



Wi-Fi Module Replacement on Framework Laptop 12

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INTRODUCTION

Follow this guide to replace or upgrade the Wi-Fi card in your Framework Laptop 12.

The Wi-Fi card is a modular card that enables Wi-Fi and Bluetooth functions. While the Framework Laptop 12 works with M.2 2230 Wi-Fi cards, Framework recommends replacing it with the same model of card that the system originally came with.

The Wi-Fi card has delicate antenna connectors. Be sure to follow the instructions carefully to avoid damaging them.

You'll encounter some component terms in this guide:

- The **Input Cover** is the part that contains the Keyboard and Touchpad.



TOOLS:

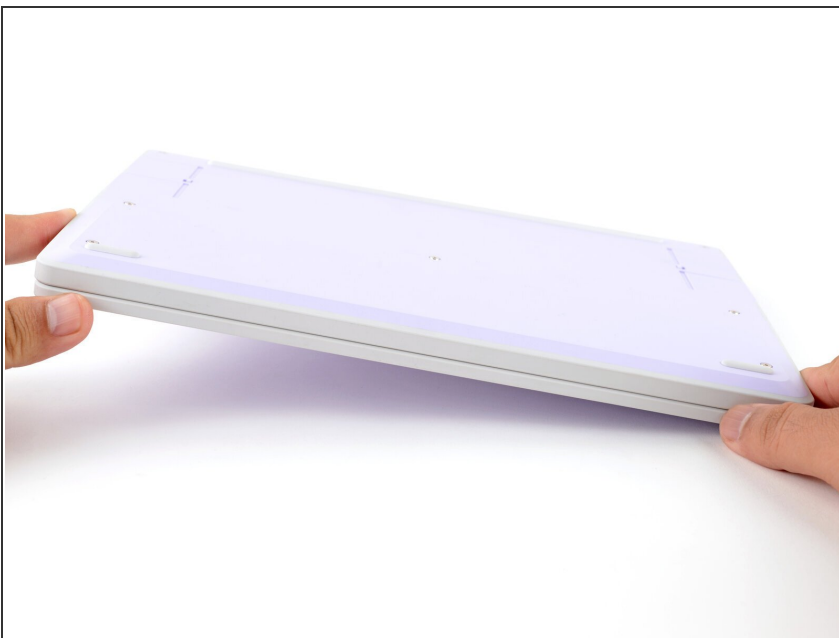
- [Framework Screwdriver](#) (1)
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Step 1 — Power down your Laptop



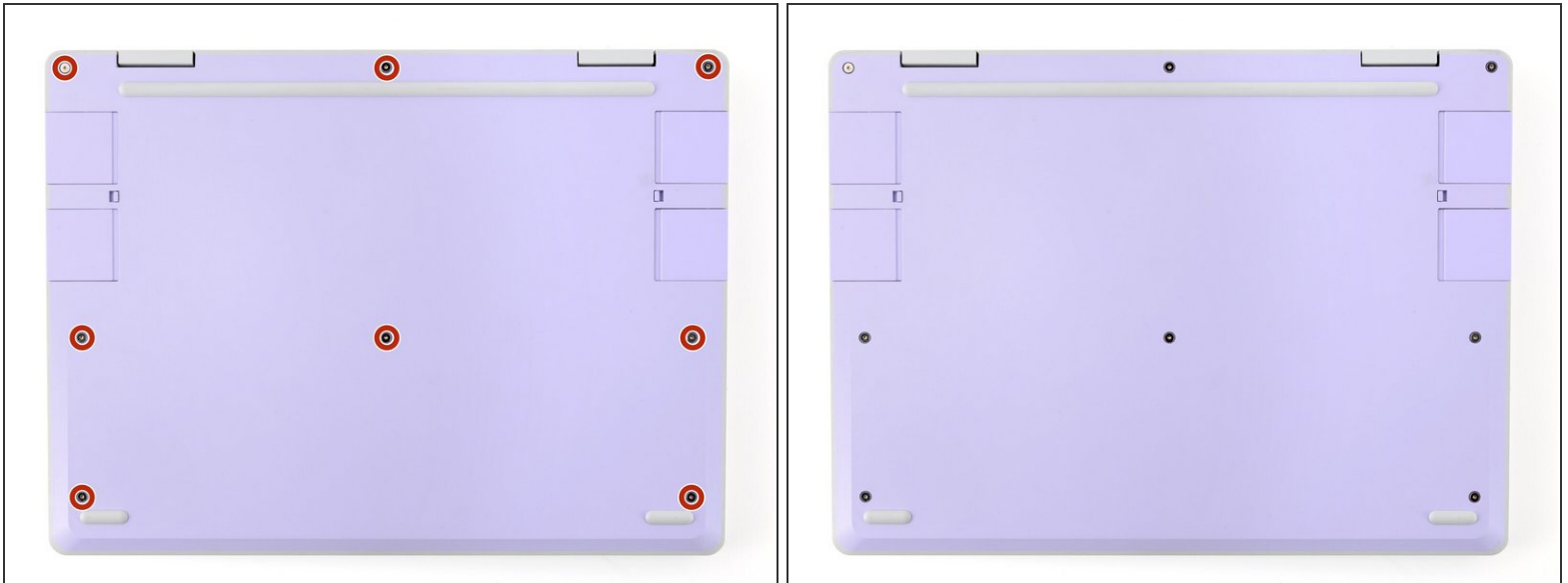
- Before you begin repairs, unplug your Laptop and **shut it down from the operating system**. This ensures that the Laptop isn't in standby/suspend mode.
 - ⓘ The indicator LEDs along the edges should be unlit. The Laptop should be silent.
 - ⓘ If you accidentally turn on the Laptop during repair, hold the power button down for 10 seconds to shut it down.
- Make sure your Framework Screwdriver has the T5 Torx bit (labeled as T-5) facing outwards. If it's not, pull the bit out and flip it.

Step 2 — Set your Laptop down



- Set your Framework Laptop face-down on a clean work surface.

Step 3 — Loosen the bottom screws



- Use your Framework Screwdriver to fully loosen the eight captive T5 Torx screws on the bottom of your Laptop.
 - ① Most screws in your Framework Laptop (including these) are captive—they're designed to stay in place after you loosen them.
 - ① Your Laptop comes with a spare set of screws [in the frame above the battery](#). Be careful—the replacement screws aren't captive.

Step 4 — Flip your Laptop over



- Flip your Laptop over so it's face-up on your work surface.

Step 5 — Open your Laptop



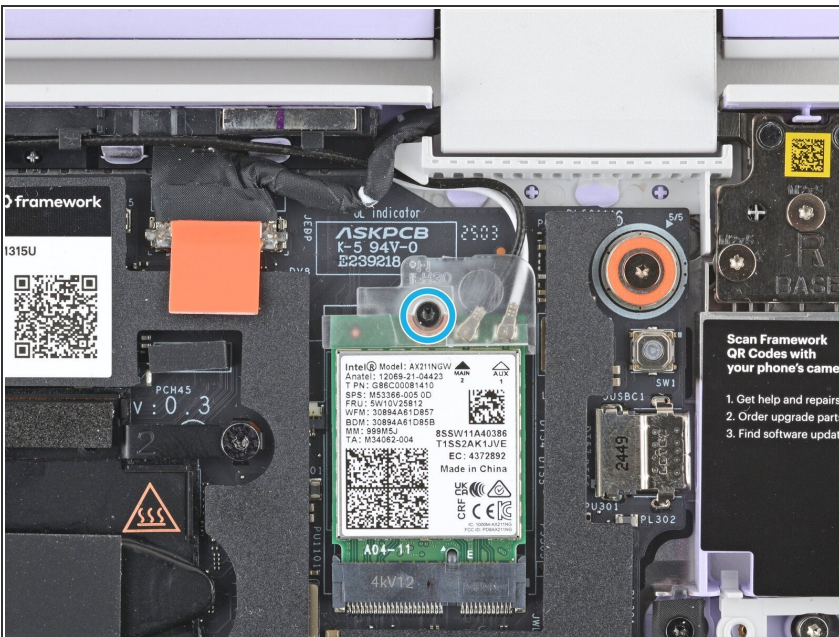
- Open the Laptop lid so that both the screen and the base lie flat on your work surface.

Step 6 — Remove the Input Cover



- Use your fingers to grip the Input Cover in the hinge cutouts.
- Lift upwards to swing the Input Cover up from the base of the Laptop.
 - ⓘ There are magnets holding the Input Cover down, so you'll feel some resistance. If it feels like a lot of force is required, check that you've fully loosened all the screws on the bottom of your Laptop.
- Remove the Input Cover.

Step 7 — Loosen the Wi-Fi card screw



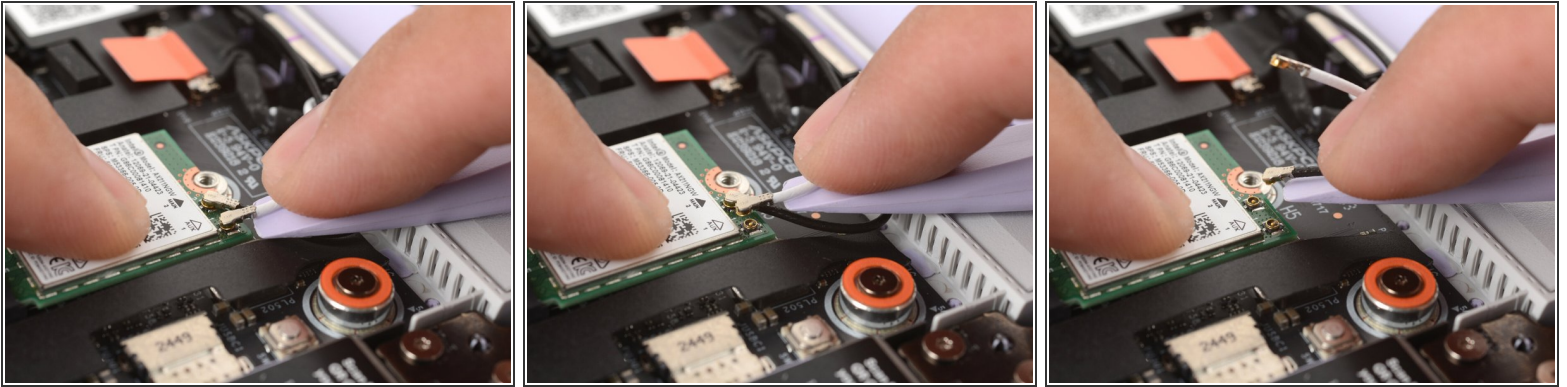
- Use your Framework Screwdriver to loosen the captive T5 Torx screw securing the Wi-Fi card bracket.
 - ⓘ The Wi-Fi card will pop up slightly when you unfasten the bracket.

Step 8 — Remove the Wi-Fi card bracket



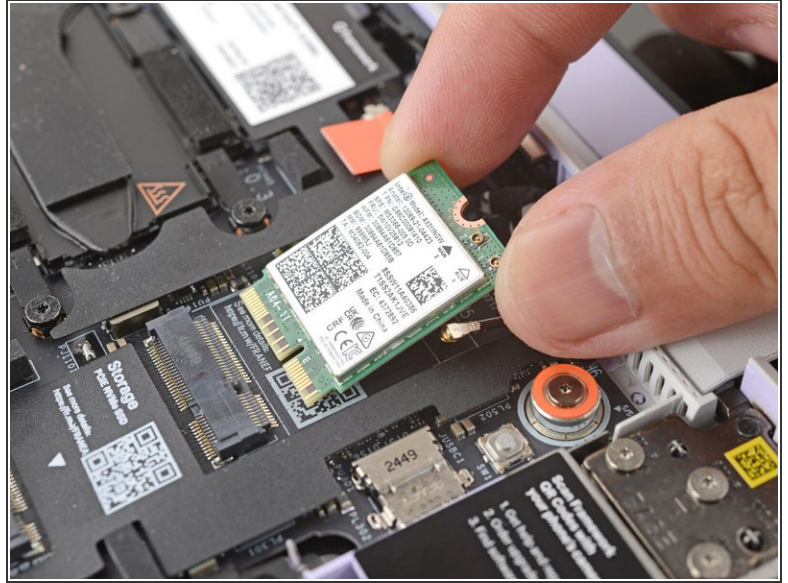
- Grab the Wi-Fi card bracket with your fingers and slide it off the top of the Wi-Fi card.
- Remove the bracket and store it in a safe location for reassembly.

Step 9 — Disconnect the antenna cables



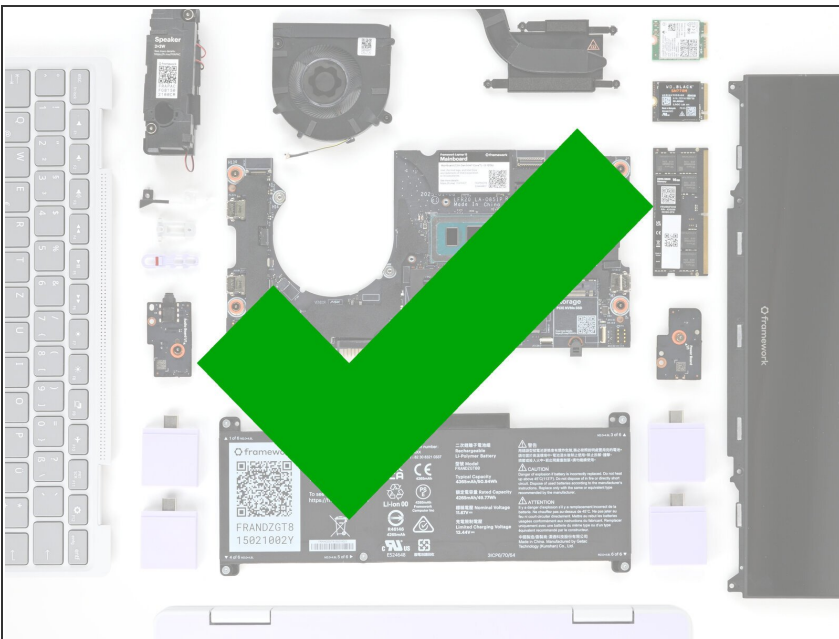
- ① The Wi-Fi card has two delicate [coaxial cable connectors](#). Follow this step carefully to avoid damaging them.
- Press and hold the Wi-Fi card down with your finger.
- Slide the flat edge of your Framework Screwdriver under the white antenna cable, as close to the metal head as possible.
- Gently lift the connector straight up to disconnect the white antenna cable.
- Repeat the procedure with the black antenna cable.

Step 10 — Remove the Wi-Fi card



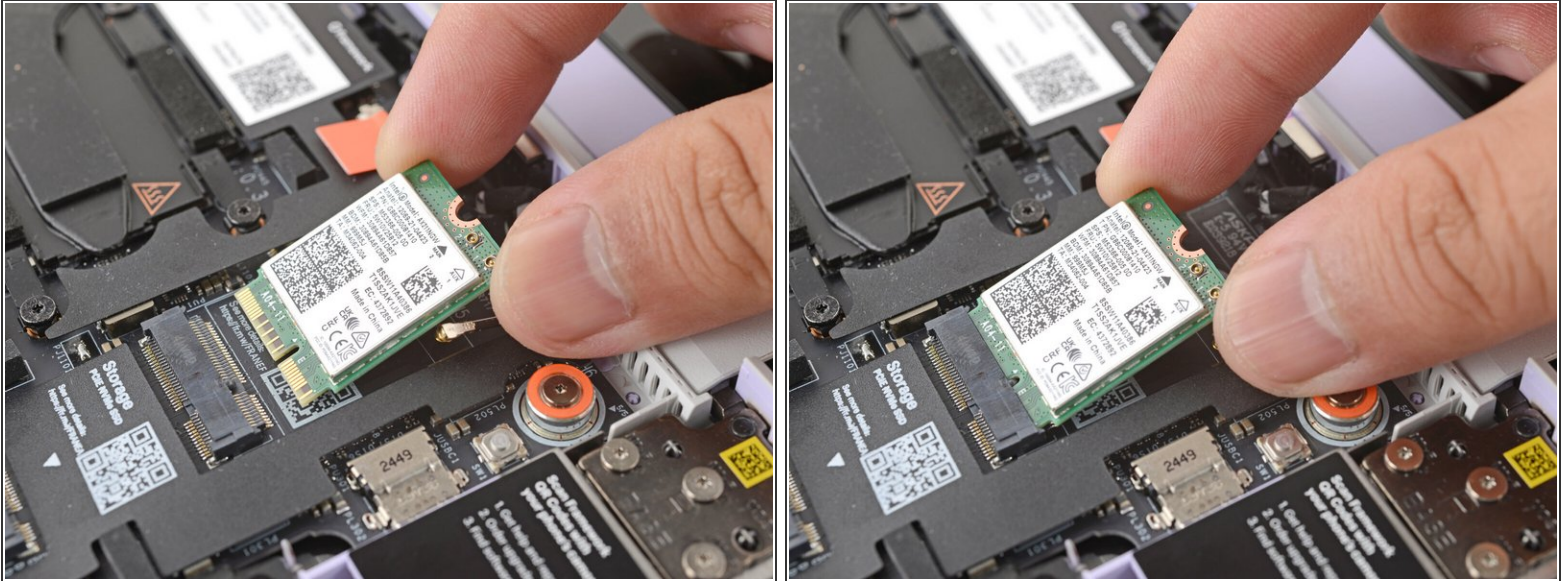
- Grab the Wi-Fi card by the edges and pull it out of its socket.
- Remove the Wi-Fi card.

Step 11 — Disassembly complete



📘 Congratulations on completing disassembly! **The remaining steps will show how to reassemble your Framework Laptop.**

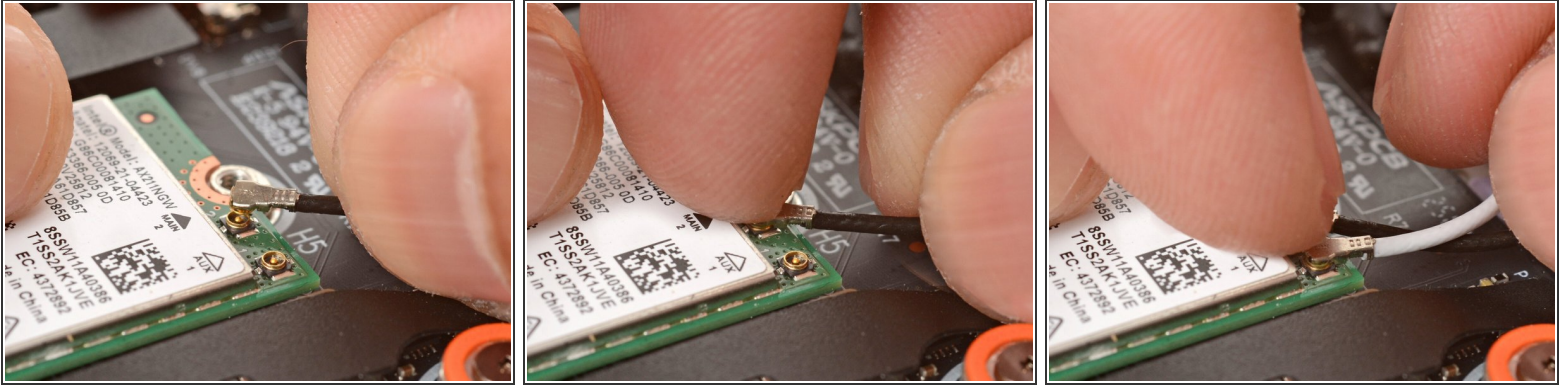
Step 12 — Install the Wi-Fi card



⚠ Hold the Wi-Fi card by its edges. Don't touch the gold contacts with your fingers. If you do, wipe the contacts with a clean, lint-free cloth to remove any finger oils.

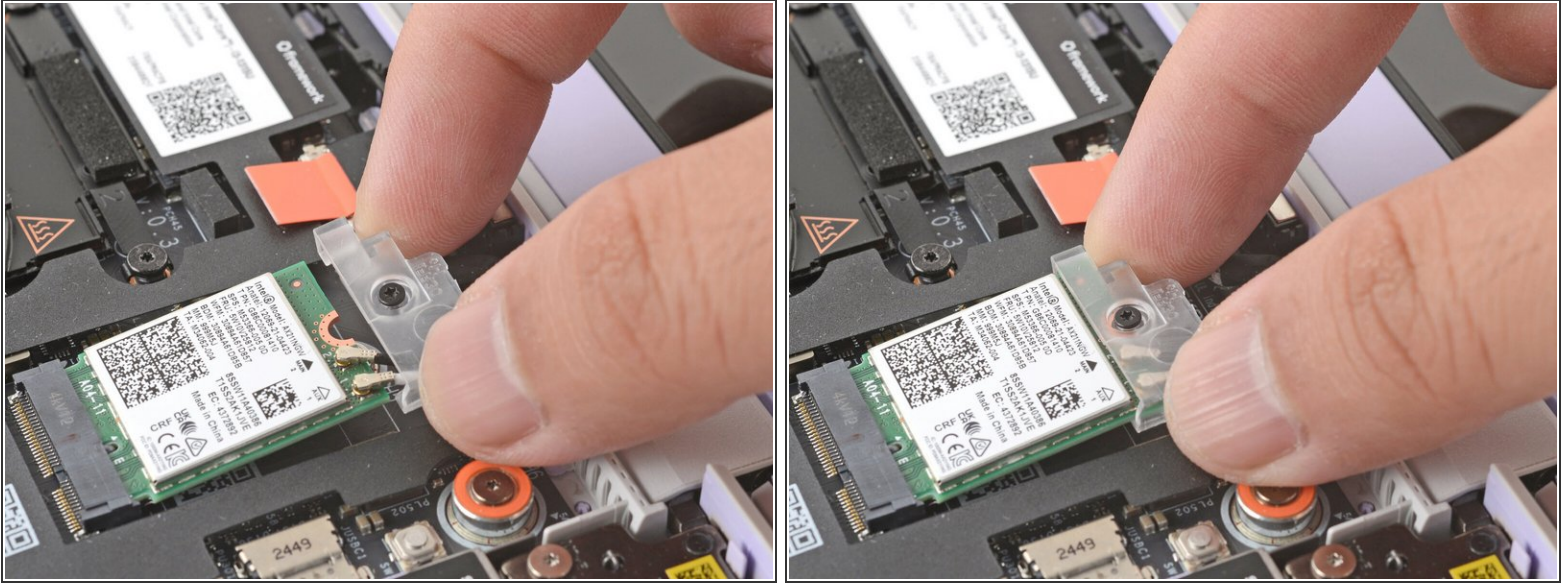
- Align the Wi-Fi card's gold contacts and notch with the socket on the Mainboard.
- Insert the Wi-Fi card into the socket at a shallow angle. The gold contacts should mostly be covered by the socket.
- ① The Wi-Fi card fits into the socket in one orientation. If it doesn't fit, try flipping the module.

Step 13



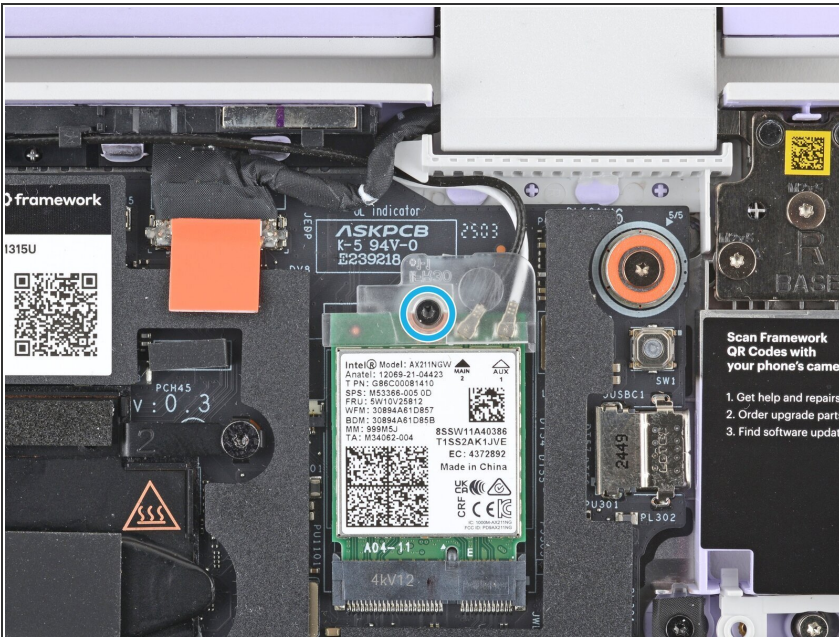
- Hold the Wi-Fi card down with your finger.
- Position the black antenna cable connector over the left Wi-Fi card's coaxial socket.
 - ❗ Tweezers can help position the connector.
- Use your finger to press the connector into place. You should feel a faint click, and the cable will stay attached to the socket by itself.
 - ⚠ These connectors are very delicate! If the connector doesn't feel like it's clicking in place, reposition the connector and try again.
- Repeat the procedure with the white antenna cable.

Step 14



- Slide the Wi-Fi bracket over the top edge of the Wi-Fi card.

Step 15



- Use your Framework Screwdriver to tighten the captive T5 Torx screw to secure the Wi-Fi card.

Step 16 — Install the Input Cover



- Angle the bottom edge of the Input Cover towards the base of the Laptop.
- Align and insert the bottom edge of the Input Cover into the base of the Laptop.
 - ⓘ Make sure the [slots along the bottom edge of the Input Cover](#) slide into the tabs in the base.
- Lower the Input Cover's top edge onto the laptop until the magnets snap it in place.
 - ⓘ Make sure the Input Cover sits neatly within the laptop frame and no corners are popping up.

Step 17 — Close and flip your Laptop



- Close the Laptop lid.
- Flip your Laptop face-down on a clean work surface.

Step 18 — Tighten the bottom screws



- Use your Framework Screwdriver to tighten the eight captive T5 Torx screws on the bottom of your Laptop.
 - ⓘ Tighten the screws until they're snug. Don't over-tighten them, or you may strip the screws.

You finished fixing your Framework Laptop!

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

If you need help, [contact Framework support](#).