

# Samsung Galaxy Note20 Ultra Screen Replacement

Use this guide to remove or replace the screen...

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#### INTRODUCTION

Use this guide to remove or replace the screen on your Samsung Galaxy Note20 Ultra.

The fingerprint sensor is embedded in this phone's screen. If your fingerprint sensor isn't working, you will likely need to replace the entire screen.

There is a significant chance that you may break the unreinforced and fragile display panel during this procedure. If you're trying to reuse the screen, be sure to apply plenty of heat and be extremely careful during the prying stage.

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.



#### **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 Ultra/20 Ultra 5G Screen (1)

Galaxy Note20 Ultra/20 Ultra 5G Display Adhesive (1)

Tesa 61395 Tape (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 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.

## Step 3 — Begin to cut the adhesive



- 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



- ⚠ While 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.

# Step 5 — Remove the rear cover





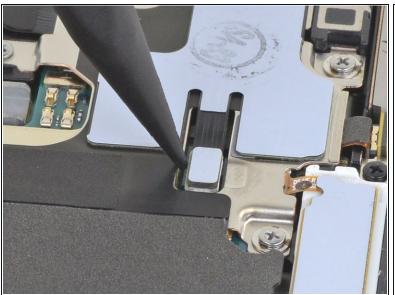
• Lift the rear cover straight up to remove it.

## 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.
  - 1 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.

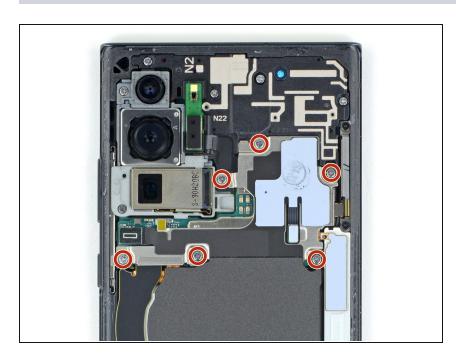
## Step 7 — Disconnect the white press connector





• 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, keep track of each screw and make sure it goes back exactly where it came from.

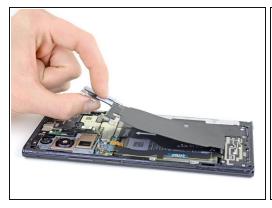
## Step 9 — Remove the wireless charging coil



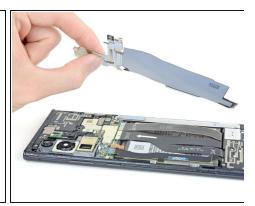




- Use a pair of tweezers to lift up the motherboard shield.
  - A Be careful when handling the motherboard shield because its edges are thin and sharp.
- Use your fingers to grip the motherboard shield.

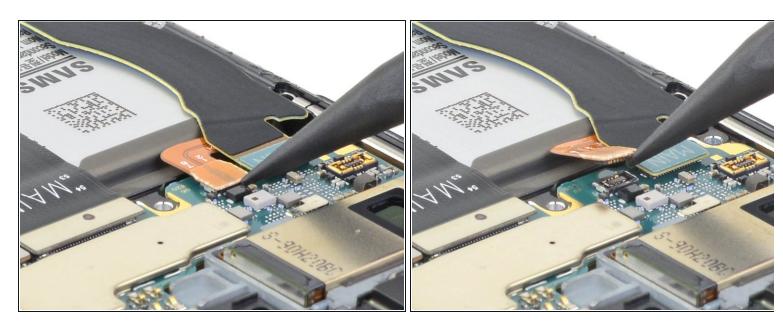






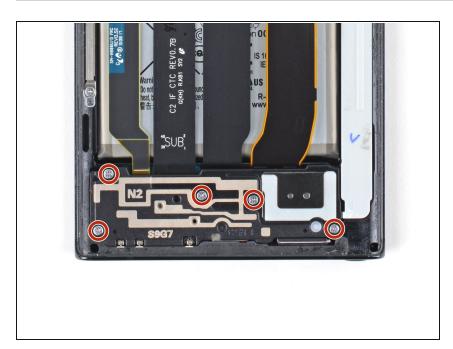
- Peel the wireless charging coil up and away from the device to remove it.
  - i The wireless charging coil is secured to the device with light adhesive.

# Step 11 — Disconnect the battery



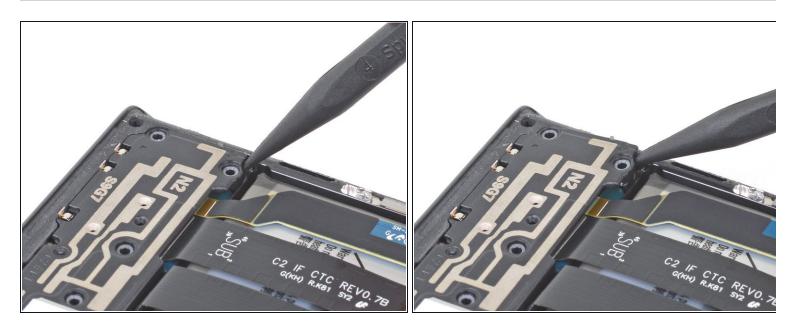
• Use the pointed end of a spudger to pry up the battery press connector to safely disconnect the battery before continuing repairs.

## Step 12 — Remove the loudspeaker screws



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

# Step 13 — Loosen the loudspeaker



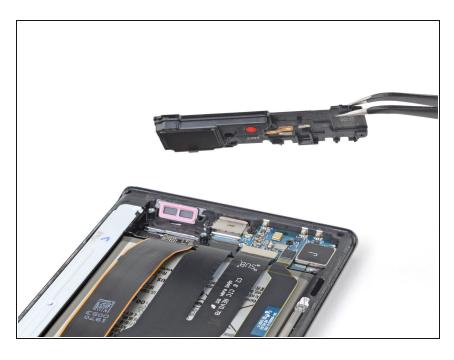
- Insert the pointed end of a spudger into the hole marked by a triangle on the left side of the loudspeaker.
- Use the spudger to pry up and loosen the left side of the loudspeaker.





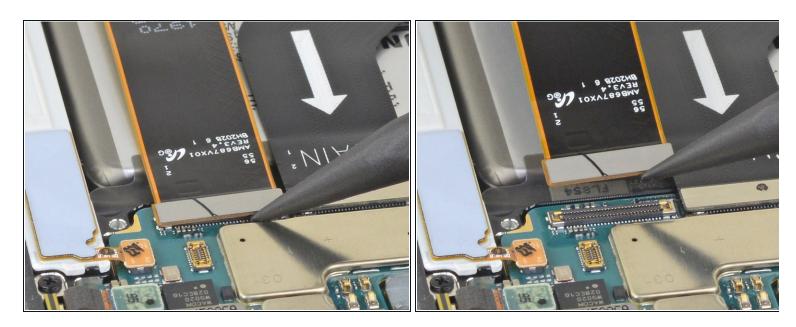
- Insert the pointed end of a spudger into the hole marked by a triangle on the right side of the loudspeaker.
- Use the spudger to pry up and detach the loudspeaker from the frame.
  - its bottom edge.

## Step 15 — Remove the loudspeaker



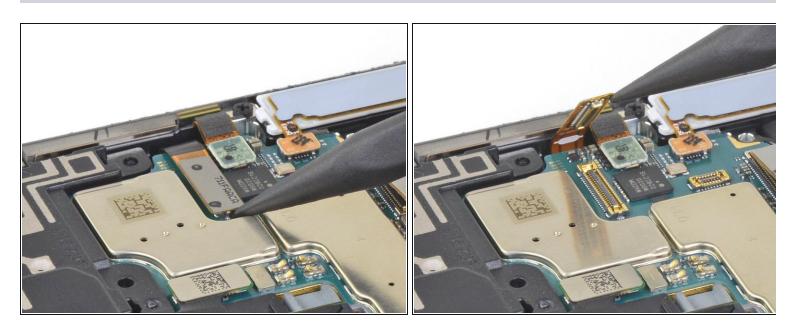
 Use a pair of tweezers to lift and remove the loudspeaker.

# Step 16 — Disconnect the display cable



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

## Step 17 — Disconnect the touch layer cable



 Use the pointed end of a spudger to disconnect the touch layer cable connector from the motherboard.

#### Step 18 — Adhesive information



- i This image shows the phone with the screen removed.
  - i To remove the screen, you will need to weaken and cut through the adhesive securing the screen's perimeter to the frame.
  - i There is additional adhesive around the front-facing camera and the fingerprint sensor.
- ⚠ Inserting opening picks beyond the adhesive may damage internal components.

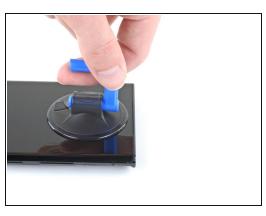
## Step 19 — Loosen the adhesive



- Heat an iOpener and apply it to the top of the screen for two minutes.
  - A properly heated iOpener should stay warm for up to 10 minutes.

    Do not reheat the iOpener more than necessary.
  - 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 both susceptible to heat damage.

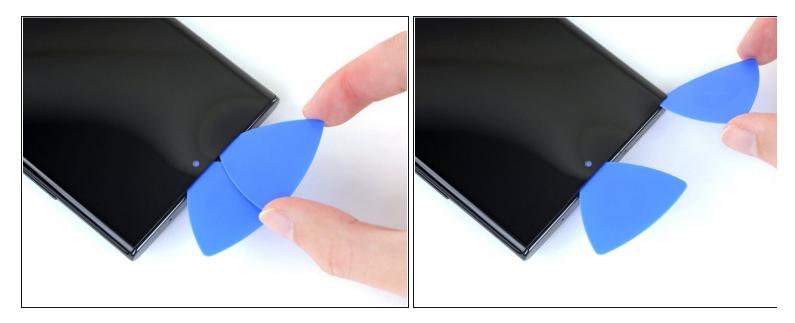
## Step 20 — Separate the perimeter adhesive



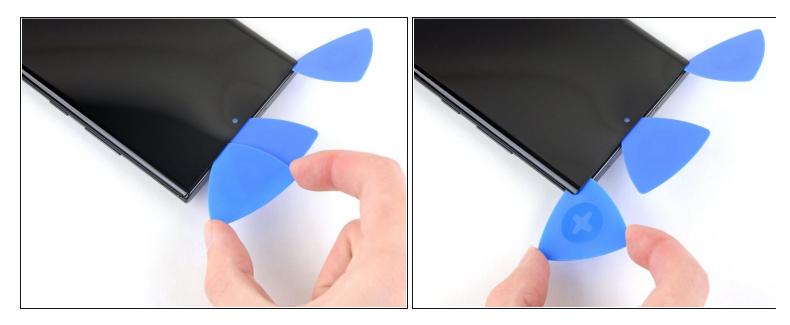




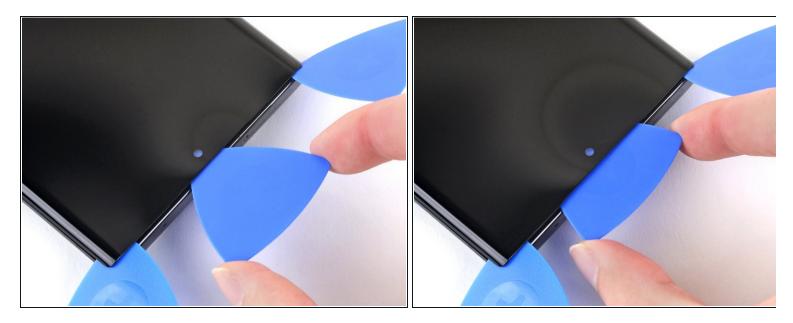
- Apply a suction cup to the heated top edge of the screen, as close to the edge as possible.
  - if your screen is badly cracked, <u>covering it with a layer of clear packing tape</u> may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken screen.
- Pull up on the suction cup with a steady force to create a gap between the screen and the frame.
  - (i) Depending on the age of your phone, this may be difficult. If you are having trouble creating a gap for the opening pick, apply more heat to the edge and try again. You may need to repeat this step multiple times.
- Insert the tip of an opening pick into the gap at a steep angle. Push down the opening pick so that it is level with the screen.
  - Make sure the opening pick slides over the front-facing camera and is not pushing against it.
- Leave the opening pick in the gap to prevent the adhesive from re-sealing.



- Insert a second opening pick into the gap.
- Slide it to the top left corner of the screen to cut the adhesive.
- Leave the opening pick in the top left corner to prevent the adhesive from re-sealing.

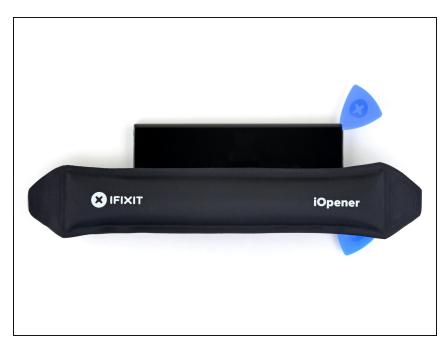


- Insert a third opening pick into the initial gap.
- Slide it to the top right corner to cut the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from re-sealing.

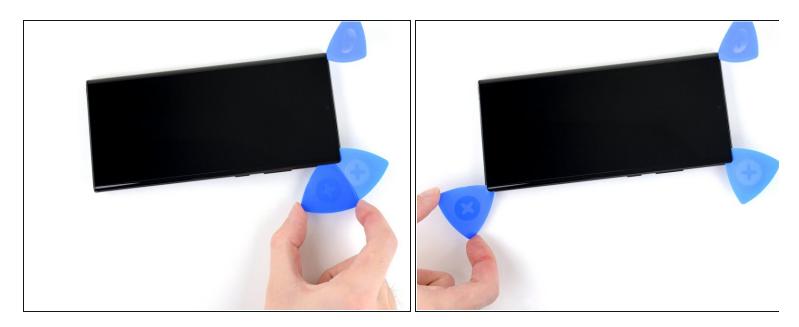


- Push the center opening pick farther into the phone to cut through the adhesive surrounding the earpiece speaker and front-facing camera.
  - insert the opening pick so far under the screen that you can't retrieve it.
- Remove the center opening pick.

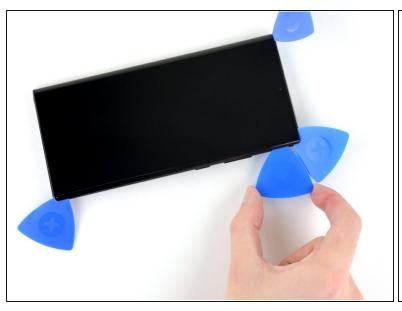
# Step 24



 Apply a heated iOpener to the right edge of the screen for two minutes.



- Insert another opening pick into the gap in the top right corner of the screen.
- Slide the opening pick down to the bottom right corner to cut through the adhesive.
- Leave the opening pick in the bottom right corner to prevent the adhesive from re-sealing.



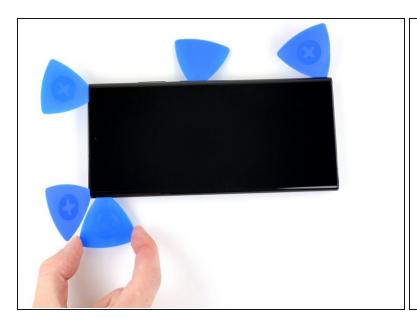


- Insert an opening pick into the gap in the top right corner.
- Slide the opening pick to the center of the right side.
- Leave the opening pick under the center of the right edge of the screen to prevent the adhesive from re-sealing.

# Step 27



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





- Insert another opening pick into the gap in the top left corner of the screen.
- Slide the opening pick down to the bottom left corner to cut through the adhesive.
- Leave the opening pick in the bottom left corner to prevent the adhesive from re-sealing.





- Insert an opening pick into the gap in the top left corner.
- Slide the opening pick to the center of the left side.
- Leave the opening pick under the center of the left edge of the screen to prevent the adhesive from re-sealing.
- (i) At this point, the perimeter of the screen should be separated from the frame. If there is still resistance around the edges of the screen, use an opening pick to cut the adhesive again.

#### Step 30 — Loosen the inner adhesive





- Hold the phone so that the right edge is facing upward.
- Apply a few drops of high-concentration (90% or higher) isopropyl alcohol in the gap between the right edge of the screen and the frame to weaken the inner adhesive near the fingerprint sensor.
  - 1 Insert the isopropyl alcohol applicator near the top of the inner adhesive area to avoid damaging the fingerprint sensor.
  - (i) You may apply the isopropyl alcohol without inserting the applicator into the phone if needed.
- Tilt the phone so that the isopropyl alcohol flows toward the inner adhesive.
- Wait two minutes for the alcohol to weaken the adhesive.

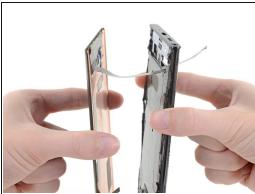
## Step 31 — Remove the screen

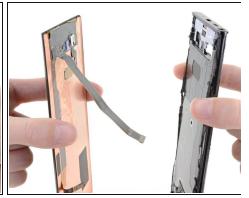




- non't try to completely remove the screen yet. There are still two cables routed through the frame.
- Hold the top half of the frame up so that the touch layer cable can be threaded through its cutout.
- Lift the screen up by its top half while threading the touch layer cable through its cutout in the frame.
  - ⚠ Don't lift the screen higher than about a 30 degree angle above the frame to avoid damaging the display cable.
  - if the screen does not easily lift off the frame, you may need to cut through more of the perimeter adhesive or apply more isopropyl alcohol to the inner adhesive.







- Thread the display cable through its cutout in the frame as you remove the screen.
- During reassembly, remember to thread the display cable and touch layer cable through their cutouts in the frame.



- Remove the screen.
  - i Remove any leftover adhesive before installing a new screen.
  - i If there's any alcohol solution remaining in the phone, carefully wipe it off or allow it to air dry before installing your new screen.
- Be sure to test your repairs before installing new adhesives.
- If you are using a custom-cut adhesive, follow this guide for instructions on how to apply adhesive to the replacement screen.
- If you are using a pre-cut adhesive card, follow 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</u> <u>Ultra Answers community</u> for help.