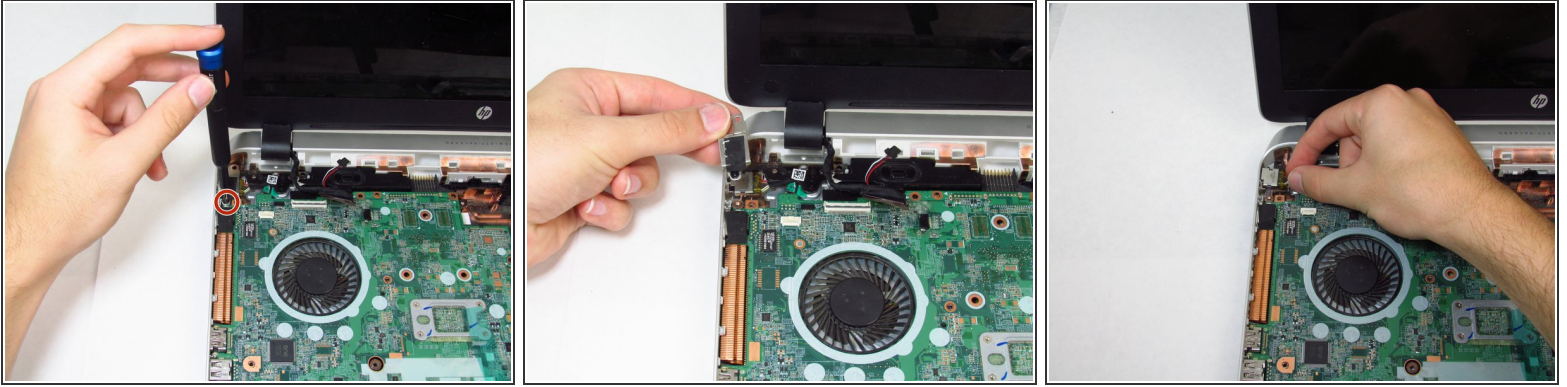
- Use the tip of the blue plastic opening tool or your fingernail to gently flip-up the grey locking flap of the webcam ribbon cable.
- ⚠ Make sure to only lift the flap and not the connector socket because the socket easily breaks off.
- Grab the ribbon cable cable and gently pull away from the socket.

Step 11



- Unscrew one 6 mm screw on the wireless card with the Phillips #00 screwdriver.
- ⓘ The wireless card will angle upwards when the screw is removed.
- Gently pull the wireless card away from the motherboard with the same angle that it rests.

Step 12



- In the upper left corner of the motherboard, unscrew one captive screw from the charger port cover with the Phillips #00 screwdriver.
- ⓘ "Captive screws" are those which will cannot be removed, but will instead remain within their screw hole after being disengaged.
- Remove the charger port cover.
- Carefully pull upwards on the charger port to disconnect it.
- ⓘ The charger port will stay attached to the device.

Step 13



- Remove the four 6 mm screws from the motherboard using the Phillips #00 screwdriver.
- Gently lift the motherboard directly up from the holding slots and remove the motherboard from the device.
- ⚠ Be careful not to put too much pressure on the motherboard while lifting it up, as there are many fragile circuits and chips on it.
- Remove the motherboard from the device once it's clear of all cables and slots.
- ☑ Be sure that all cables are clear before reinstalling the motherboard as to not catch any cables beneath.

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