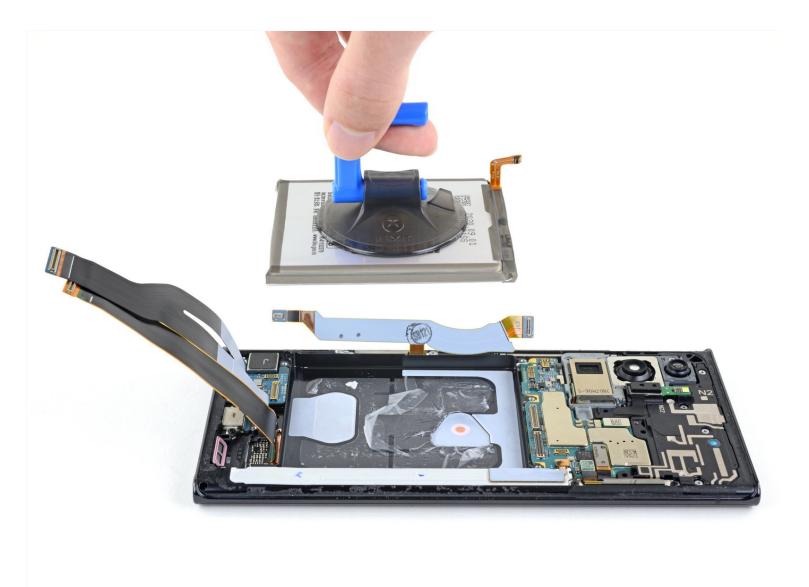


# Samsung Galaxy Note20 Ultra Battery Replacement

Use this guide to replace the battery on your...

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# INTRODUCTION

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

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, take appropriate precautions.



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 Ultra/20 Ultra 5G Battery (1) Galaxy Note20 Ultra Battery Adhesive (1) Tesa 61395 Tape (1)

#### Step 1 — Heat the rear cover



- Completely power off your phone before you begin disassembly.
- <u>Heat an iOpener</u> 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 and internal battery 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.
  - *i* If your back glass 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 panel.
- 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.



- 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 re-sealing.

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

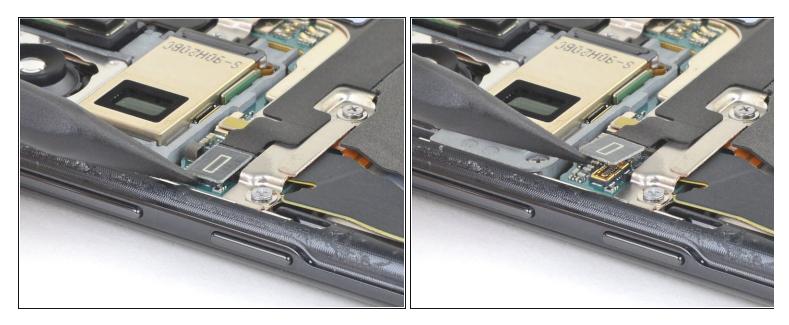


- Mhile cutting through the adhesive, don't insert the opening pick more than 5 mm into the phone or you risk damaging the internal components.
- Repeat the process of heating and cutting the adhesive along the three remaining sides of the rear cover.
  - (i) You can insert each new opening pick in the 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 re-sealing.
- Slide an opening pick back and forth around the entire perimeter of the phone to release any missed adhesive. Reheat any stubborn adhesive.



• Lift the rear cover straight up to remove it.

# Step 6 — Disconnect the wireless charging coil

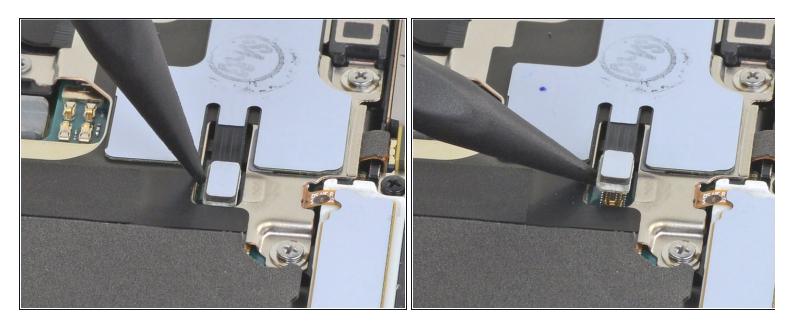


 Use the pointed end of a spudger to pry up and disconnect the wireless charging coil press connector.

Take care to pry only under the edge of the connector to prevent damaging the socket itself and surrounding components.

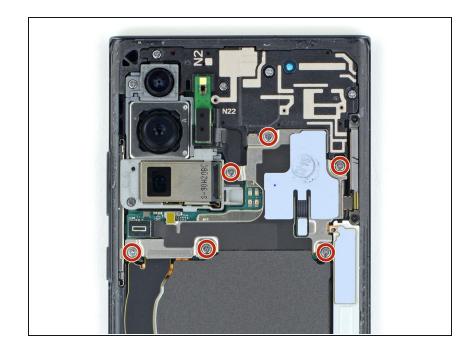
To re-attach <u>press connectors</u> like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

## Step 7 — Disconnect the white press connector



• Use the pointed end of a spudger to pry up and disconnect the white press connector located in the bottom right of the motherboard shield.

## Step 8 — Remove the motherboard shield screws



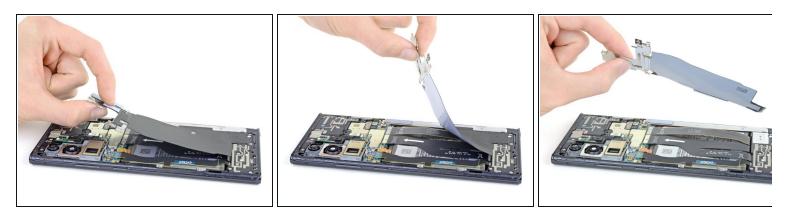
- Use a Phillips screwdriver to remove the six 4.0 mm screws securing the motherboard shield.
  - (i) If these screws have not been removed before, they may be difficult to remove as they have threadlocker on their threads.
  - *i* Throughout this repair, <u>keep track</u> of each screw and make sure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

## Step 9 — Remove the wireless charging coil



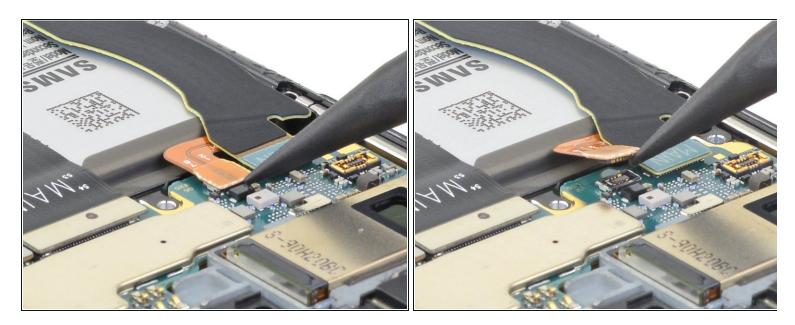
- Use a pair of tweezers to lift up the motherboard shield.
  A Be careful when handling the motherboard shield because its edges are thin and sharp.
- Use your fingers to grip the motherboard shield.

# Step 10



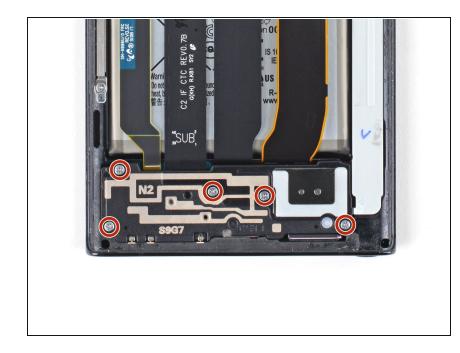
- Peel the wireless charging coil up and away from the device to remove it.
  - *i* The wireless charging coil is secured to the device with light adhesive.

# Step 11 — Disconnect the battery

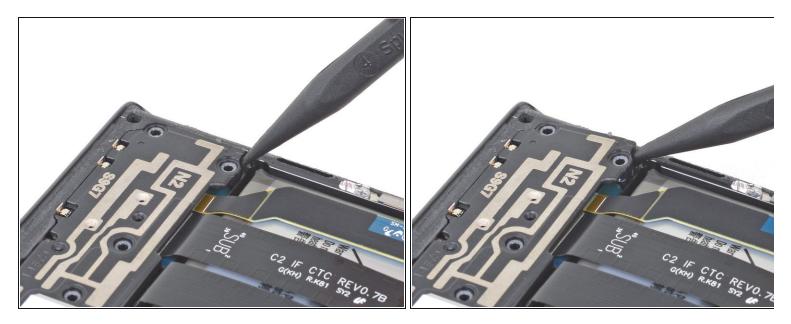


• Use the pointed end of a spudger to pry up the battery press connector to safely disconnect the battery before continuing repairs.

## Step 12 — Remove the loudspeaker screws



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

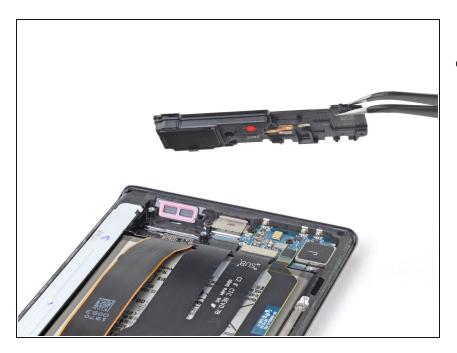


- Insert the pointed end of a spudger into the hole marked by a triangle on the left side of the loudspeaker.
- Use the spudger to pry up and loosen the left side of the loudspeaker.



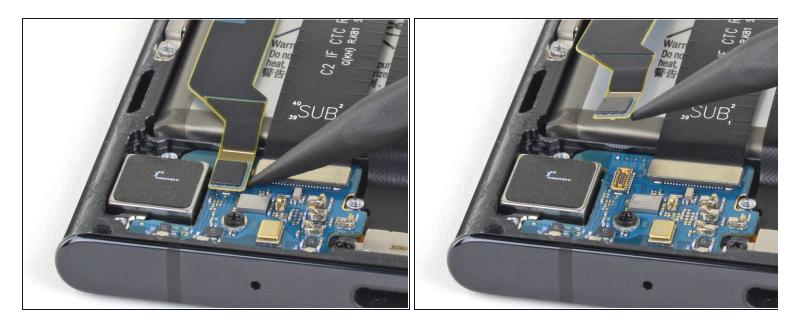
- Insert the pointed end of a spudger into the hole marked by a triangle on the right side of the loudspeaker.
- Use the spudger to pry up and detach the loudspeaker from the frame.
  - *i* The loudspeaker is secured to the frame by clips along its bottom edge.

#### Step 15 — Remove the loudspeaker



• Use a pair of tweezers to lift and remove the loudspeaker.

# Step 16 — Disconnect the interconnect cables from the daughterboard



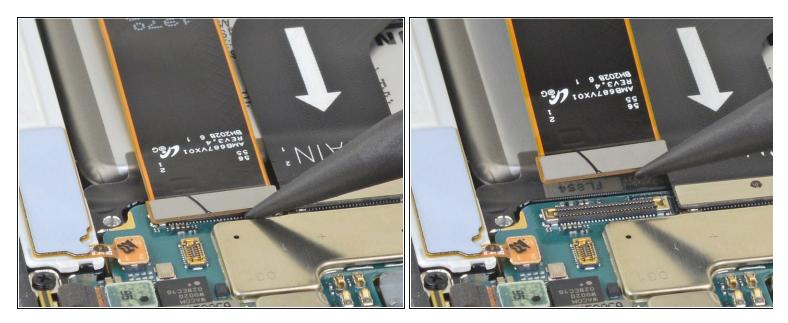
• Use the pointed end of a spudger to disconnect the secondary interconnect cable from the daughterboard.

# Step 17



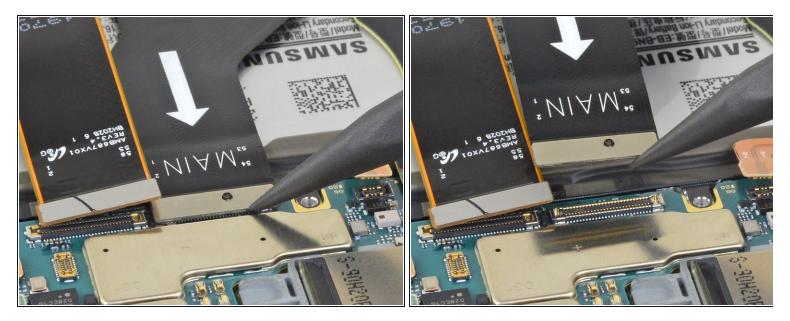
• Use the pointed end of a spudger to disconnect the main interconnect cable from the daughterboard.

# Step 18 — Disconnect the display cable

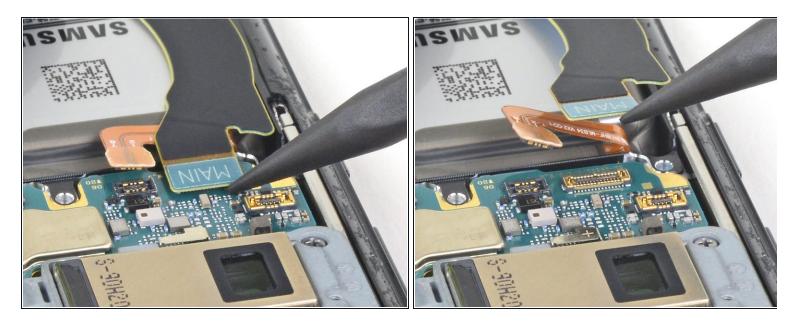


• Use the pointed end of a spudger to disconnect the display cable from the motherboard.

# Step 19 — Disconnect the interconnect cables from the motherboard

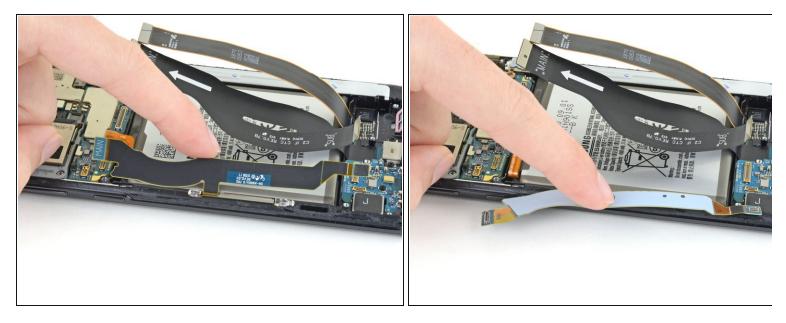


• Use the pointed end of a spudger to disconnect the main interconnect cable from the motherboard.



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

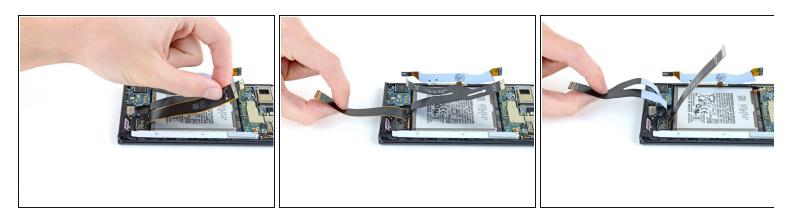
## Step 21 — Move the cables



- 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.

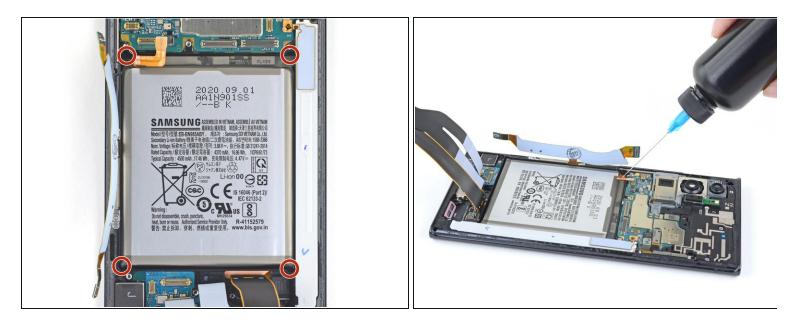
Do not bend the ribbon cables more than necessary. Excessive bending may damage the cables.

# Step 22



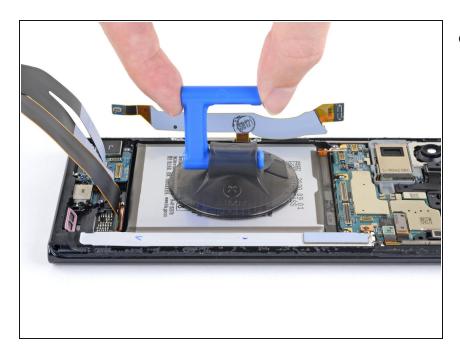
- Bend the display cable back so you can access the battery.
- Bend the main interconnect cable back.

# Step 23 — Apply isopropyl alcohol

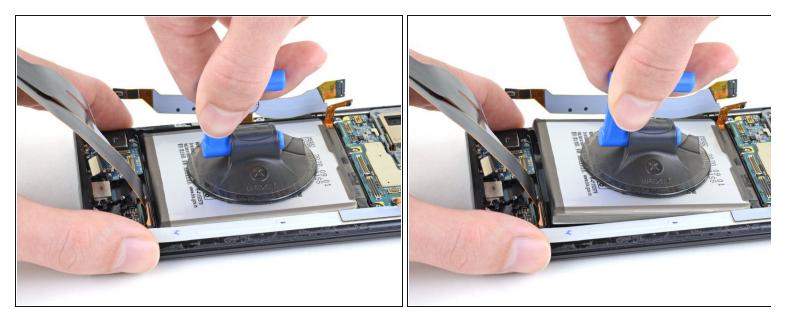


- Apply a few drops of high-concentration (90% or higher) isopropyl alcohol to the open spaces in each corner of the battery.
- Wait two minutes for the isopropyl alcohol to weaken the adhesive underneath the battery.

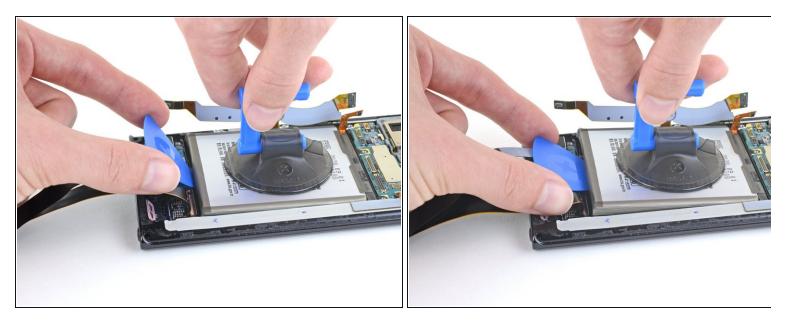
#### Step 24 — Remove the battery



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



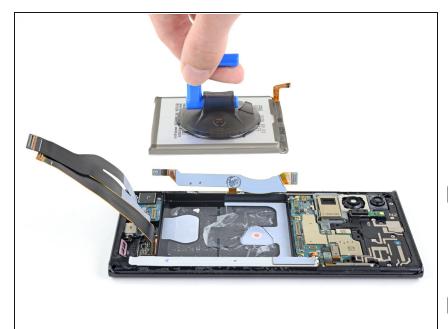
- Pull up on the suction cup with a steady force to create a gap between the bottom edge of the battery and the frame.
  - Take care not to bend the battery—a bent battery may leak dangerous chemicals or cause a thermal event.
  - (i) If the battery does not appear to be separating from the frame, apply 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.
  - 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 <u>stretch release</u> <u>adhesive strips</u>, double sided adhesive tape, or <u>pre-cut adhesive</u> 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 <u>R2 or e-Stewards certified recycler</u>.

Repair didn't go as planned? Try some basic troubleshooting, or ask our Samsung Galaxy Note20 Ultra Answers community for help.