

# **Samsung Galaxy Note20 Battery Replacement**

Use this guide to remove and replace the...

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#### INTRODUCTION

Use this guide to remove and replace the battery on your Samsung Galaxy Note20.

#### For your safety, discharge the battery below 25% before disassembling your phone.

This reduces the risk of a dangerous thermal event if the battery is accidentally damaged during the repair. If your battery is swollen, <u>take appropriate precautions</u>.

#### TOOLS:

iOpener (1)

Suction Handle (1)

iFixit Opening Picks (Set of 6) (1)

Spudger (1)

Tweezers (1)

Phillips #00 Screwdriver (1)

Isopropyl Alcohol (90% or Greater) (1)

#### PARTS:

Galaxy Note20/20 5G Battery (1)

### Step 1 — Heat the rear cover



- ⚠ Completely power off your phone before you begin disassembly.
- Heat an iOpener and apply it to the left side of the rear cover for one minute.
  - ⚠ A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the screen, internal battery, and the plastic rear cover are susceptible to heat damage.

# Step 2 — Insert an opening pick







- Apply a suction cup to the heated edge of the rear cover, as close to the edge as possible.
- Pull up on the suction cup with strong, steady force to create a gap between the rear cover and the frame.
  - (i) Depending on the age of your phone, this may be difficult. If you are having trouble, apply more heat to the edge and try again.
- Insert an opening pick into the gap.
  - ⚠ Don't insert the opening pick more than 5 mm into the phone or you risk damaging the internal components.

# Step 3 — Begin to cut the adhesive



- ⚠ As you cut through the adhesive around the perimeter of the phone, don't insert the pick more than 5 mm to avoid damaging internal components.
- Slide the opening pick along the left edge towards the bottom left corner to cut through the adhesive.
- Leave the pick inserted in the bottom left corner to prevent the adhesive from resealing.

#### Step 4 — Cut along the perimeter of the rear cover







- Repeat the process of heating and cutting the adhesive along the three remaining sides of the rear cover.
  - ② You can insert each new opening pick in the gaps created by the opening picks left in each corner.
- As you proceed, leave an opening pick in each corner to prevent the adhesive from resealing.
- (i) If the rear cover is still attached to the frame after cutting through all four sides, try slicing through the adhesive again with an opening pick.

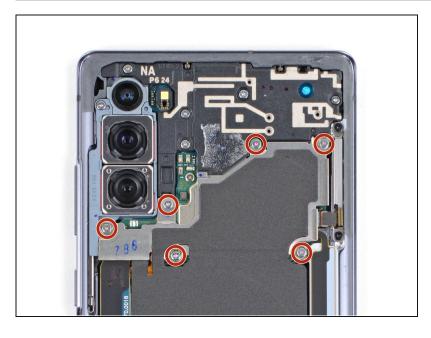
### Step 5 — Remove the rear cover





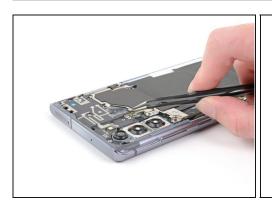
• Lift the rear cover straight up to remove it.

### Step 6 — Remove the motherboard shield



- Use a Phillips screwdriver to remove the six 4.0 mm screws securing the motherboard shield.
  - i If these screws have not been removed before, they may be difficult to remove as they have threadlocker on their threads.
- i Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from.

# Step 7







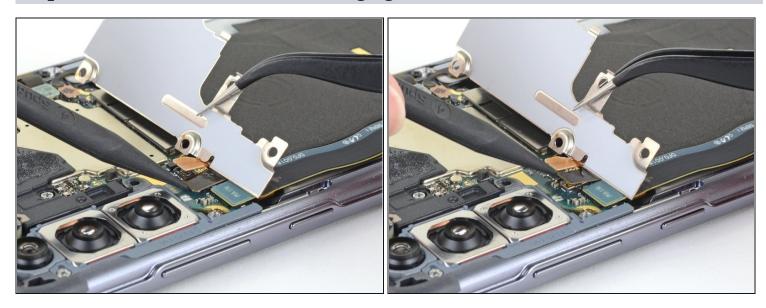
- Use a pair of <u>tweezers</u> to lift up and flip back the motherboard shield.
  - $\triangle$  Be careful when handling the motherboard shield because its edges are thin and sharp.

### Step 8 — Disconnect the battery



- While using a pair of tweezers to hold the motherboard shield out of the way, use the pointed end of a spudger to pry up the battery press connector.
- ⚠ Take care to pry only under the edge of the connector to prevent damaging the socket itself and surrounding components.
- 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 9 — Disconnect the wireless charging coil

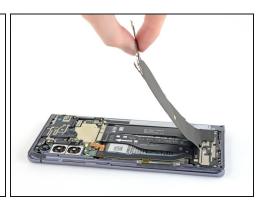


• While using a pair of tweezers to hold the motherboard shield out of the way, use the pointed end of a spudger to pry up the wireless charging coil press connector.

#### Step 10 — Remove the wireless charging coil

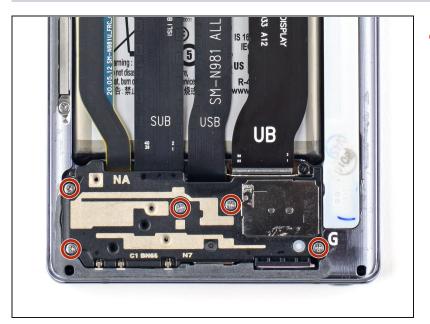






- Grip the motherboard shield with your fingers.
- Peel the wireless charging coil up and away from the device.
  - (i) The wireless charging coil is secured to the device with light adhesive.
- Remove the wireless charging coil.

### Step 11 — Unscrew the loudspeaker

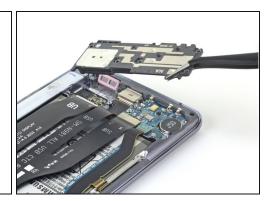


 Use a Phillips screwdriver to unscrew the five 4.0 mm screws securing the loudspeaker to the frame.

#### Step 12 — Remove the loudspeaker







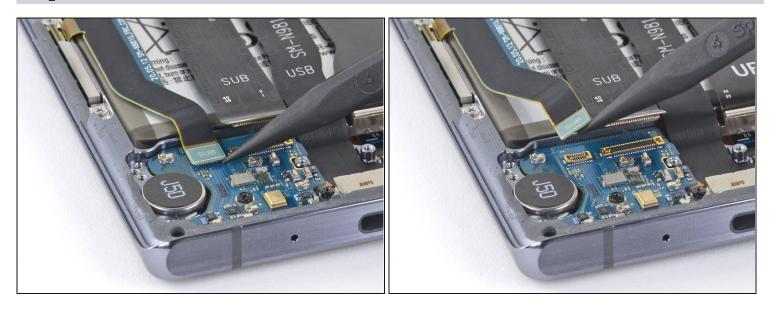
- Insert the pointed end of a spudger underneath the loudspeaker near its top left screw hole.
- Use the spudger to pry up and detach the loudspeaker from the frame.
- Use a pair of <u>tweezers</u> to lift and remove the loudspeaker.
  - ⚠ Take care not to puncture or bend the battery with your tweezers—a punctured or bent battery may leak dangerous chemicals or cause a thermal event.

# Step 13 — Disconnect the interconnect cables

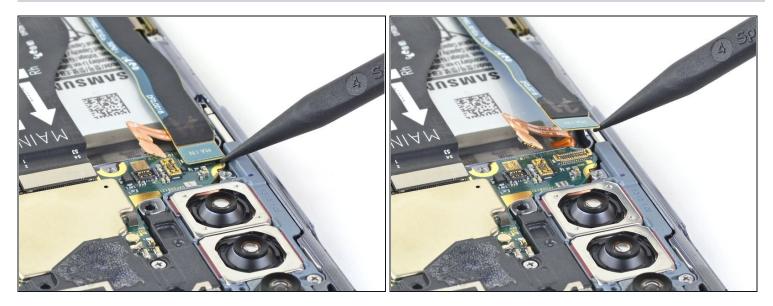


• Use the pointed end of a spudger to disconnect the main interconnect cable from the daughterboard.

# Step 14

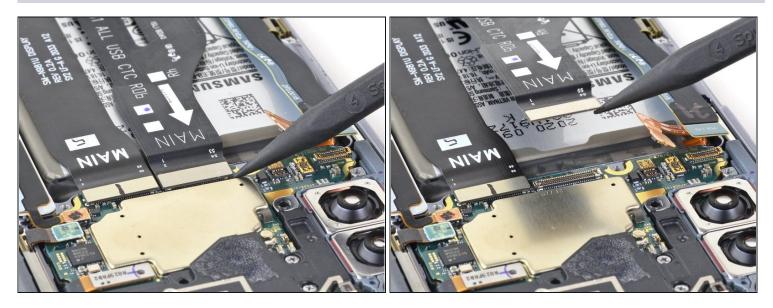


• Use the pointed end of a spudger to disconnect the secondary interconnect cable from the daughterboard.



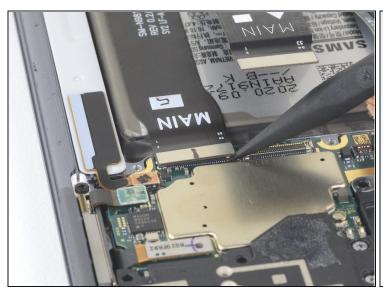
• Use the pointed end of a spudger to disconnect the secondary interconnect cable from the motherboard.

# Step 16



• Use the pointed end of a spudger to disconnect the main interconnect cable from the motherboard.

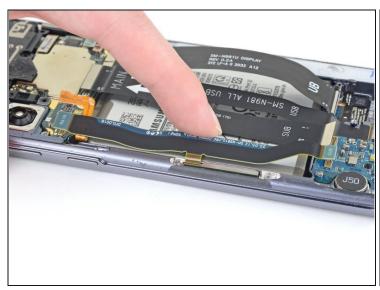
### Step 17 — Disconnect the display cable





• Use the pointed end of a spudger to disconnect the display cable from the motherboard.

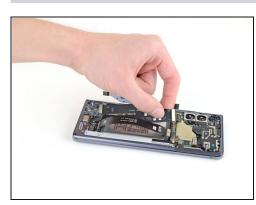
#### Step 18 — Move the cables



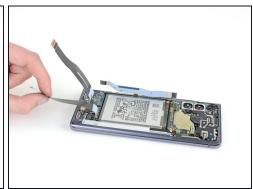


- Flip the secondary interconnect cable away from the battery.
- (i) The secondary interconnect cable is still attached to the phone by a ribbon cable. You only need to move the cable enough to access the battery.

⚠ Do not bend the ribbon cables more than necessary. Excessive bending may damage the cables.

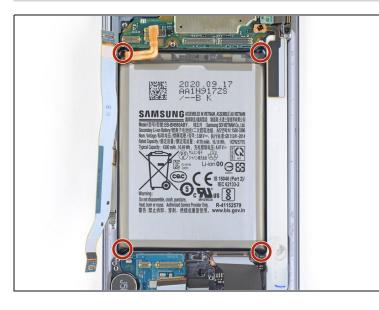






- Bend the main interconnect cable back so you can access the battery.
- Bend the display cable back and out of the way.

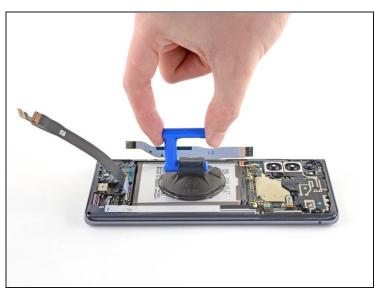
### Step 20 — Apply isopropyl alcohol





- Apply a few drops of high-concentration (90% or higher) isopropyl alcohol to the open spaces in each corner of the battery.
- Wait two minutes for the isopropyl alcohol to weaken the adhesive underneath the battery.

# Step 21 — Remove the battery



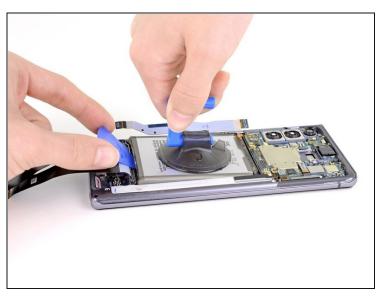


• Apply a suction cup to the center of the battery.



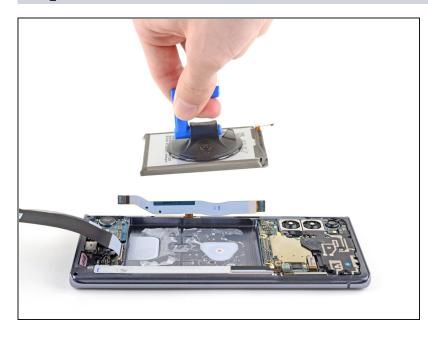


- Pull up on the suction cup with a steady force to create a gap between the bottom edge of the battery and the frame.
- Take care not to bend the battery—a bent battery may leak dangerous chemicals or cause a thermal event.
- (i) If the battery does not appear to be separating from the frame, apply a few more drops of isopropyl alcohol and wait two minutes before trying again.
- (i) The adhesive underneath the battery is strong. You might need to apply isopropyl alcohol and pull up on the suction cup multiple times to loosen the battery.





- Insert the point of an opening pick into the gap created between the bottom edge of the battery and the frame.
- Push the pick under the battery to cut through the adhesive and detach the battery from the frame.
  - ⚠ Don't insert the opening pick more than halfway to avoid damaging the fingerprint sensor underneath the battery.
- ⚠ Don't try to forcefully lever the battery out. If needed, apply a few more drops of alcohol to further weaken the adhesive. Never deform or puncture the battery with your pry tool.



- Pull up on the suction cup to remove the battery.
  - i The battery will come out without much force once the isopropyl alcohol has adequately penetrated the battery adhesive.
- If there's any alcohol solution remaining in the phone, carefully wipe it off or allow it to air dry before installing your new battery.
- During reassembly, remove the old adhesive and apply stretch release adhesive strips, double sided adhesive tape, or pre-cut adhesive to secure the new battery.
- ⚠ Do not reuse the battery after it has been removed, as doing so is a potential safety hazard.

For optimal performance, <u>calibrate your newly installed battery</u> after completing this guide.

Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

#### 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 <u>basic troubleshooting</u>, or ask our <u>Samsung Galaxy Note20 Answers community</u> for help.