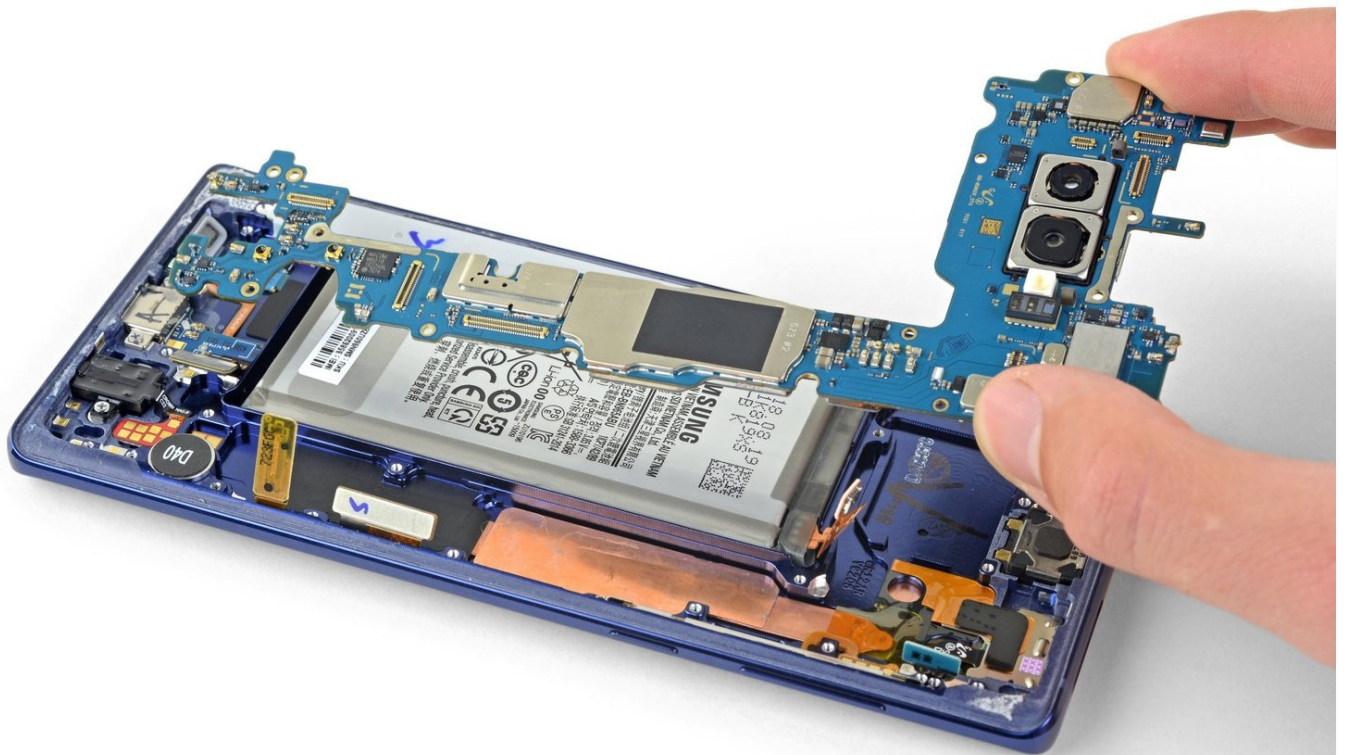




Samsung Galaxy Note9 Motherboard Replacement

A damaged motherboard can cause auxiliary...

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INTRODUCTION

A damaged motherboard can cause auxiliary components to malfunction and even prevent it from powering on. If you think your motherboard is causing you problems, follow this guide to replace it on your Samsung Galaxy Note9.

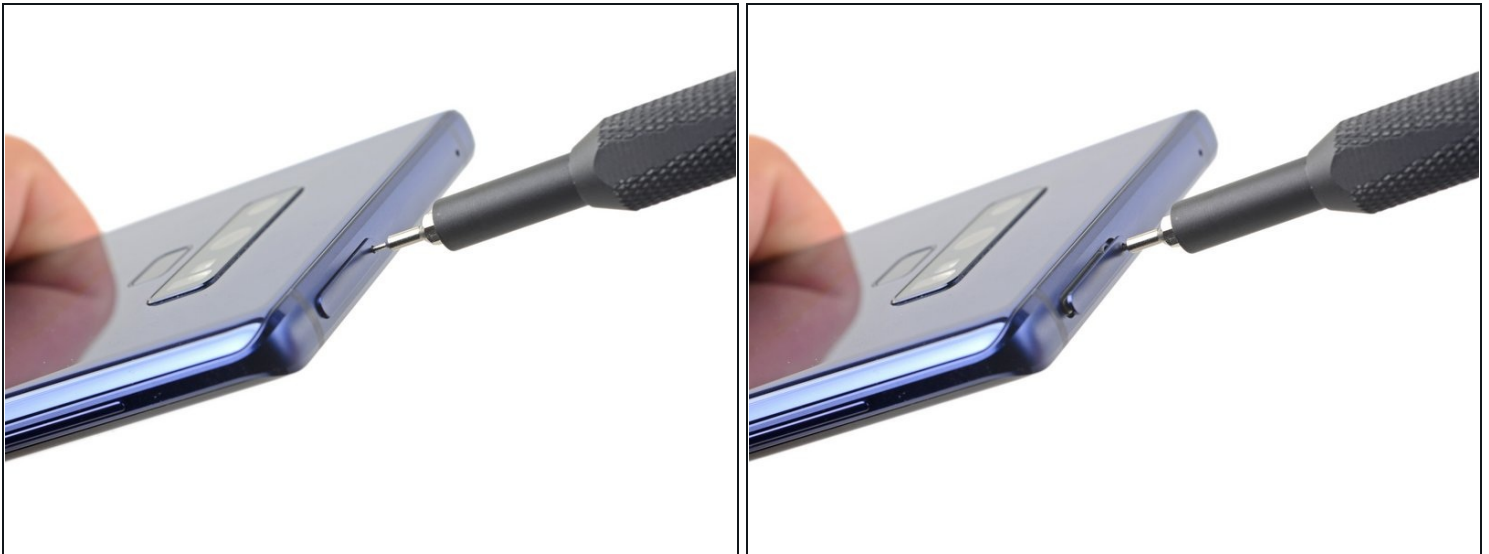
TOOLS:

[Suction Handle](#) (1)
[iOpener](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[Phillips #000 Screwdriver](#) (1)
[Spudger](#) (1)
[SIM Card Eject Tool](#) (1)
[Tweezers](#) (1)

PARTS:

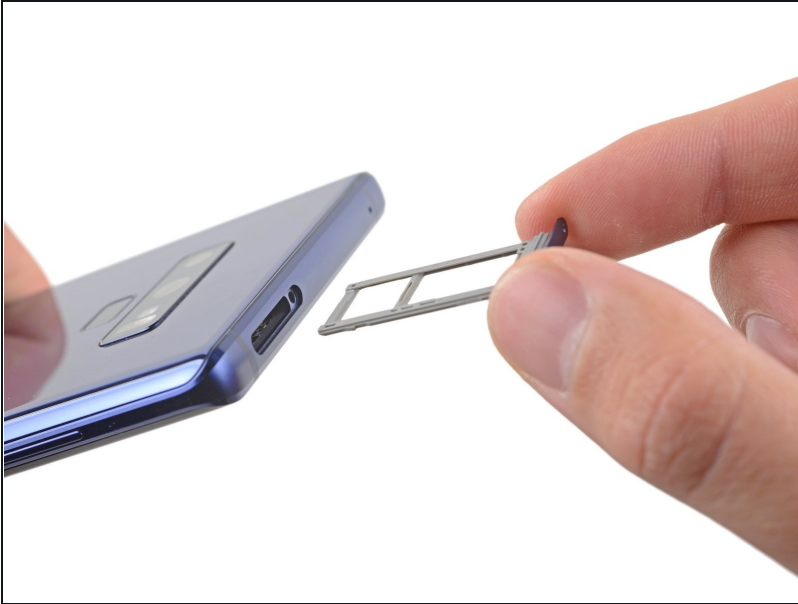
[Galaxy Note9 Rear Cover Adhesive](#) (1)
[Samsung Galaxy Note9 Motherboard](#) (1)

Step 1 — Eject the SIM card tray



- Insert a SIM card eject tool straight into the hole in the SIM card tray.
- Press to eject the SIM card tray.

Step 2 — Remove the SIM card tray



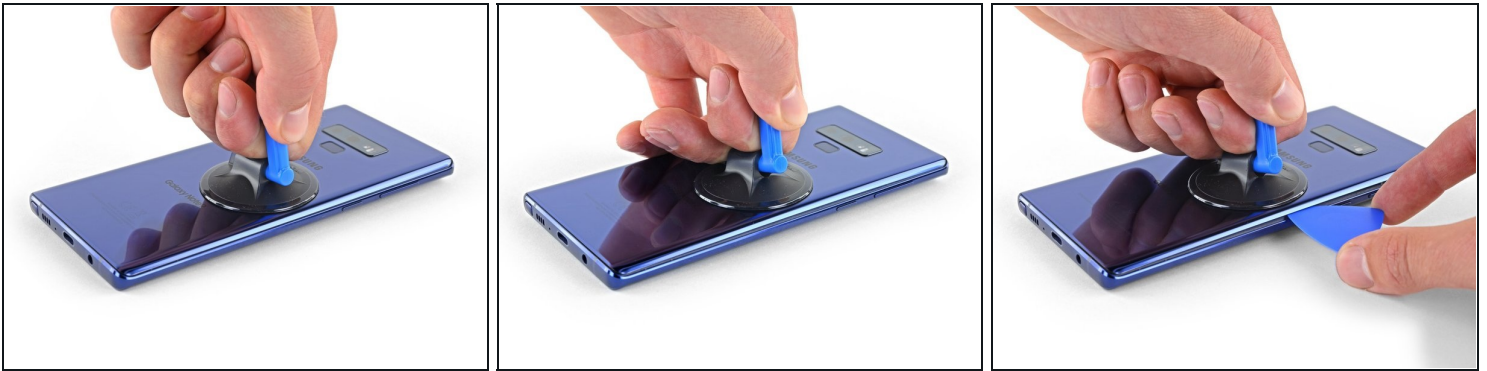
- Remove the SIM card tray.
- ⓘ The SIM card will fall out of the tray easily.

Step 3 — Apply a heated iOpener



- Power off your phone before beginning disassembly.
- Use a hairdryer, a heatgun, or [prepare an iOpener](#) and apply it to the right edge of the back of the phone for about a minute to soften the adhesive underneath.

Step 4 — Insert an opening pick



- Apply a suction handle to the back cover.
 - Lift with a suction handle to create a gap between the back cover and the frame of the phone.
 - Insert an opening pick into the gap.
- ⓘ If the glass is badly cracked, [cover it in packing tape](#) to create a surface for the suction cup to adhere to.

⚠ If the adhesive won't budge, apply more heat, **not** excessive force. Too much force could break the glass.

Step 5 — Cut through the adhesive



- Note that there is more adhesive along the top edge and around the camera bezel than around the rest of the phone.
 - Cut carefully around the left edge near the fingerprint sensor or you risk damaging the ribbon cable inside.
- ⓘ If, at any point, the adhesive feels stubborn, apply more heat—not more force.

Step 6 — Slide the opening pick



- Starting from the center, cut the adhesive up and down the right side with an opening pick.

⚠ Do not insert the pick more than halfway into the phone when cutting near the fingerprint sensor or cameras, or you risk damaging internal components.

Step 7



⚠ Be careful near the corner, as the glass is very weak. Apply more heat at any time if the adhesive becomes stuck.

- Leave an opening pick in the upper-right corner.
- Use another opening pick to cut the adhesive around the bottom-right corner.
- Leave that opening pick in the phone.

Step 8



- Use a heat gun or hair dryer or apply a heated iOpener to the left side of the rear panel for at three minutes to soften the adhesive underneath.

Step 9



⚠ Be careful near the corners, as the glass is weakest there.

- Insert an opening pick into the lower-left corner of the rear panel.
- Using another opening pick, cut the adhesive along the left edge of the rear panel.

⚠ Don't insert an opening pick in more than halfway on the left edge near the fingerprint sensor or you may damage the ribbon cable inside.

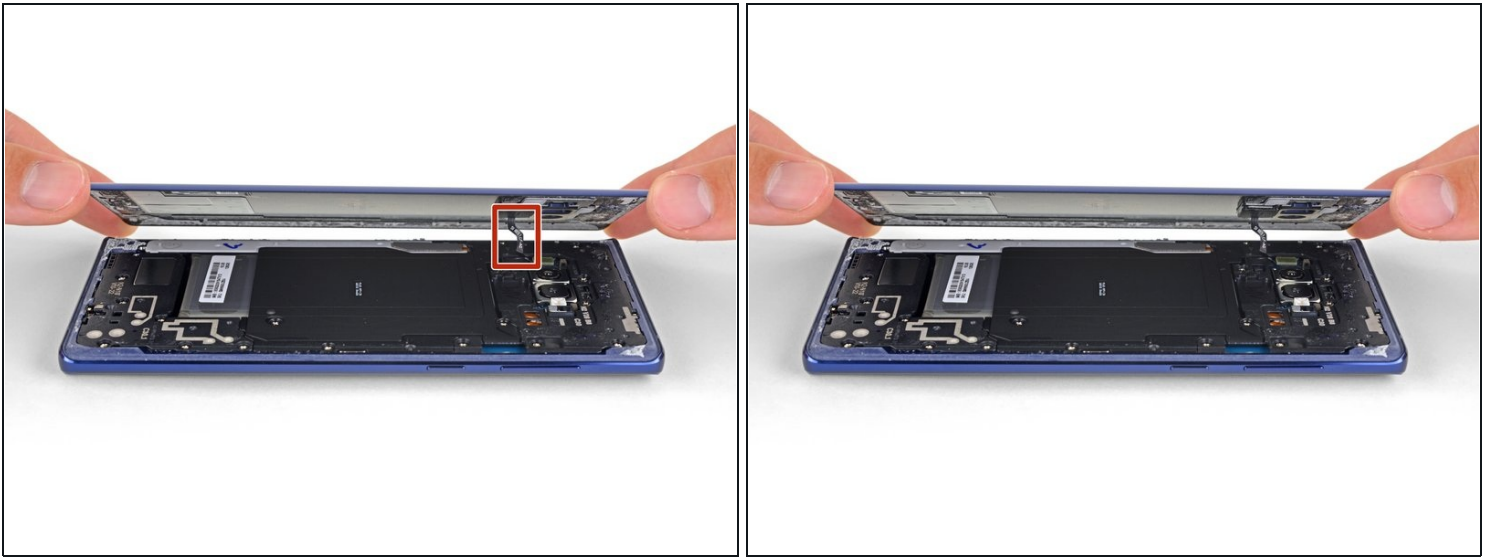
ⓘ It is fine if opening picks fall out as the back cover becomes separated.

Step 10



- Using the inserted opening pick, carefully cut the adhesive around the upper-left corner of the rear panel.
 - Finally, cut the last of the adhesive along the top of the phone.
- ⓘ Use an iOpener, hair dryer, or heat gun to apply more heat as needed where you are cutting the adhesive.

Step 11



- Separate the right side of the rear cover first.
- Tilt the cover up along the left edge to expose the fingerprint sensor ribbon cable.

⚠ Do not pull out the fingerprint sensor ribbon cable yet.

ⓘ The fingerprint sensor cover might stay attached to the midframe.

Step 12 — Disconnect the fingerprint sensor



- Use the tip of a spudger to pry the fingerprint sensor ribbon cable up and out of its socket.

Step 13

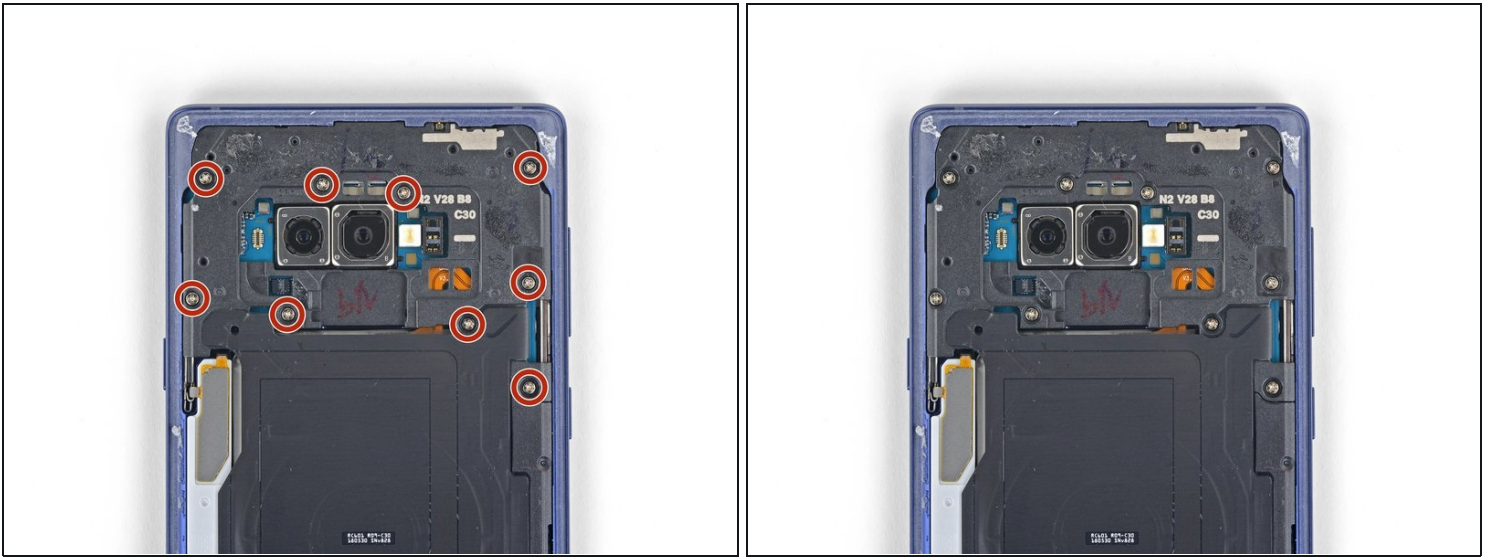


- Remove the back cover.

★ To re-install the back cover:

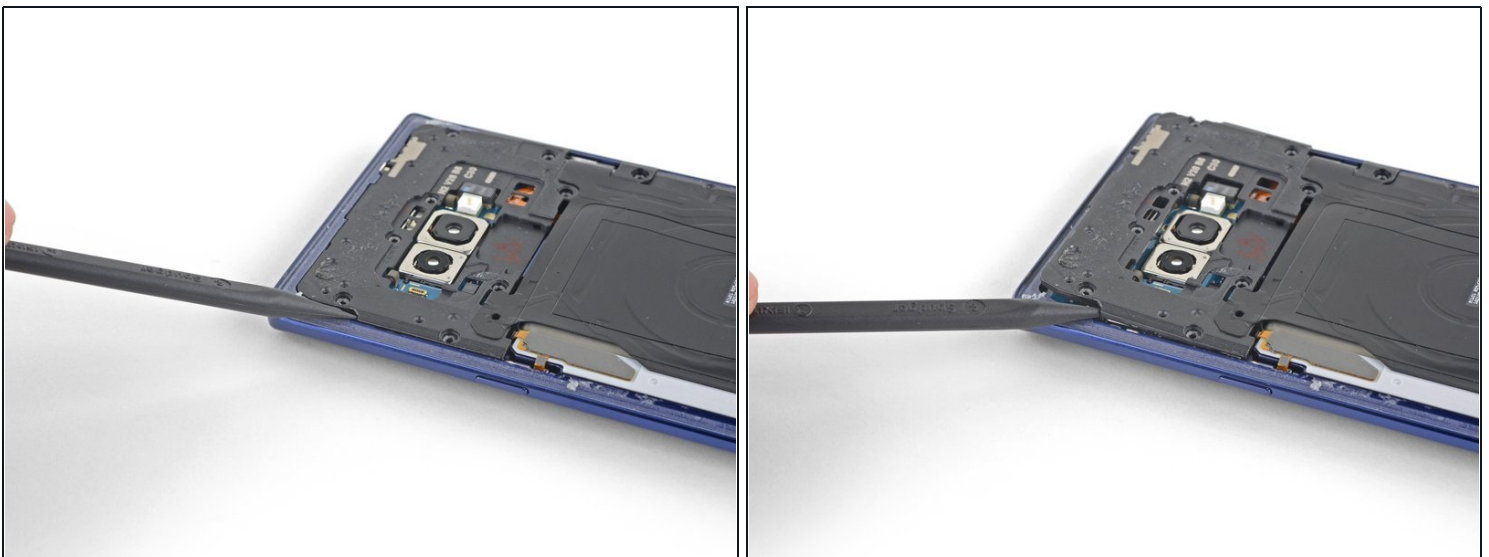
- Use tweezers to peel away any remaining adhesive from the phone's chassis. Then clean the adhesion areas with high concentration isopropyl alcohol (at least 90%) and a lint-free cloth to prep the surface for the new adhesive. You don't have to clear out adhesive down to the plastic but larger pieces should be removed.
- Turn on your phone and test your repair before installing new adhesive and resealing the phone.
- Carefully apply the new adhesive to the back cover, then line up one edge of the glass against the phone chassis and firmly press the glass into the phone.

Step 14 — Remove the upper midframe



- Use a Phillips screwdriver to remove the nine 4 mm screws securing the upper midframe.

Step 15



- Insert the tip of a spudger into the upper-left corner of the upper midframe.
- Pry the upper midframe out of the phone.

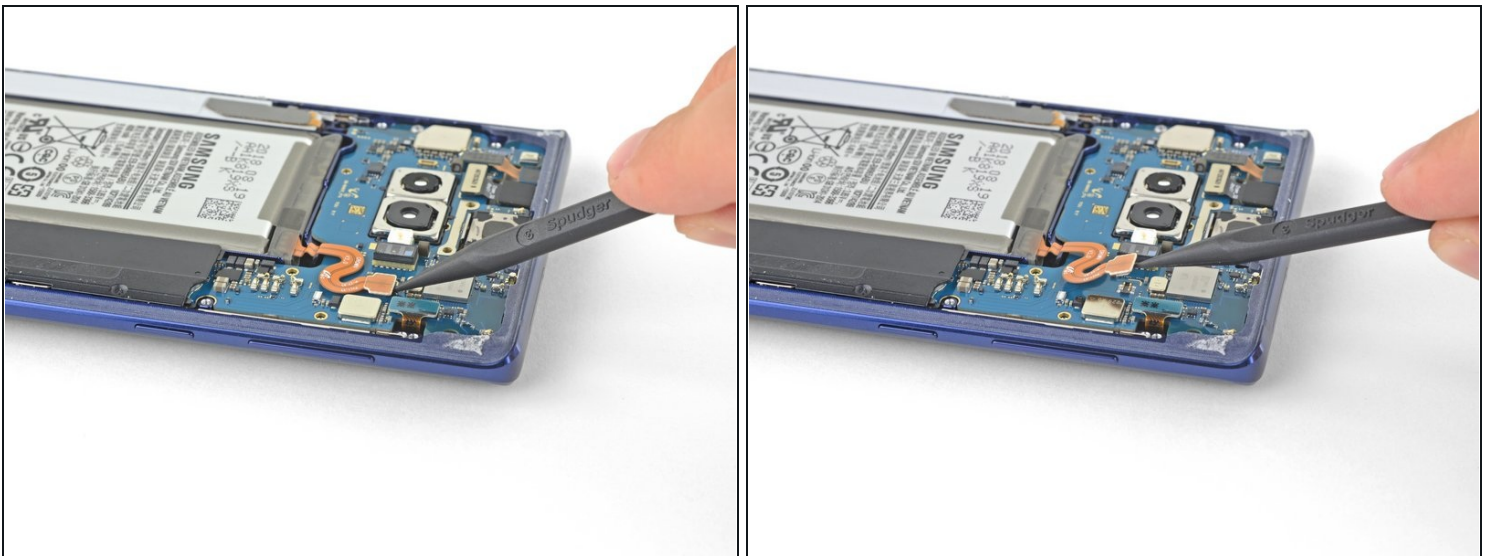
i The upper midframe snaps into and out of place.

Step 16



- Peel the wireless charging coil off the battery starting with the left side.
- ⓘ The adhesive is weak but you can use an opening pick to cut it if necessary.
- ★ During reassembly start by snapping the midframe into place first before adhering the wireless charging coil.

Step 17 — Disconnect the battery



- Use the tip of a spudger to disconnect the orange ribbon cable connecting the battery to the motherboard.

Step 18 — Remove the midframe



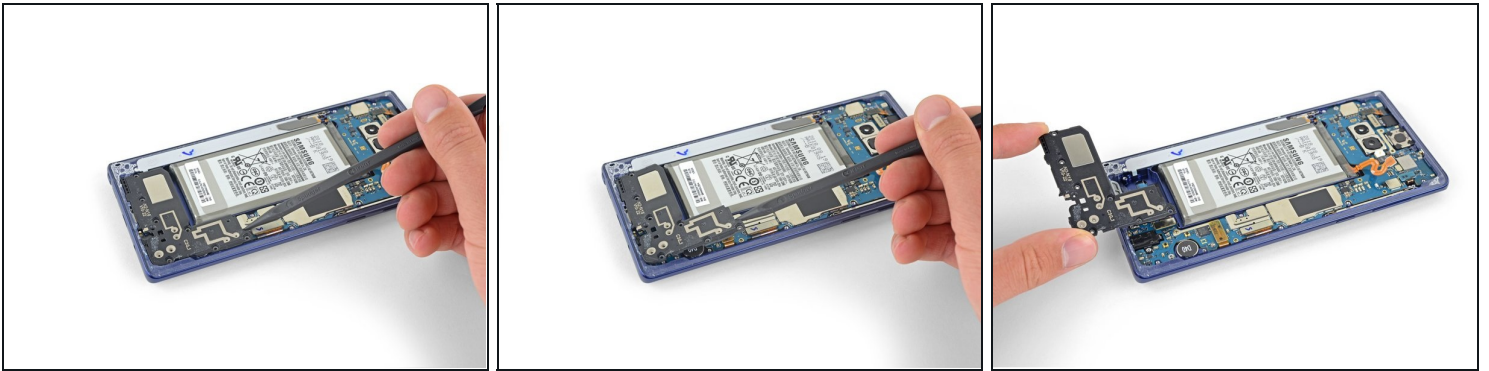
- Remove the nine 4 mm Phillips screws from the plastic cover next to the battery.

Step 19



- Remove the plastic cover next to the battery.

Step 20



- Insert the tip of a spudger into the top of the lower midframe.
- Pry the lower midframe out from the phone.
- ⓘ The lower midframe snaps into and out of place.
- Remove the lower midframe.

Step 21 — Remove the front camera



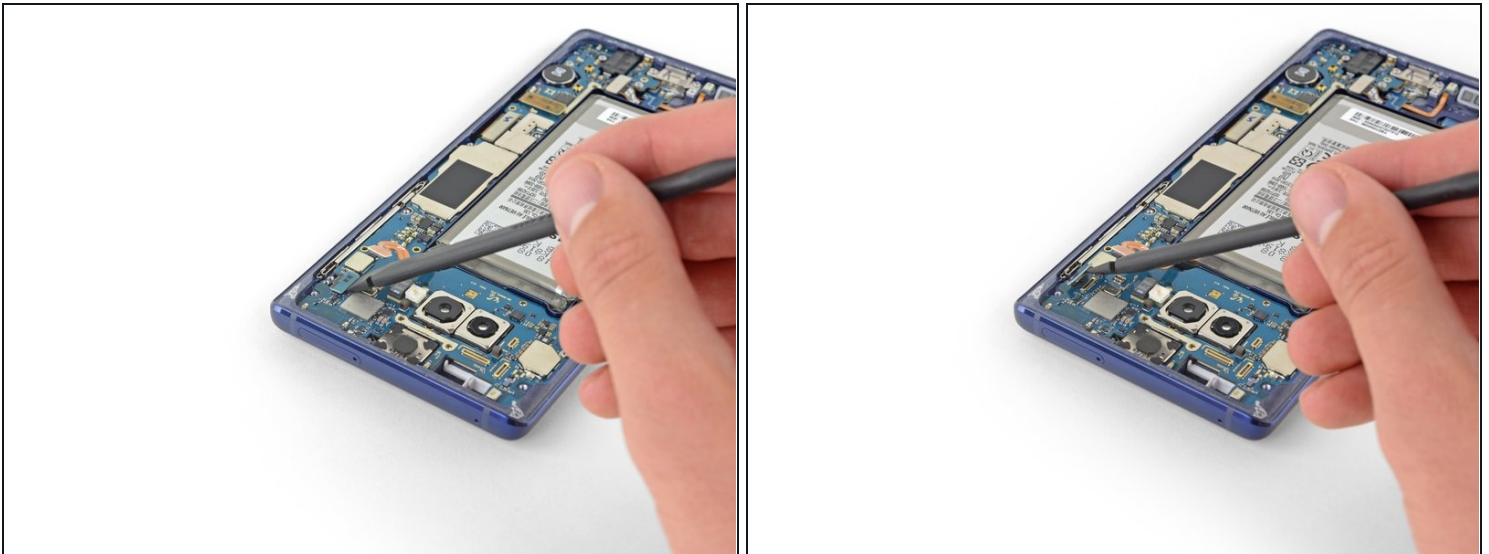
- Use the tip of a spudger to pry the front camera connector straight up and out of its socket.
- Use tweezers to remove the front camera.

Step 22 — Remove the iris scanner



- Use the tip of a spudger to disconnect the iris scanner from the motherboard.
- Use tweezers to remove the iris scanner.

Step 23 — Disconnect the front sensor array



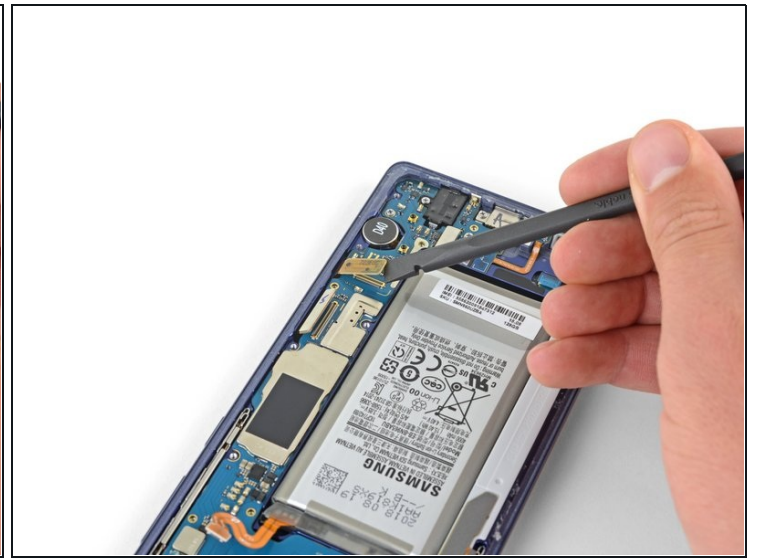
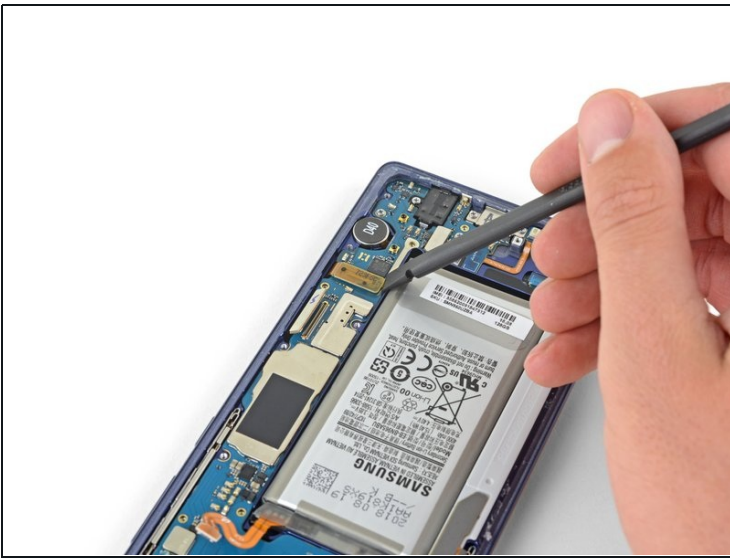
- Use the flat end of a spudger to pry the front sensor connector out of its socket.

Step 24 — Disconnect the display assembly



- Use the flat end of a spudger to disconnect the display cable from the motherboard.

Step 25



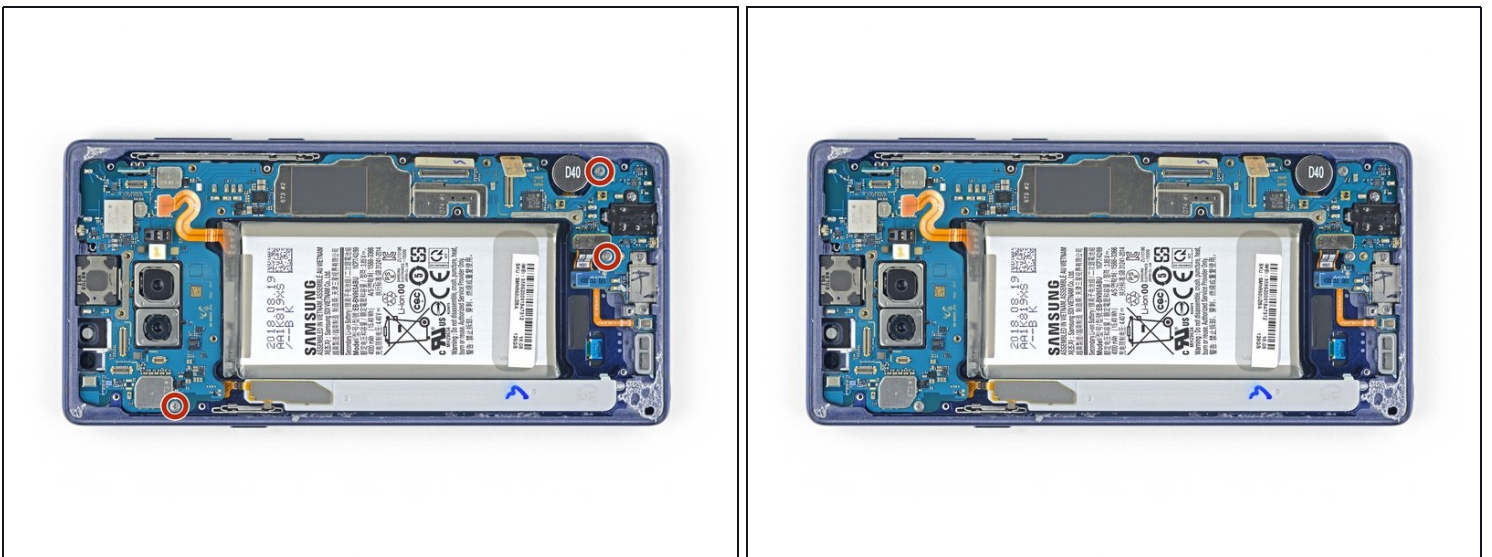
- Use the flat end of a spudger to disconnect the touchscreen cable from the motherboard.

Step 26 — Disconnect the charging assembly



- Use the flat end of a spudger to disconnect the charging assembly from the motherboard.

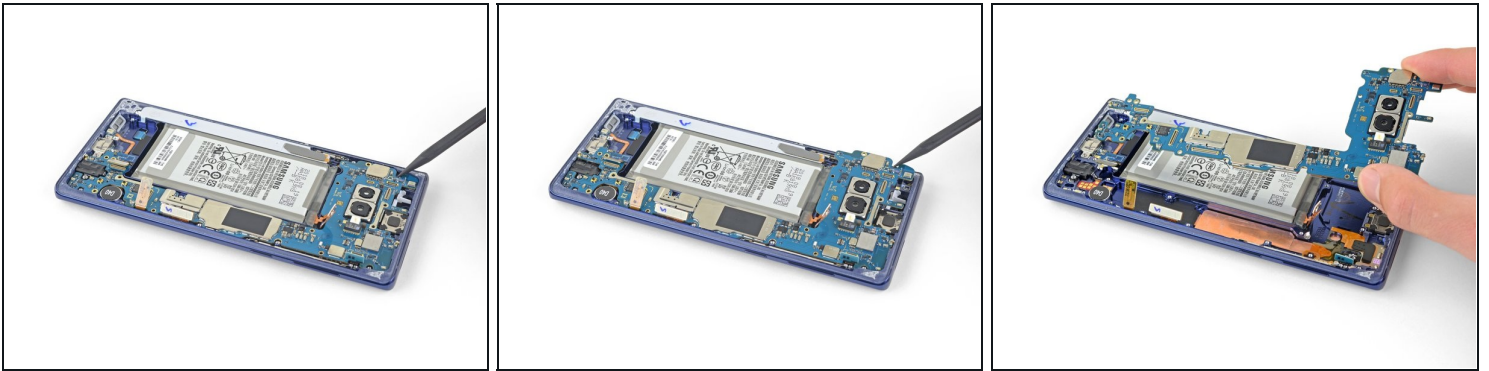
Step 27



- Remove the three 4 mm Phillips screws securing the motherboard.

☐ There are triangles next to the holes indicating the motherboard screw locations.

Step 28



- Use a spudger to gently lift the motherboard from the upper-left corner.
- Carefully remove the motherboard.

⚠ Move the ribbon cables out of the way as necessary. Do not pull the motherboard out if it becomes snagged on any cables.

To reassemble your device, follow the above steps in reverse order.

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.

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.