



Samsung Galaxy S21 Ultra USB-C Charging Port and Daughterboard Replacement

Use this guide to replace the USB-C charging...

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INTRODUCTION

Use this guide to replace the USB-C charging port and daughterboard on your Samsung Galaxy S21 Ultra.

Note: Retaining water resistance after the repair will depend on how well you reapply the adhesive, but your device will lose its IP (Ingress Protection) rating.

🔧 TOOLS:

[SIM Card Eject Tool](#) (1)
[iOpener](#) (1)
[Suction Handle](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[Heat Gun](#) (1)
[Isopropyl Alcohol \(90% or Greater\)](#) (1)
[Microfiber Cleaning Cloths](#) (1)
[ESD Safe Blunt Nose Tweezers](#) (1)
[Spudger](#) (1)
[Phillips #00 Screwdriver](#) (1)

⚙️ PARTS:

[Samsung Galaxy S21 Ultra \(USA\) USB-C Charge Port - Genuine](#) (1)

Step 1 — Remove the SIM card tray



- Insert a SIM eject tool, bit, or straightened paper clip into the SIM card tray hole on the top edge of the phone.
 - Press the SIM eject tool into the SIM card tray hole to eject the SIM card tray.
 - Remove the SIM card tray.
- ⓘ If you accidentally inserted the SIM eject tool into a microphone hole, don't worry! [You most likely didn't damage the microphone.](#)

Step 2 — Heat the back cover



- ① Unplug and power off your phone before you begin.
- [Prepare an iOpener](#) and apply it to the back cover for at least three minutes to loosen the adhesive underneath.
- ① A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the display and internal battery are both susceptible to heat damage.

Step 3 — Insert an opening pick



- Secure a suction handle to the bottom edge of the back cover, as close to the edge as possible.
 - ① If the back cover is badly cracked, covering it with a layer of clear packing tape may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken cover.
- Lift the back cover with the suction handle to create a small gap between the back cover and the frame.
 - ① If you have trouble creating a gap, apply more heat to further soften the adhesive. Follow the [iOpener](#) instructions to avoid overheating.
- Insert an opening pick into the gap you created.
- Slide the opening pick to the bottom left corner to slice the adhesive.
- Leave the opening pick in place to prevent the adhesive from resealing.

Step 4 — Slice the adhesive



- Insert a second opening pick at the bottom edge of your phone.
- Slide the opening pick to the bottom right corner to slice the adhesive.
- Leave the opening picks in place to prevent the adhesive from resealing.

Step 5



❗ If the adhesive becomes hard to cut, it has most likely cooled down. [Use your iOpener](#) for two to three minutes to reheat it.

- Insert a third opening pick at the bottom right corner of your phone.
- Slide the opening pick along the right edge of your phone to slice the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from resealing.

Step 6



⚠ When you slice near the camera assembly, insert only the tip of the opening pick (~ 4-5 mm) to avoid damaging or smearing the camera.

- Insert a fourth opening pick underneath the top right corner of your phone.
- Slide the opening pick along the top edge to slice the adhesive.
- Leave the opening pick in the top left corner to prevent the adhesive from resealing.

Step 7



- Insert a fifth opening pick underneath the top left corner.
- Slide the opening pick along the left edge of the back cover to slice the remaining adhesive.

⚠ When you slice near the power button, insert only the tip of the opening pick (~ 3-4 mm) to avoid damaging the power and volume button flex cable.

Step 8 — Remove the back cover



- Remove the back cover.

★ During reassembly:

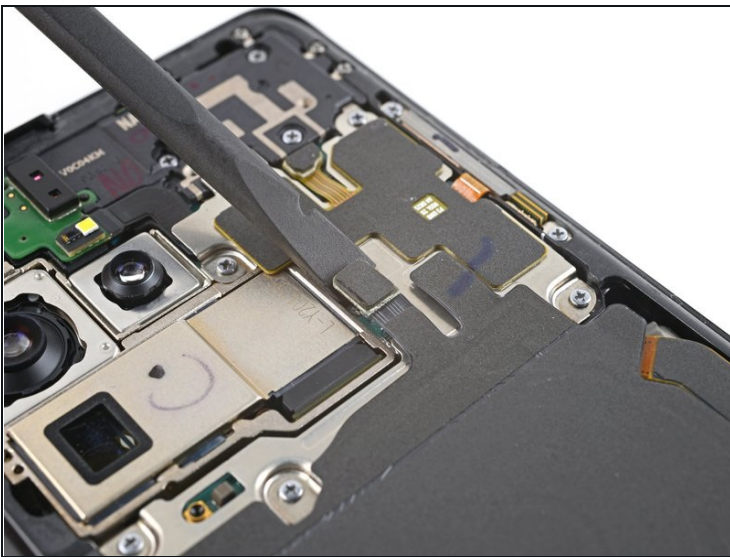
- This is a good point to power on your phone and test all functions before sealing it up. Be sure to power your phone back down completely before you continue working.
- Remove any adhesive chunks with a pair of [tweezers](#) or your fingers. Apply heat if you're having trouble separating the adhesive.
- If you're using custom-cut adhesives, [follow this guide](#).
- If you're using double-sided tape, [follow this guide](#).

Step 9 — Slice the adhesive



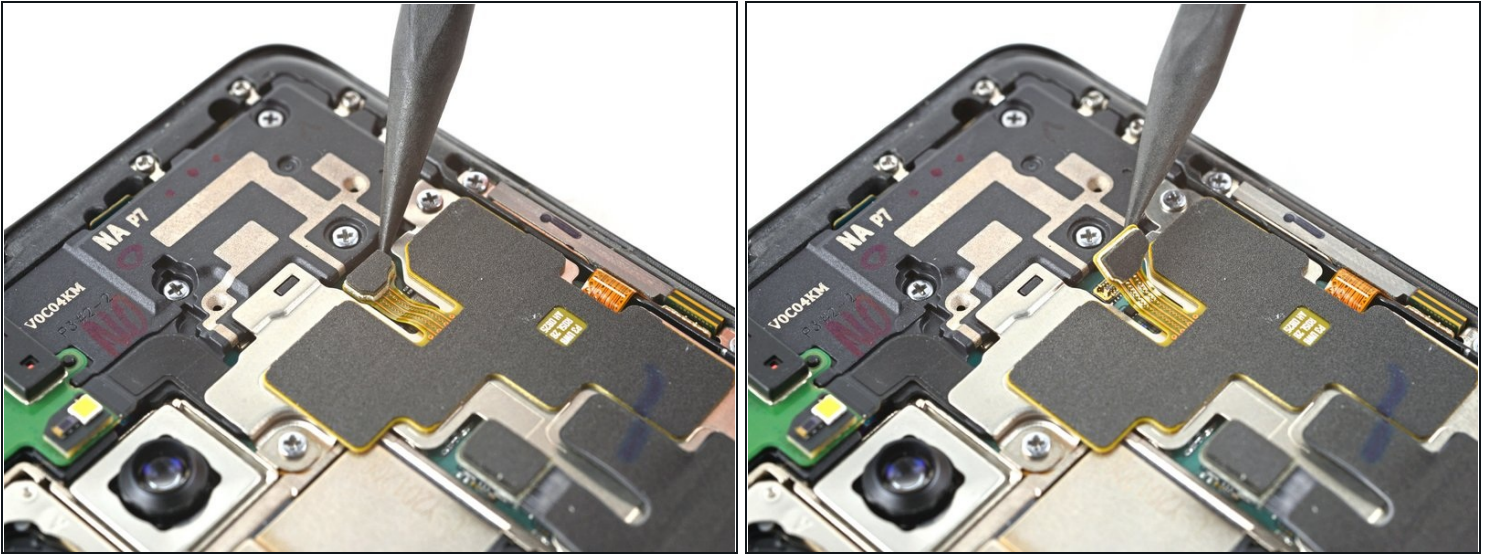
- Insert an opening pick underneath the left bottom end of the NFC antenna and charging coil assembly.
- Carefully slide the opening pick along the bottom left edge of the assembly to separate it from the battery.

Step 10 — Disconnect the charging coil



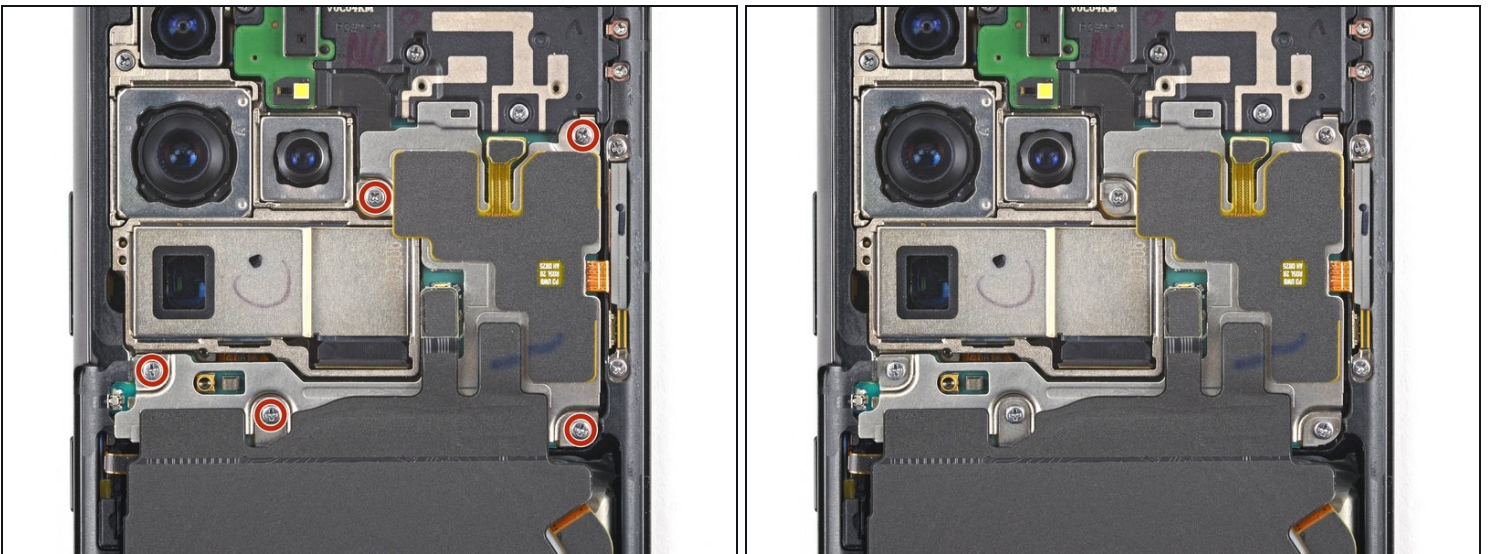
- Use a spudger to disconnect the charging coil by prying the connector straight up from its socket.

Step 11 — Disconnect the NFC antenna



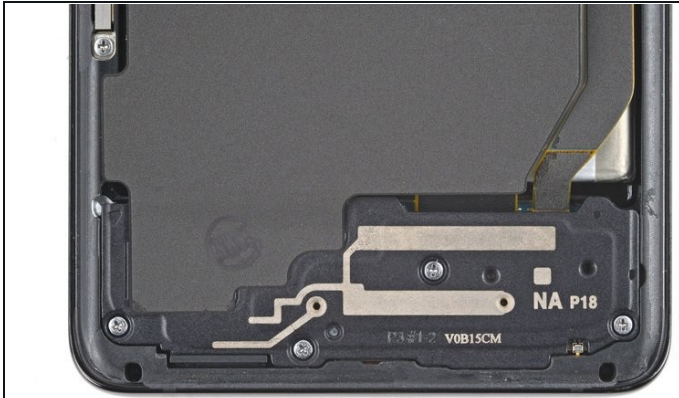
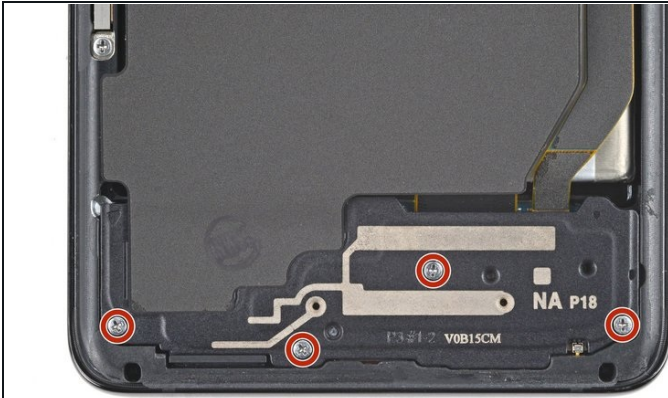
- Use a spudger to disconnect the NFC antenna by prying the connector straight up from its socket.

Step 12 — Unfasten the NFC antenna & charging coil assembly



- Use a Phillips screwdriver to remove the five 3.9 mm-long screws securing the NFC antenna and charging coil assembly.

Step 13 — Unfasten the loudspeaker



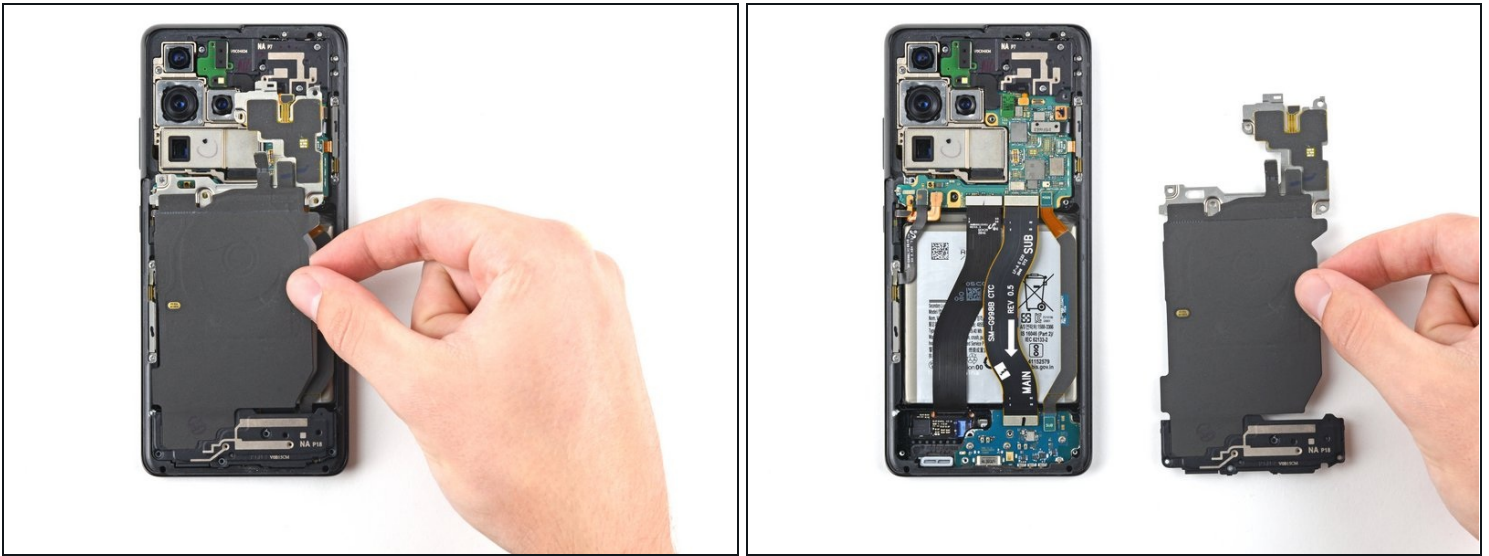
- Use a Phillips screwdriver to remove the four 3.9 mm-long screws securing the loudspeaker assembly.

Step 14 — Disconnect the loudspeaker



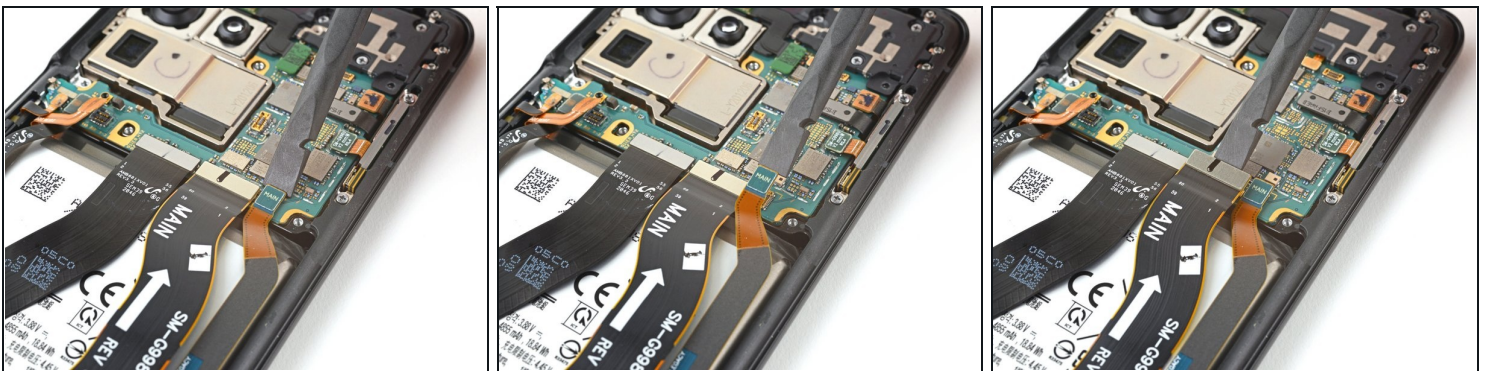
- Insert the tip of a spudger between the frame and the upper-left notch in the loudspeaker.
- Pry up with the spudger to release the loudspeaker from its plastic clips.

Step 15 — Remove the NFC antenna & charging coil assembly



- Use a pair of [tweezers](#) or your fingers to carefully remove the NFC antenna, charging coil, and loudspeaker assembly.
- ☑ Set the assembly aside. You'll reuse it during reassembly.

Step 16 — Disconnect the interconnect cables



- Use a spudger to pry up and disconnect the primary and secondary interconnect cables' press connectors on the motherboard.

Step 17 — Remove the secondary interconnect cable



- Use a spudger to disconnect the secondary interconnect cable from the daughterboard by prying its bottom connector straight up from its socket.
 - Use your fingers or a pair of [tweezers](#) to carefully remove the secondary interconnect cable.
- ☒ Set the cable aside. You'll reuse it during reassembly.

Step 18 — Remove the primary interconnect cable



- Use a spudger to disconnect the primary interconnect cable from the daughterboard by prying its bottom connector straight up from its socket.
 - Use your fingers or a pair of tweezers to carefully remove the primary interconnect cable.
- ☒ Set the cable aside. You'll reuse it during reassembly.

Step 19 — Unfasten the charging board



- Use a Phillips screwdriver to remove the three 3.4 mm-long screws securing the charging board.

Step 20 — Pry up the charging board



- Insert the pointed end of a spudger underneath the left edge of the charging board next to the main flex cable connector.
- Use your spudger to pry up the charging board.

Step 21 — Remove the charging board



- Use a pair of [blunt tweezers](#) or your fingers to remove the charging board. Start by lifting its top edge up and then carefully slide the USB-C connector out of its recess.
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To reassemble your device, follow these instructions in reverse order.

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

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Answers community](#) for help.