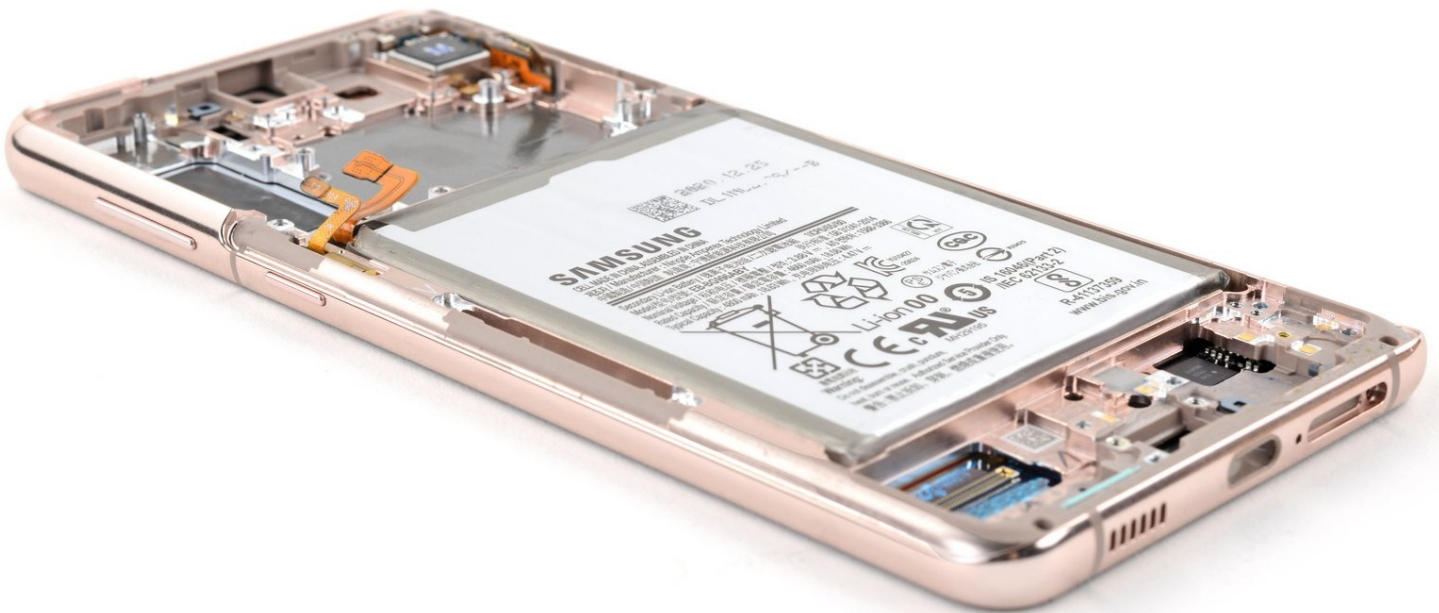




Samsung Galaxy S21 Plus Screen and Battery Assembly Replacement

Follow this guide to replace the screen and...

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INTRODUCTION

Follow this guide to replace the screen and battery assembly on your Samsung Galaxy S21+ with a genuine Samsung part.

This guide is written for the genuine Samsung screen and battery assembly. The assembly consists of the screen, battery, and frame together in one part. Be sure you have the right part before you begin the repair.

Before you begin, refer to the [Samsung Self-Repair document](#) for safety information.

If your battery is swollen, [take appropriate precautions](#). Before disassembling your device, **completely discharge the battery**. This reduces the risk of a dangerous thermal event if the battery is accidentally damaged during the repair.

Note: Restoring 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:

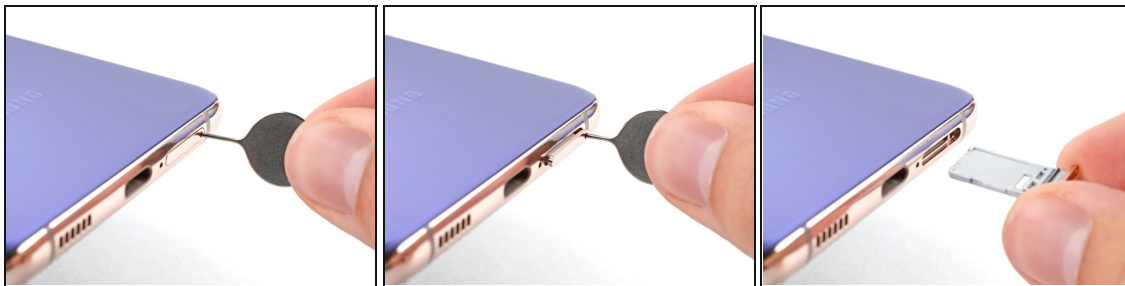
[iOpener](#) (1)
[Suction Handle](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[Heat Gun](#) (1)
[Isopropyl Alcohol \(90% or Greater\)](#) (1)
[Microfiber Cleaning Cloths](#) (1)
[ESD Safe Blunt Nose Tweezers](#) (1)
[Spudger](#) (1)
[Phillips #00 Screwdriver](#) (1)




PARTS:

[Samsung Galaxy S21+ \(USA\) Screen and Battery - 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 bottom edge



⚠ Be sure to power off your device before you begin your repair.

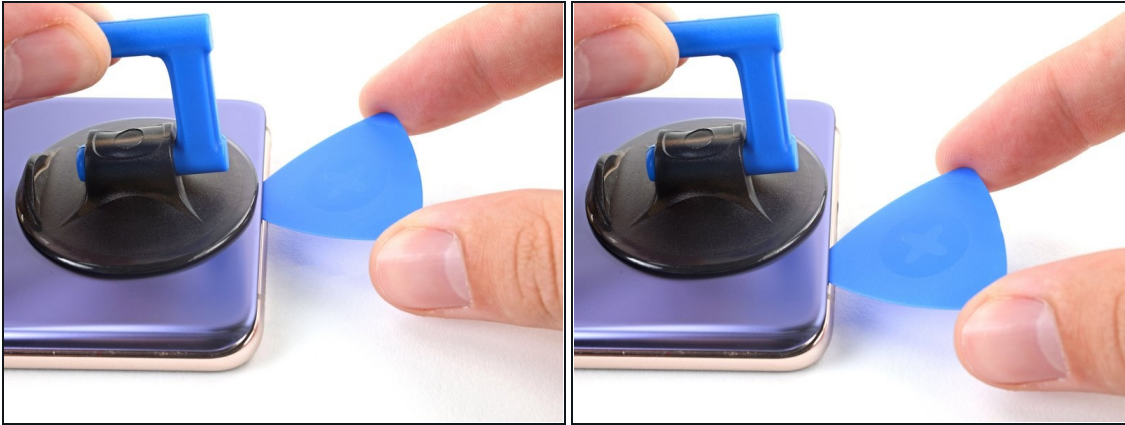
- [Heat an iOpener](#) and apply it to the bottom edge of the back cover for two minutes.
- ⓘ A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the display and internal battery are both susceptible to heat damage.

Step 3 — Insert an opening pick



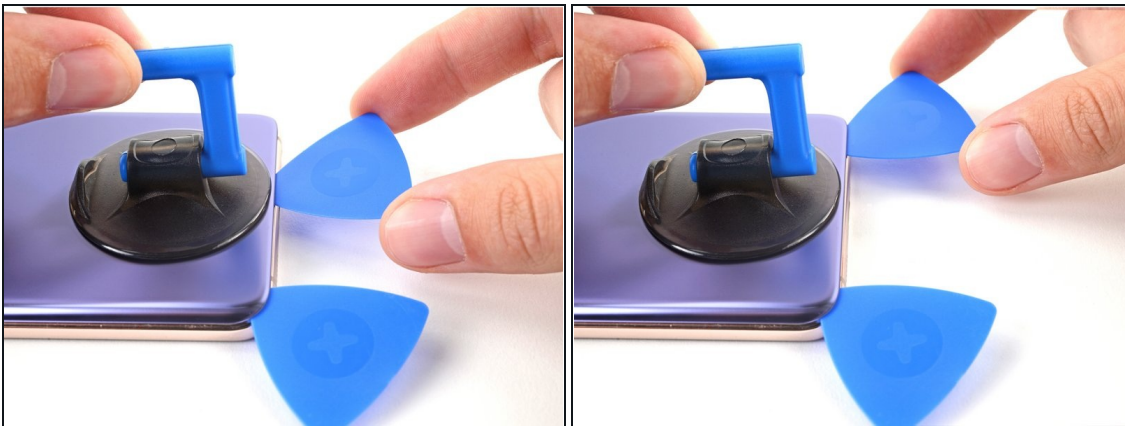
- Secure a suction handle to the bottom edge of the back cover, as close to the edge as possible.
 - ⓘ If the back cover is cracked, the suction handle may not stick. Try [lifting it with strong tape](#), or superglue the suction handle in place and allow it to cure so you can proceed.
- Lift the back cover with the suction handle to create a small gap between the back cover and the frame.
 - ⓘ 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.

Step 4 — Separate the adhesive



- 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 5



- 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 6 — Heat the right edge



- [Heat an iOpener](#) and apply it to the right edge of the back cover for two minutes.

Step 7



 If the adhesive becomes hard to cut, it has most likely cooled down. [Apply a heated iOpener](#) to the edge 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 8 — Heat the top edge



- [Heat an iOpener](#) and apply it to the top edge of the back cover for two minutes.

Step 9



⚠ 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.

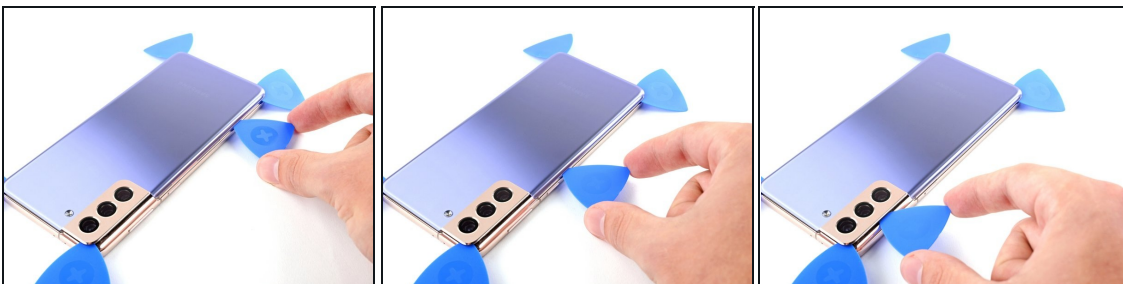
- Insert a fourth opening pick underneath the top right corner of your phone.
- Slide the opening pick along the top edge to slice the adhesive.
- Leave the opening pick in the top left corner to prevent the adhesive from resealing.

Step 10 — Heat the left edge



- [Heat an iOpener](#) and apply it to the left edge of the back cover for two minutes.

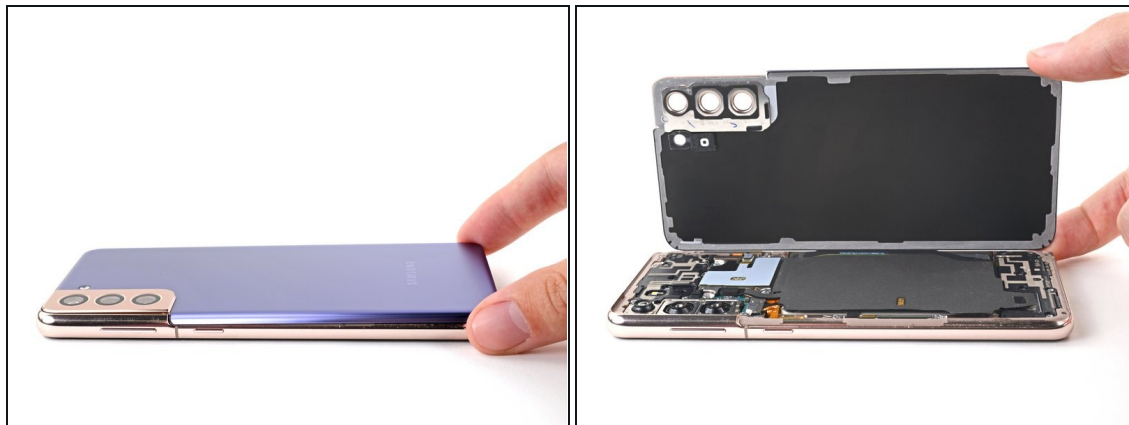
Step 11



- Insert a fifth opening pick underneath the bottom 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 12 — Remove the back cover

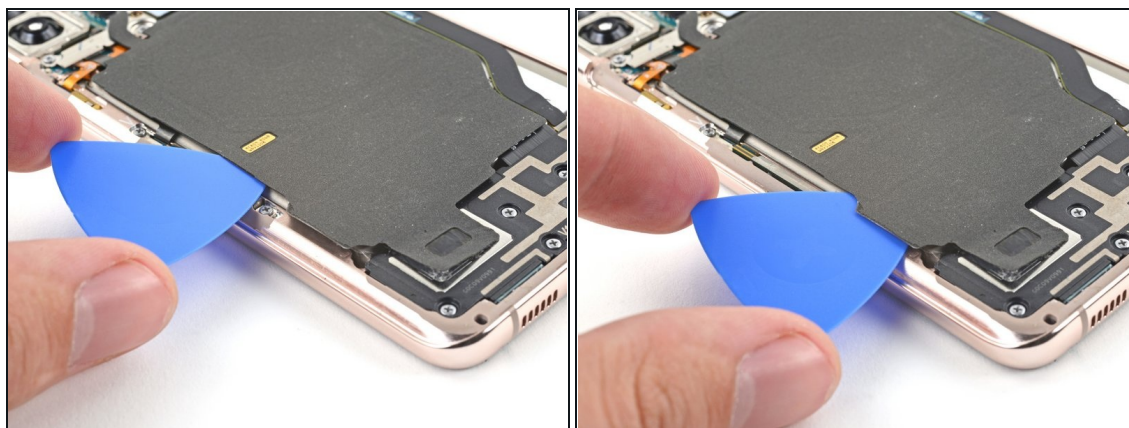


- Remove the back cover.

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. Use some high concentration (over 90%) isopropyl alcohol to wipe away any adhesive residue.
- If you're using custom-cut adhesives, [follow this guide](#).
- If you're using double-sided tape, [follow this guide](#).

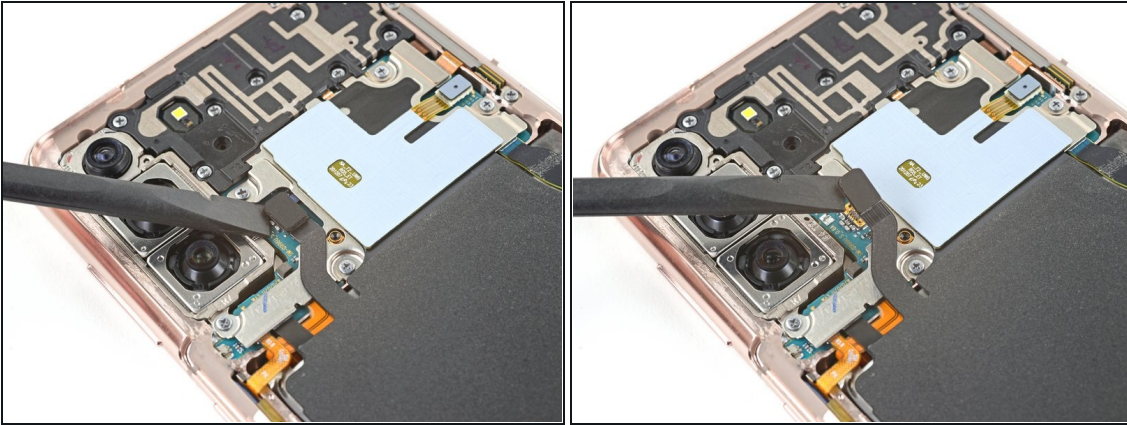
Step 13 — Slice the adhesive



 Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a thermal event.

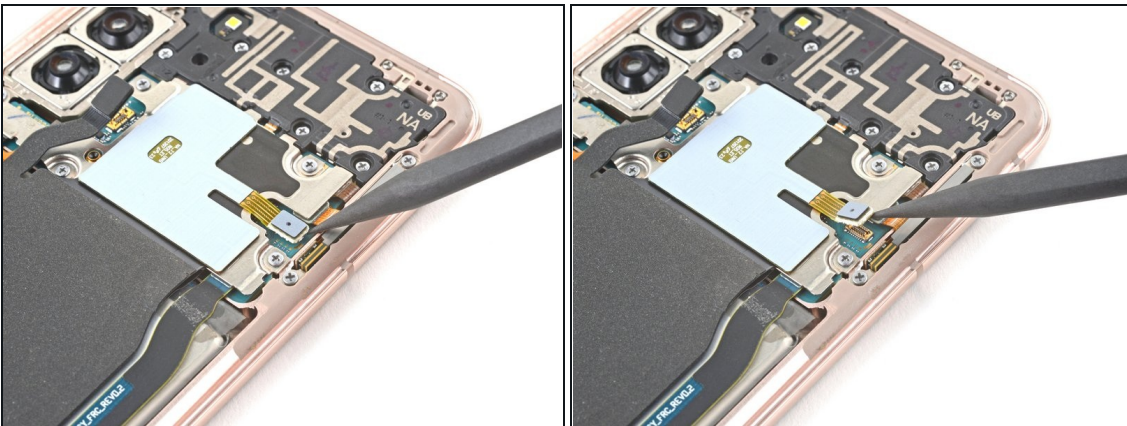
- Insert an opening pick underneath the left bottom end of the NFC antenna and charging coil assembly.
- Carefully slide the opening pick along the bottom left edge of the assembly to separate it from the battery.

Step 14 — Disconnect the charging coil



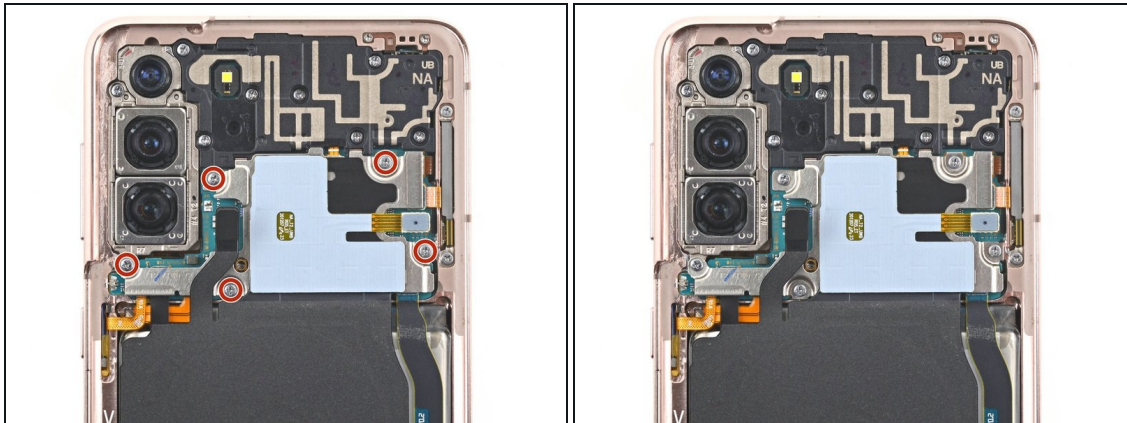
- Use a spudger to disconnect the charging coil by prying the connector straight up from its socket.

Step 15 — Disconnect the NFC antenna




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

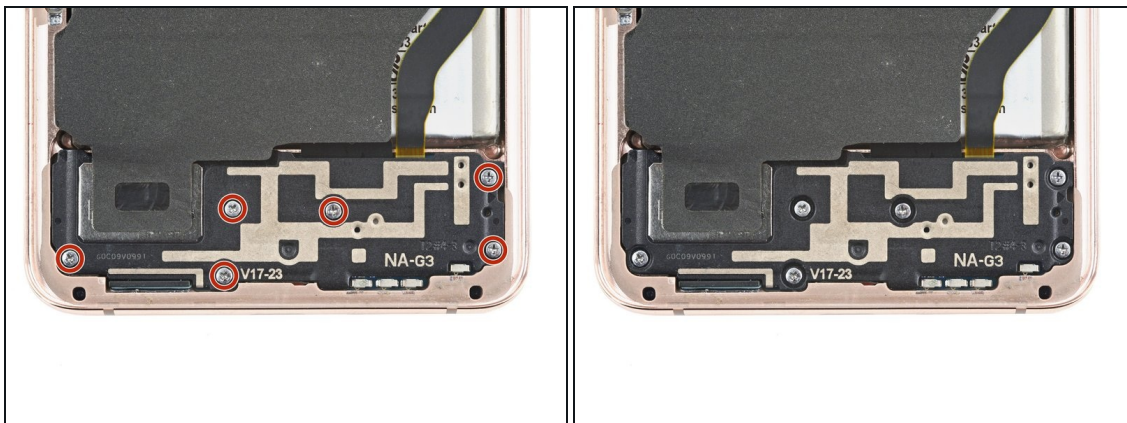
Step 16 — Unfasten the NFC antenna & charging coil assembly screws




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

 If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled **#3427**.

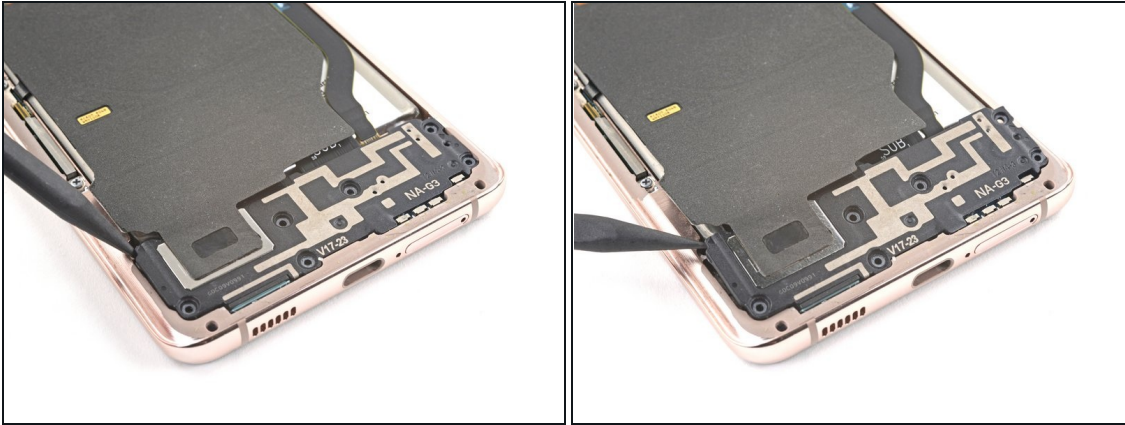
Step 17 — Unfasten the loudspeaker



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

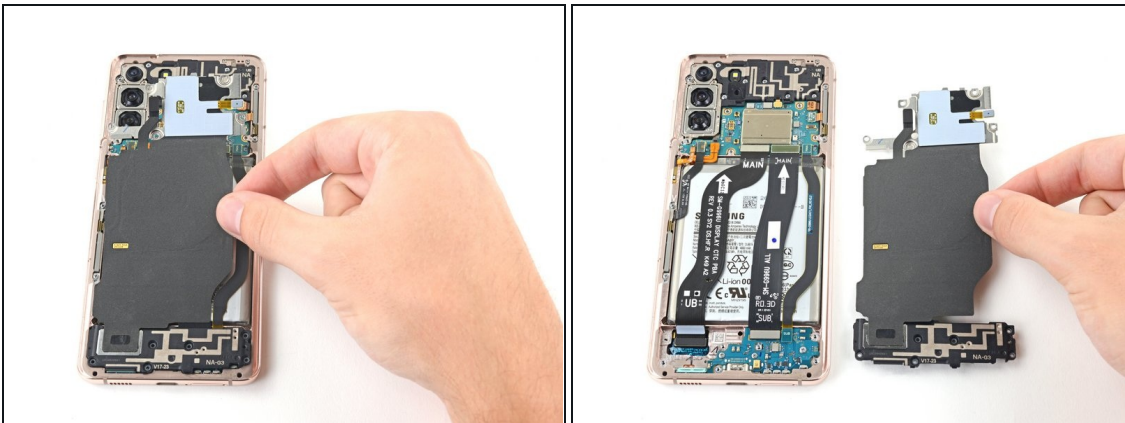
 If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled **#3427**.

Step 18 — Disconnect the loudspeaker



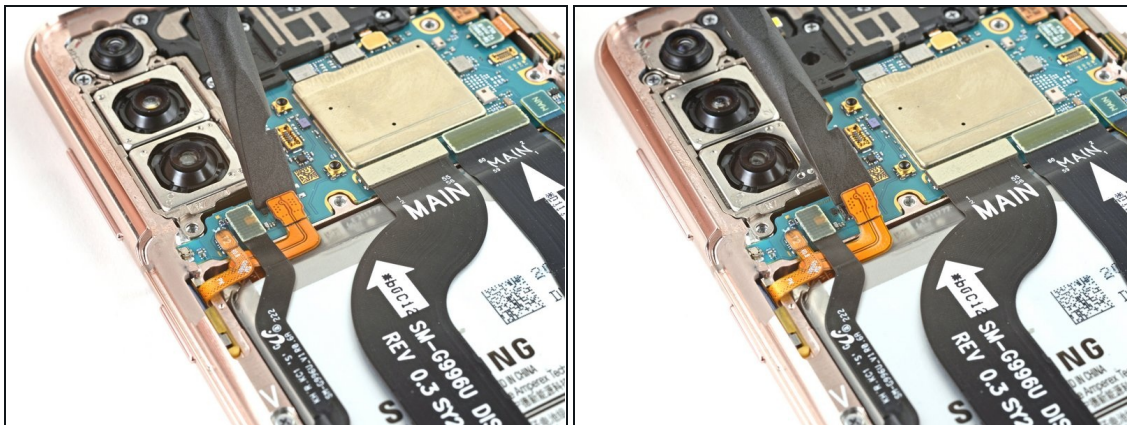
- Insert the tip of a spudger between the frame and the upper-left notch in the loudspeaker.
- Pry up with the spudger to release the loudspeaker from its plastic clips.

Step 19 — Remove the NFC antenna & charging coil assembly



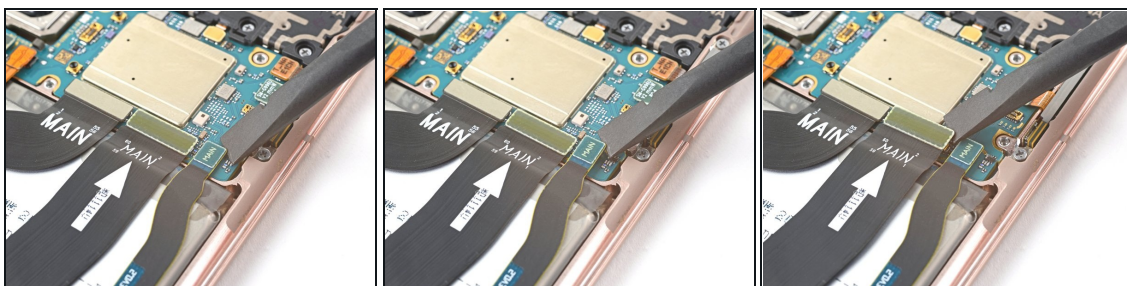
- Use a pair of tweezers or your fingers to carefully remove the NFC antenna and charging coil assembly.

Step 20 — Disconnect the battery



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

Step 21 — Disconnect the interconnect cables



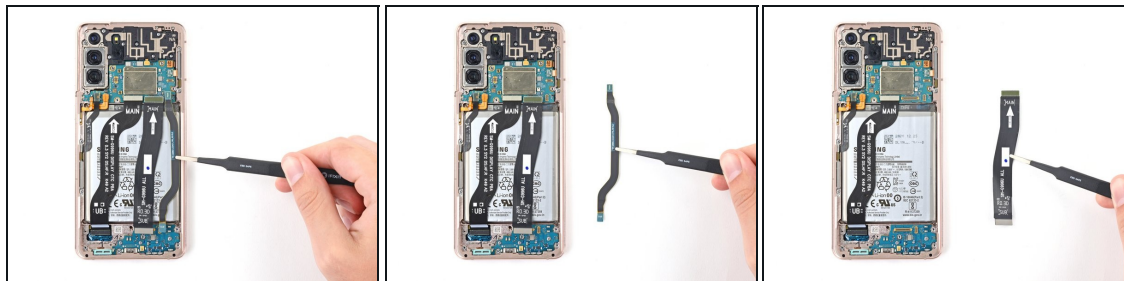
- Use a spudger to pry up and disconnect the primary and secondary interconnect cables' press connectors on the motherboard.

Step 22




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

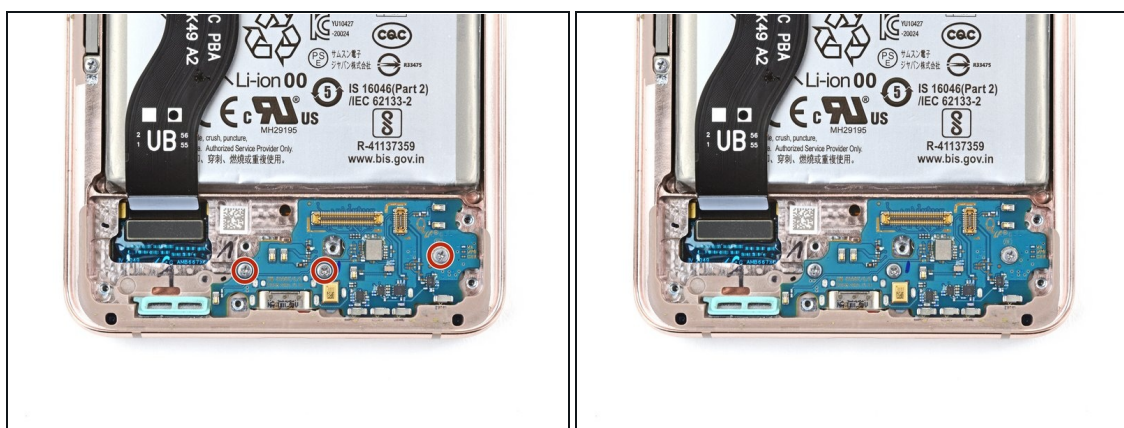
Step 23 — Remove the interconnect cables



- Use tweezers, or your fingers, to remove the interconnect cables.

 Set the cables aside. You'll reuse them during reassembly.

Step 24 — Unfasten the daughterboard



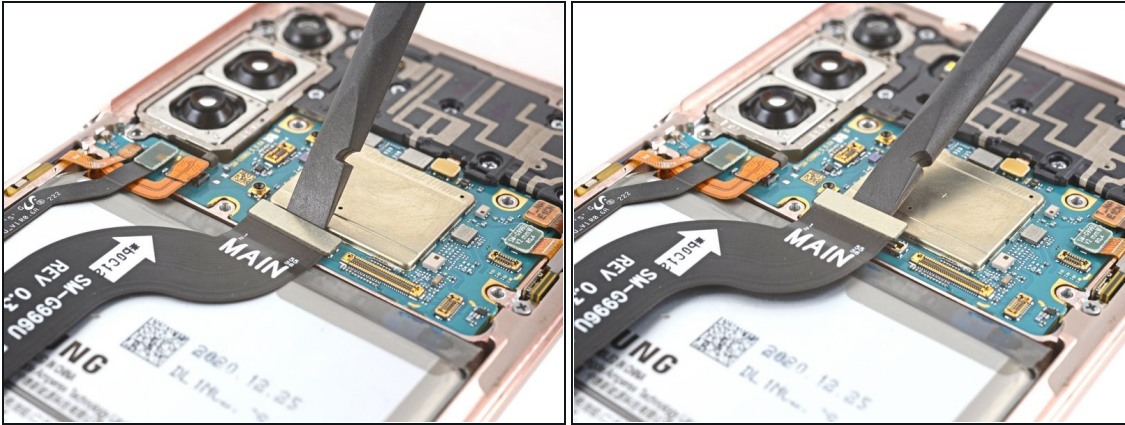
- Use a Phillips screwdriver to remove the three 3.4 mm-long screws securing the charging board.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled **#3428**.

Step 25 — Remove the daughterboard



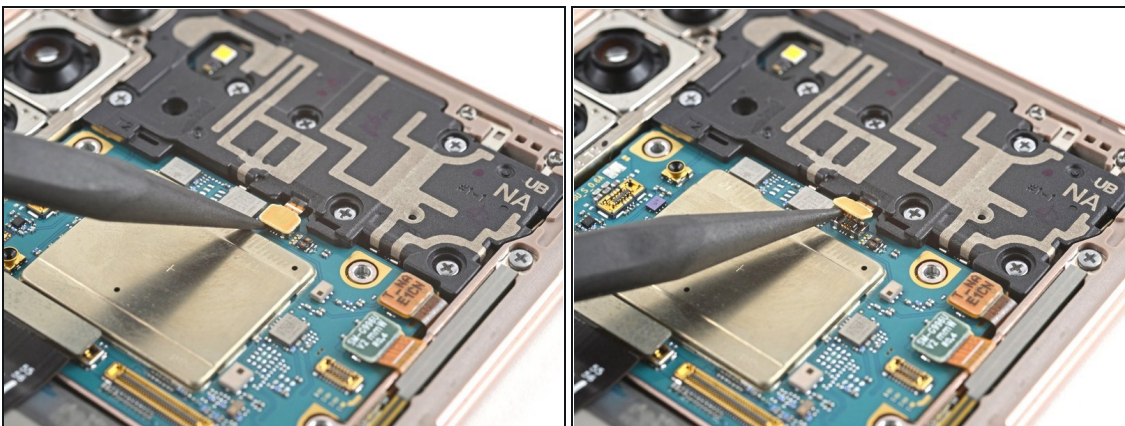
- Insert the pointed end of a spudger under the upper left edge of the daughterboard and pry up to release it from its recess.
- Use tweezers, or your fingers, to pull the daughterboard up and away from the bottom of the device and remove it.

Step 26 — Disconnect the display cable



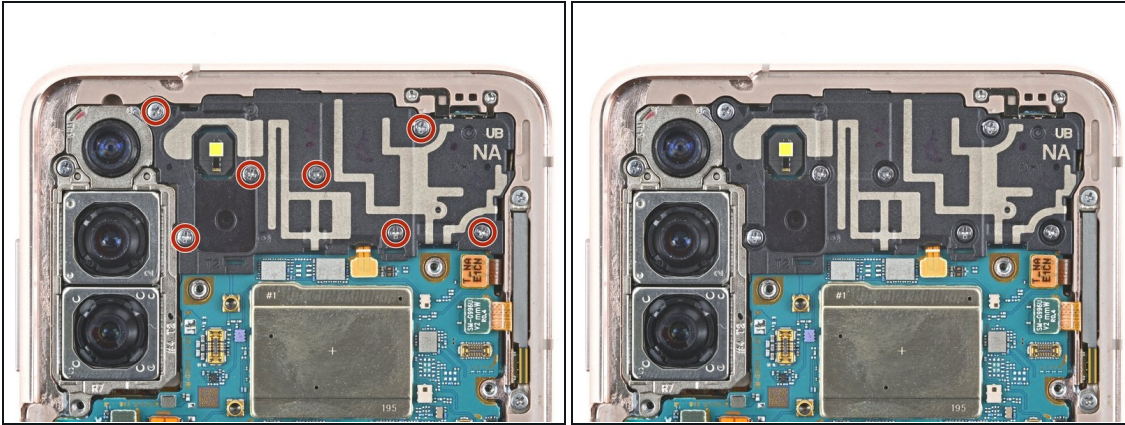
- Use a spudger to pry up and disconnect the display cable's press connector.

Step 27 — Disconnect the earpiece speaker



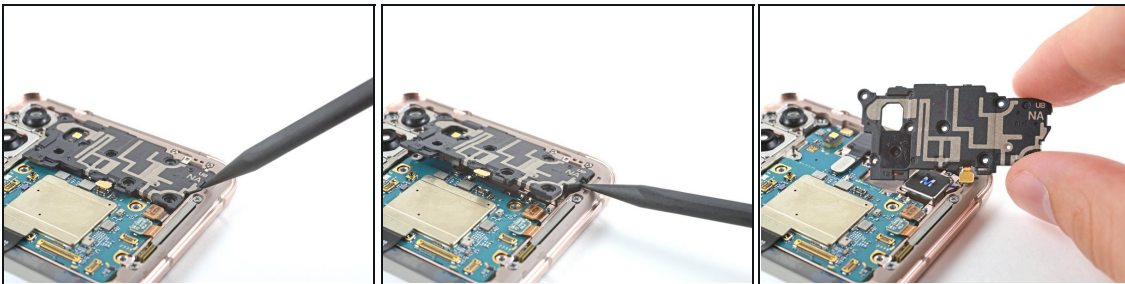
- Use the tip of a spudger to pry up and disconnect the earpiece speaker's press connector.

Step 28 — Unfasten the earpiece speaker



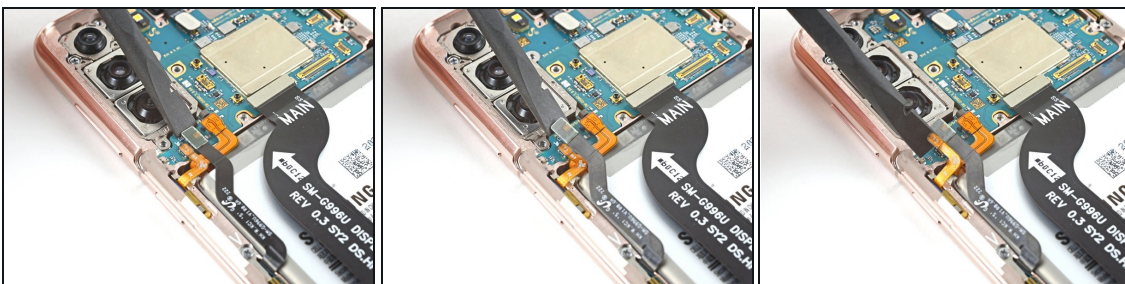
- Use a Phillips screwdriver to remove the seven 3.9 mm-long screws securing the earpiece speaker assembly.
- ☑ If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled **#3427**.

Step 29 — Remove the earpiece speaker



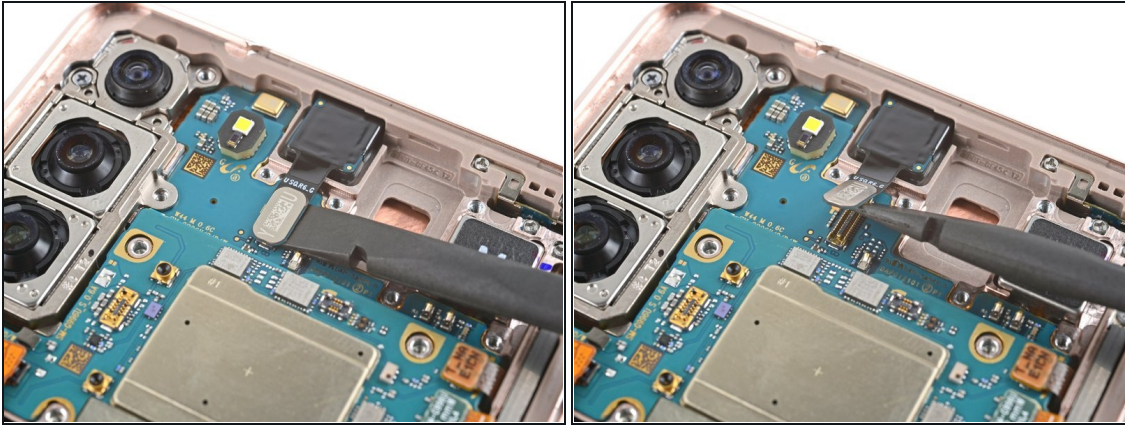
- Insert a spudger between the earpiece speaker and the frame.
- Pry up with the spudger to release the earpiece speaker from its plastic clips
- Remove the earpiece speaker.
- ☑ Set the speaker aside. You'll reuse it during reassembly.

Step 30 — Disconnect the left cables



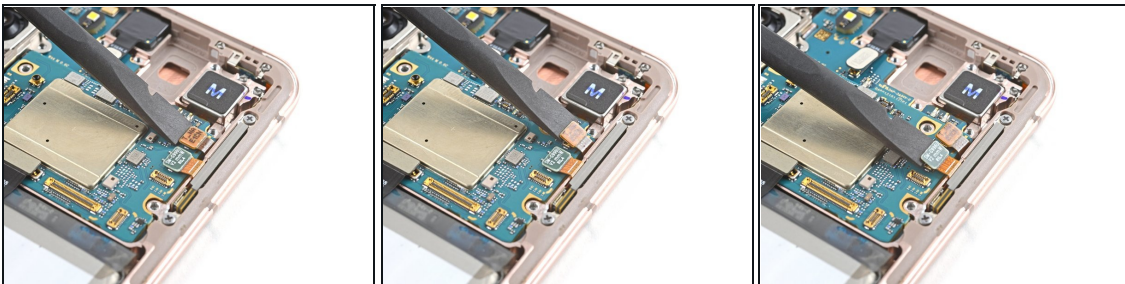
- Use a spudger to pry up and disconnect the 5G mmWave antenna's press connector.
- Repeat for the power button cable's press connector next to it.

Step 31 — Disconnect the front camera



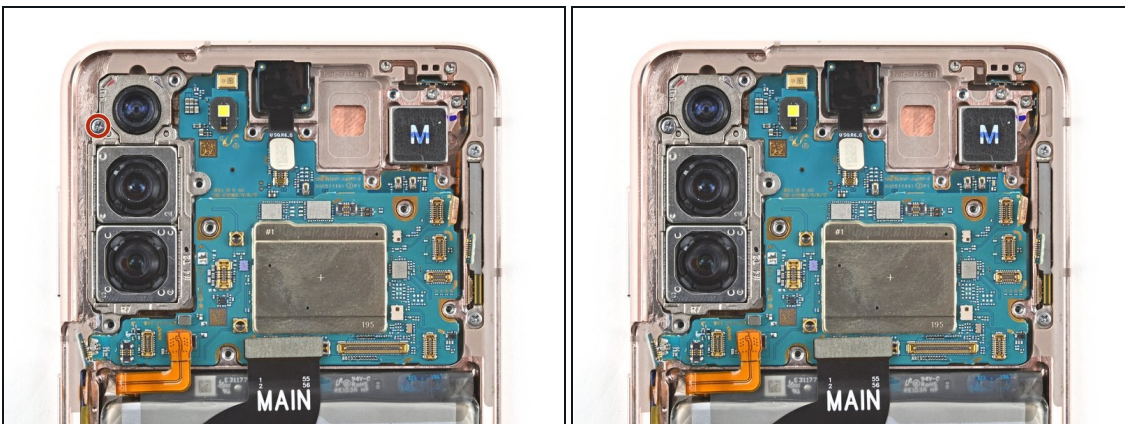
- Use a spudger to pry up and disconnect the front camera's press connector.

Step 32 — Disconnect the right cables



- Use a spudger to pry up and disconnect the orange press connector.
- Repeat for the right 5G mmWave antenna's press connector next to it.

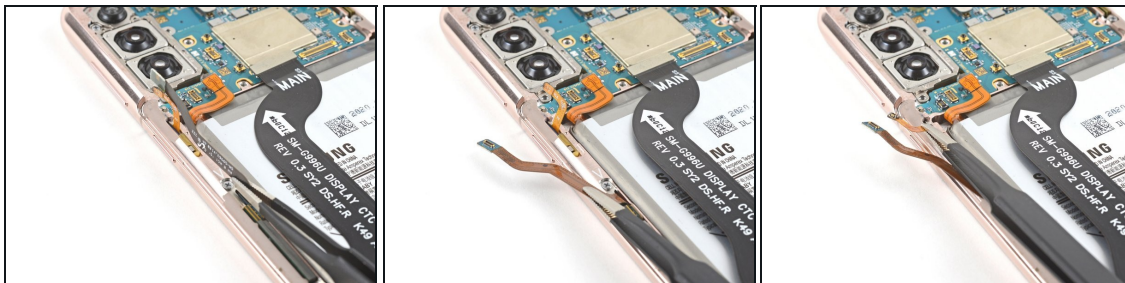
Step 33 — Unfasten the motherboard



- Use a Phillips screwdriver to remove the 3.9 mm-long screw securing the motherboard.

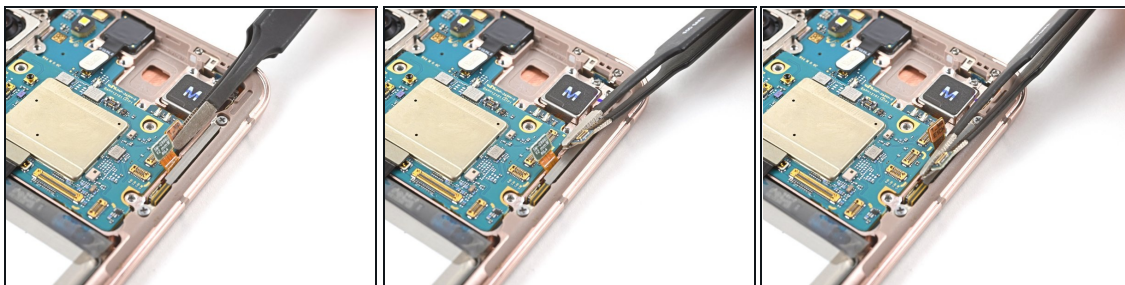
☒ If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled **#3427**.

Step 34 — Reposition the left cables



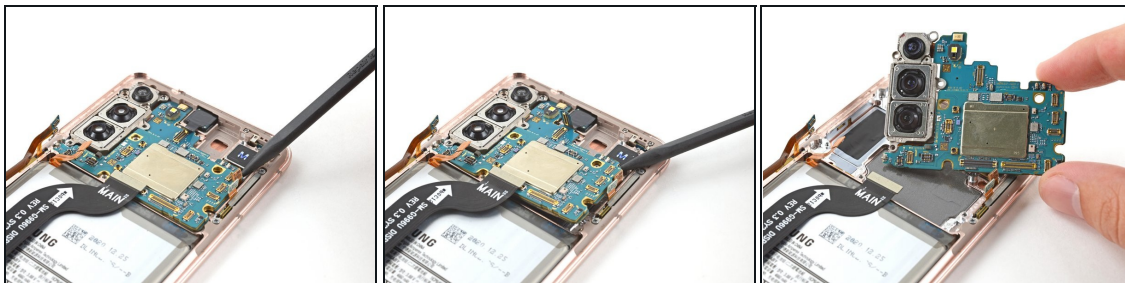
- Use tweezers, or your fingers, to gently bend the left 5G mmWave antenna cable away from the frame.
- Repeat for the power button cable.

Step 35 — Reposition the right cables



- Use tweezers, or your fingers to gently bend the two connectors away from the right edge of the motherboard.

Step 36 — Remove the motherboard



- Insert the tip of a spudger between the motherboard and the frame.
- Pry up with the spudger to release the motherboard from its recess in the frame.
- Remove the motherboard.

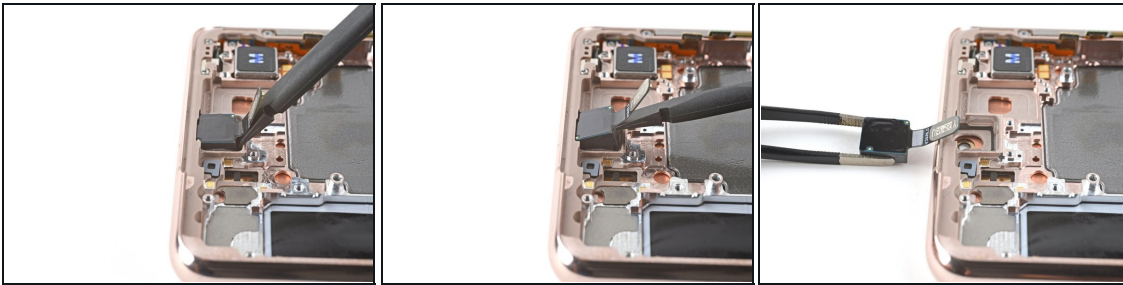
☒ Set the motherboard aside. You'll reuse it during reassembly.

Step 37 — Heat the front camera



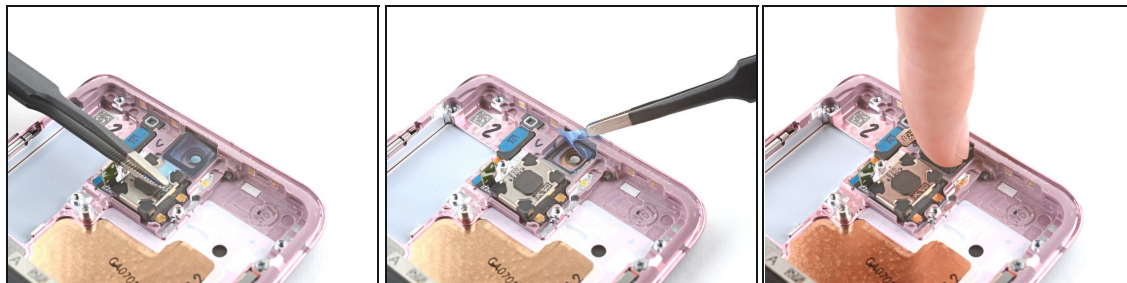
- Apply a heated iOpener to the front camera for 90 seconds.

Step 38 — Remove the front camera



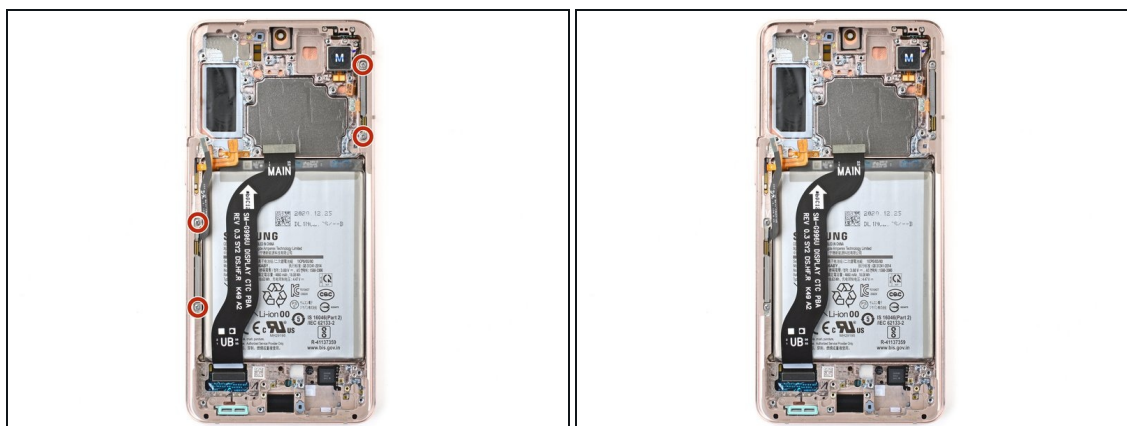
- Insert a spudger into the gap between the frame and the front camera.
- Pry up with the spudger to separate the front camera from the frame.
 - ⓘ If you're having trouble separating the front camera from the frame, apply more heat.
- Use tweezers, or your fingers, to remove the front camera.
- ☑ Set the camera aside. You'll reuse it during reassembly.

Step 39 — Front camera reassembly instructions



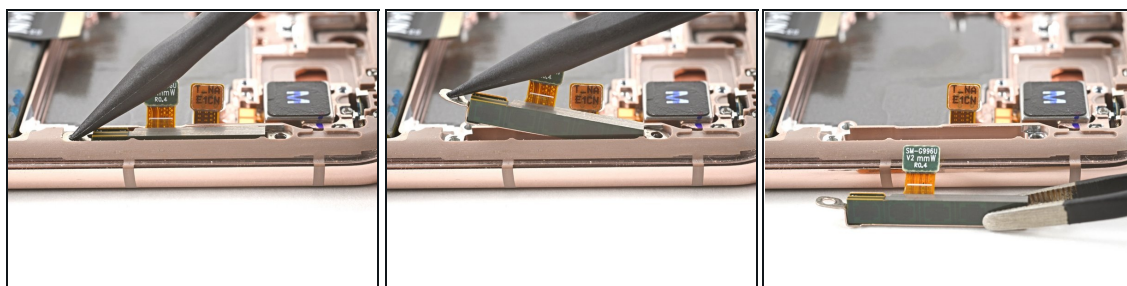
- ☒ During reassembly, follow these instructions to reinstall your front camera:
 - Peel off the front camera adhesive from its liner and apply the sticky end to the frame.
 - Use tweezers, or your fingers, to pull on the tab and expose the top layer of adhesive.
 - Insert the front camera and apply pressure to adhere it to the frame.

Step 40 — Unfasten the 5G mmWave antennas



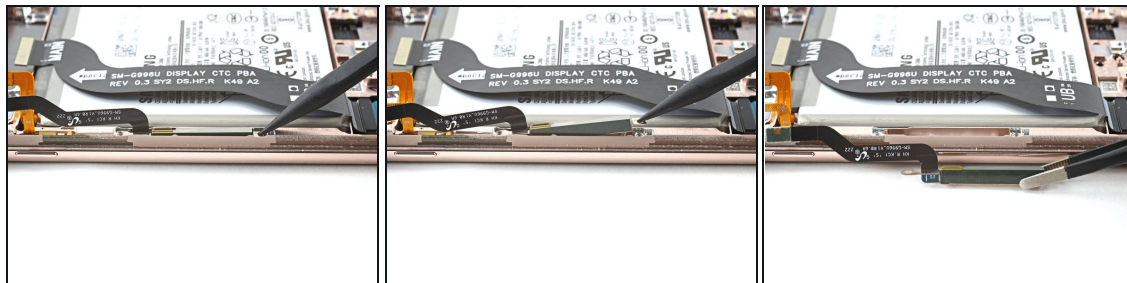
- Use a Phillips screwdriver to remove the four 3.4 mm-long screws securing the 5G mmWave antennas.
- ☒ If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled **#3428**.

Step 41 — Remove the right 5G mm wave antenna



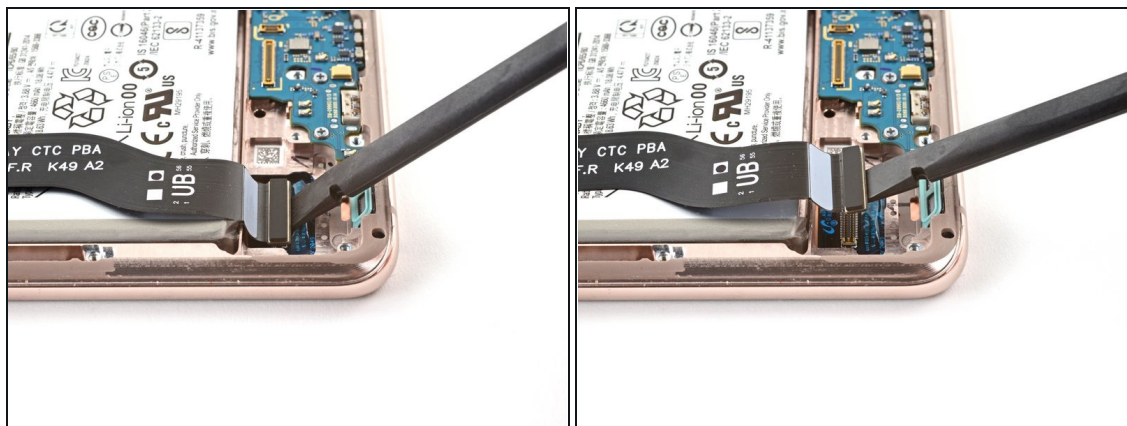
- Use the point of a spudger to pry up on the right 5G mmWave antenna bracket's bottom screw tab.
- Use tweezers, or your fingers, to remove the right 5G mmWave antenna.
- ☒ Set the antenna aside. You'll reuse it during reassembly.

Step 42 — Remove the left 5G mmWave antenna



- Use the point of a spudger to pry up on the left 5G mmWave antenna bracket's bottom screw tab.
 - Use tweezers, or your fingers, to remove the left 5G mmWave antenna.
- ☒ Set the antenna aside. You'll reuse it during reassembly.

Step 43 — Disconnect the display cable



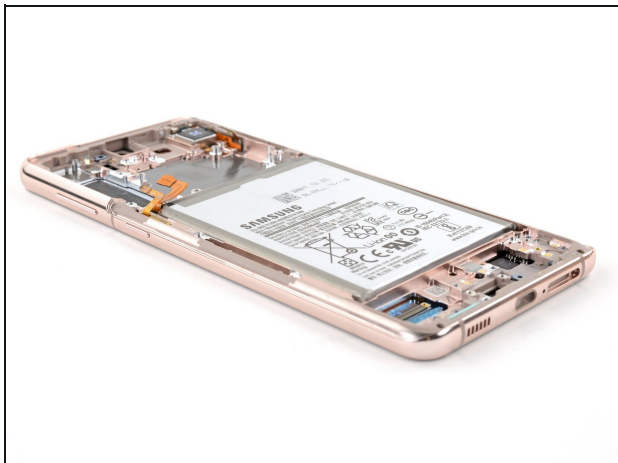
- Use a spudger to pry up and disconnect the display cable's press connector near the bottom of the device.

Step 44 — Remove the display cable



- Use tweezers, or your fingers, to remove the display cable.
- ☒ Set the cable aside. You'll reuse it during reassembly.

Step 45 — Only the screen and battery assembly remains



- You're now left with the screen and battery assembly.

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 [follow the Samsung Self-Repair document](#) (beginning page 9) to make sure your device is fully functional.

Download the [Self Repair Assistant](#) on your device and [follow the Samsung Self-Repair document](#) (beginning page 24) to perform a battery cycle reset.

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.