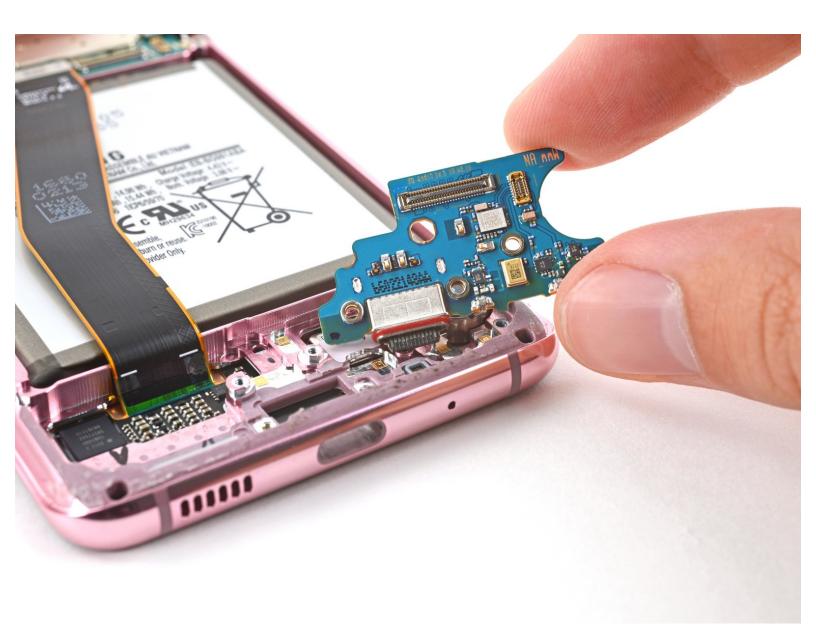


Galaxy S20 USB-C Charging Port and Daughterboard Replacement

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 in your Samsung Galaxy S20.

The USB-C port is soldered to the daughterboard, so this repair will require you to replace the entire daughterboard.

Before you begin, refer to the <u>Samsung Self-Repair document</u> for safety information.

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:

- Tweezers (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)
- iOpener (1)
- Suction Handle (1)
- iFixit Opening Picks (Set of 6) (1)



PARTS:

- Samsung Galaxy S20 5G (USA) USB-C Charge Port - Genuine (1)
- Samsung Galaxy S20 5G (USA Verizon)
 USB-C Charge Port Genuine (1)

Step 1 — Heat the bottom edge



- Unplug and power off your phone before you begin.
- Heat an iOpener and apply it to the back cover's bottom edge for two minutes.
 - 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 2 — Separate the bottom edge adhesive







- Apply a suction cup to the back of the phone, as close to the center of the bottom edge as possible.
 - if your display 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 screen.
- Pull on the suction cup with strong, steady force to create a gap between the back cover and the frame.
- Insert the point of an opening pick into the gap.
 - Due to tight tolerances, this may take multiple attempts of reheating with the iOpener and separating with the suction cup before you get it right.
 - (i) If you are having trouble creating a gap, apply more heat to the edge and try again.
 - ↑ Do not apply excessive force with the pick, or you risk cracking the back cover glass.



- Slide the pick back and forth along the bottom edge to slice through the adhesive.
 - ⚠ Do not attempt to cut the adhesive near the corners of the phone where the glass is curved or you risk cracking the glass panel.
- Leave your opening pick in the seam to prevent the adhesive from resealing.

Step 4 — Heat the left edge



 Apply a heated iOpener to the left edge of the back cover for two minutes.

Step 5 — Separate the left edge adhesive

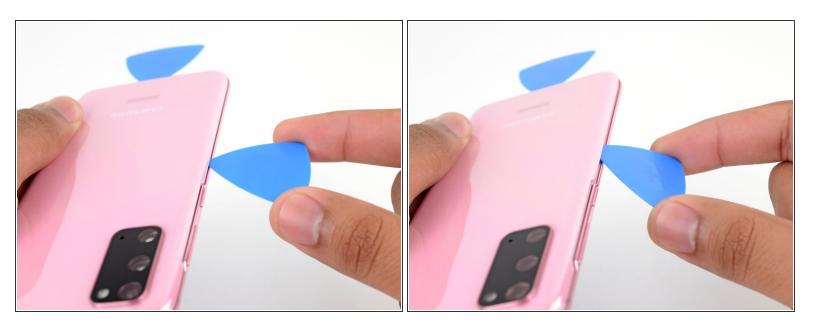






- Apply a suction cup to the back of the phone, as close to the center of the left edge as possible.
- Pull on the suction cup with strong, steady force to create a gap between the back cover and the frame.
- Insert the point of an opening pick into the gap.
 - (i) As the glass on this edge is curved, you won't be able to insert this pick very far. As long as the very tip of the pick is underneath the glass's edge, you will be able to proceed.
- (i) Due to tight tolerances, this may take multiple attempts.
 - (i) If you are having trouble creating a gap, apply more heat to the edge and try again.
 - You can try also applying a few drops of high concentration (over 90%) isopropyl alcohol into the seam to help loosen the adhesive.

⚠ Do not apply excessive force with the pick, or you risk cracking the back cover glass.



 Once the pick is underneath the glass's edge, tilt it downward and insert it further to fully separate the back cover's adhesive.

Step 7



- Slide the pick all along the left edge of the phone to separate the back cover's adhesive.
 - ↑ Take care when sliding across the ridge in the frame surrounding the volume and power buttons—the cutout in the glass may make it more prone to cracking.
- Leave your pick under the left edge of the glass near the top left corner to prevent the adhesive from resealing.

Step 8 — Heat the right edge



- Apply a heated iOpener to the right edge of the back cover for two minutes.
 - 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 9 — Separate the right edge adhesive







- Apply a suction cup to the back of the phone, as close to the center of the right edge as possible.
- Pull on the suction cup with strong, steady force to create a gap between the back cover and the frame.
- Insert the point of an opening pick into the gap.
 - Like with the previous edge, you will need to tilt the opening pick downward to fully insert it underneath the back cover.







- Slide the pick all along the right edge of the phone to separate the back cover's adhesive.
- Leave your pick under the right edge of the glass near the top of the device to prevent the adhesive from resealing.
 - (i) As you do this, the back cover may release one or both of the other picks and allow them to fall free. If this occurs, set the pick(s) aside as the bottom edge shouldn't reseal from this point onward.

Step 11 — Heat the top edge



 Apply a heated iOpener to the top edge of the back cover for two minutes.

Step 12 — Separate the top edge adhesive







- ↑ The glass near the corners of the back cover is curved and very susceptible to cracking. Be gentle during this step to prevent damaging your back cover.
 - Gradually slide the pick from the right edge of the device around the top right corner.
 - Continue slicing along the top edge all the way to the top left corner to fully separate the back cover adhesive.
 - (i) If the slicing becomes difficult at any point, stop and reapply heat before continuing.

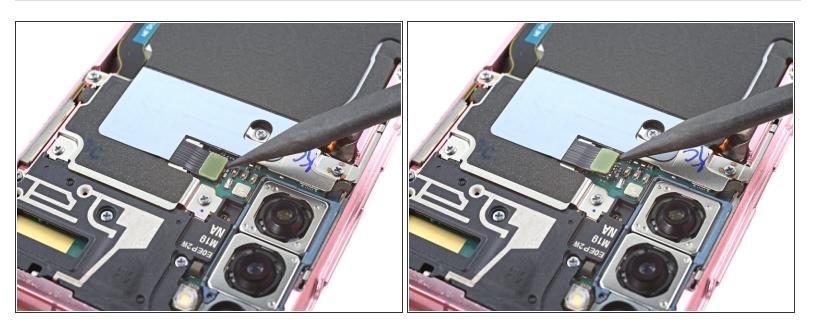
Step 13 — Remove the back cover





- Lift the back cover slowly. Use opening picks to slice any remaining adhesive.
- 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 Samsung custom-cut adhesives, follow this guide.
 - If you're using double-sided tape, follow this guide.

Step 14 — Disconnect the wireless charging coil



 Use a spudger to pry up and disconnect the wireless charging coil's press connector on the motherboard.

Step 15 — Unfasten the motherboard bracket





- Use a Phillips #00 screwdriver to remove the five 4 mm-long screws securing the motherboard bracket.
 - Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled #3373.

Step 16 — Unclip the motherboard bracket





 Use a pair of blunt-nose tweezers to gently pull up and unclip the motherboard bracket from the plastic midframe.

↑ Do not completely remove the bracket yet, as its still attached to the wireless charging coil.

Step 17 — Unfasten the loudspeaker





- Use a Phillips #00 screwdriver to remove the five 4 mm-long screws securing the loudspeaker and lower midframe.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled #3373.

Step 18 — Disconnect the loudspeaker





 Insert the point of a spudger into the notch in the top left corner of the midframe and pry up to release the clips holding it in place.

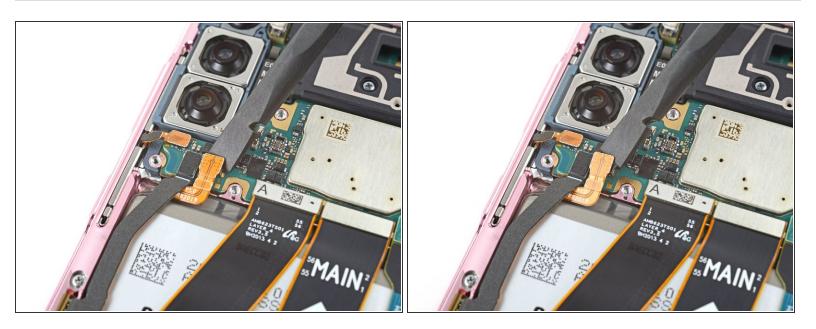
Step 19 — Remove the wireless charging coil





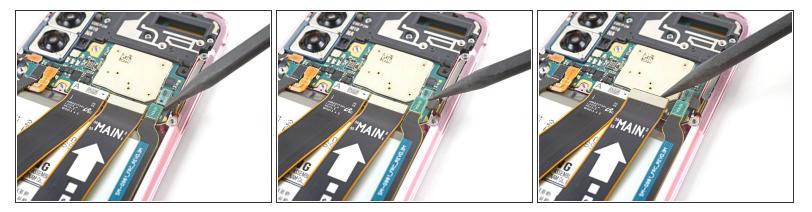
- Insert the point of a spudger into the notch in the top left corner of the midframe and pry up to release the clips holding it in place.
- Remove the wireless charging coil.

Step 20 — Disconnect the battery



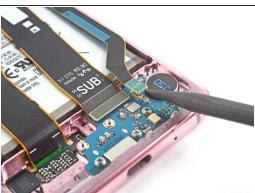
Use a spudger to pry up and disconnect the battery's press connector on the motherboard.

Step 21 — Disconnect the flex cables



 Use a spudger to pry up and disconnect the primary and secondary flex cables from the motherboard.

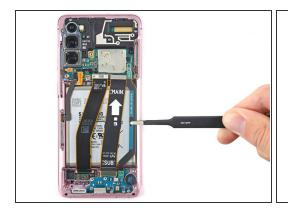


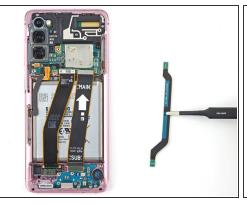




- Use a spudger to pry up and disconnect the primary and secondary flex cables from the daughterboard near the bottom of the device.
- To re-attach <u>press connectors</u> like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

Step 23 — Remove the flex cables







- Remove the primary and secondary flex cables.
- Set the cables aside. You'll reuse them during reassembly.

Step 24 — Unfasten the daughterboard





- Use a Phillips #00 screwdriver to remove the three 3.4 mm-long screws securing the USB-C port and daughterboard.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled #3396.

Step 25 — Remove the daughterboard







- Insert the pointed end of a spudger under the left edge of the daughterboard and pry up to release
 it from its recess.
- Use a pair of tweezers to pull the daughterboard up and away from the bottom of the device and remove it.

To reassemble your device, follow the instructions in reverse order and perform the opposite actions, e.g., "reattach" instead of "removing." Skip steps that use heating and prying, and pay close attention to the bullets as you work through the steps.

After you've completed the repair, download the Samsung Members App from the Galaxy Store or the Play Store, and <u>Samsung Self-Repair document</u> (beginning page 10) to make sure your device is fully functional.

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn't go as planned? Check out our **Answers community** for troubleshooting help.