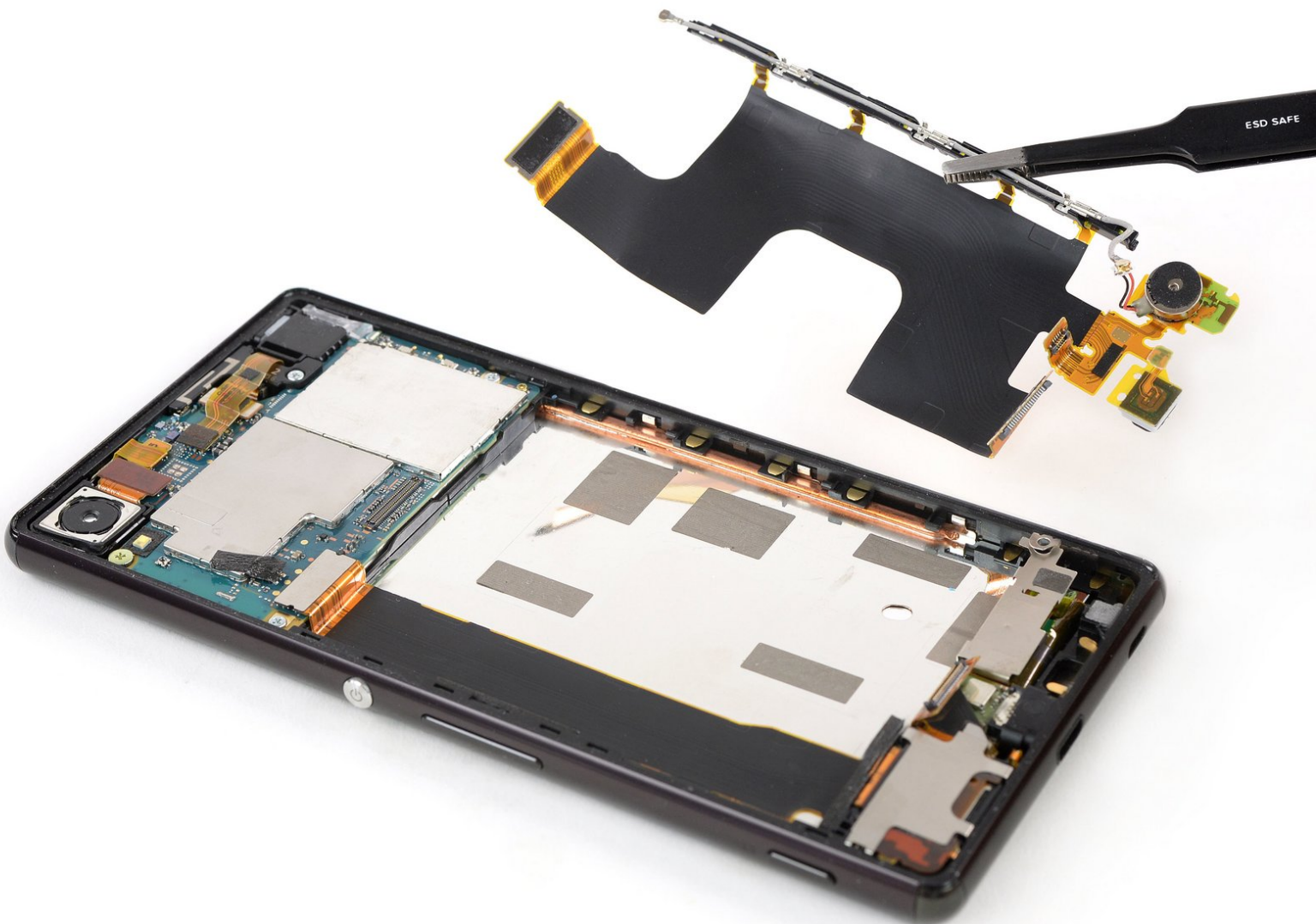




Sony Xperia Z4 Flex Cable Assemblies and Loudspeaker Replacement

This guide shows how to remove the main flex cable assembly, the side button flex cable, and the loudspeaker.

Written By: Dominik Schnabelrauch



INTRODUCTION

Use this guide to remove the main flex cable assembly including vibration motor and microphone, the loudspeaker and the side button flex cable including the charging port.

Opening the Sony Xperia Z4 will **damage the waterproof seals** on the device. If you do not replace the adhesive seals, your phone will function normally but will **lose its water protection**.

Due to the phone's design, you must remove the lithium-ion battery in order to access the flex cable assemblies. **Do not re-use a bent or damaged battery, as doing so is a potential safety hazard.**

Before disassembling your phone, discharge the battery below 25%. The battery can catch fire and/or explode if accidentally punctured, but the chances of that happening are much lower if discharged.

You'll need **replacement adhesive** to reattach components when reassembling the device.



TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Tweezers](#) (1)
- [iOpener](#) (1)
- [iFixit Opening Picks set of 6](#) (1)
- [Suction Handle](#) (1)
- [ESD Safe Tweezers Blunt Nose](#) (1)
- [Spudger](#) (1)



PARTS:

- [Sony Xperia Z4 Rear Cover Adhesive](#) (1)
- [Sony Xperia Z4 Battery](#) (1)
- [Sony Xperia Z4 Main Flex Cable](#) (1)
- [Sony Xperia Z4 Side Button Cable](#) (1)

Step 1 — Back Cover



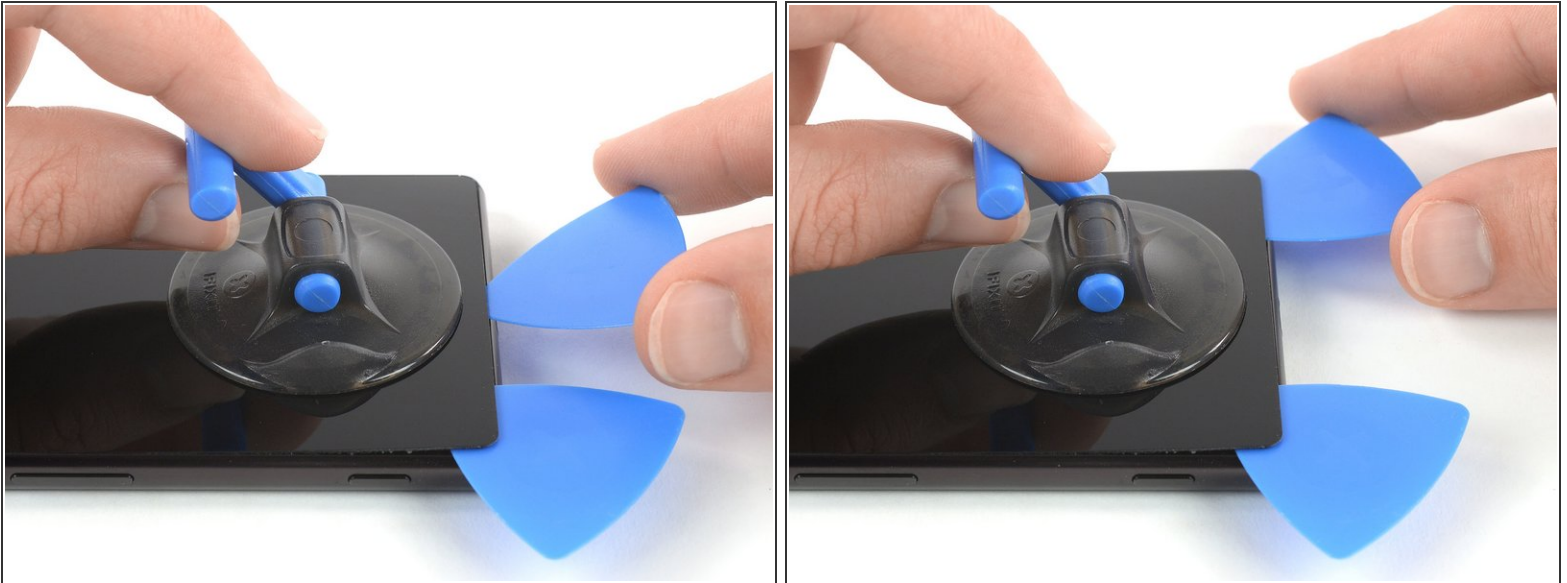
- Before you begin, switch off your phone.
- Apply a [heated iOpener](#) to the back of the phone to loosen the adhesive beneath the back cover. Apply the iOpener for at least two minutes.

Step 2



- Secure a suction handle to the bottom of the back cover, as close to the edge as possible.
- Lift the back cover with the suction handle to create a small gap between the cover and the frame.
- Insert an opening pick into the gap.
 - ❗ If you have trouble, apply more heat to further soften the adhesive. Follow the iOpener instructions to avoid overheating.
- Slide the opening pick to the bottom left corner.

Step 3




- Insert a second opening pick and slide it to the bottom right corner to cut the adhesive.
- Leave the opening picks in place to prevent the adhesive from resealing.

Step 4



- Insert a third opening pick at the bottom left corner.

 In the next few steps whilst cutting around the rear camera make sure you only use the tip of the opening pick to avoid smearing the lens or damaging the camera.

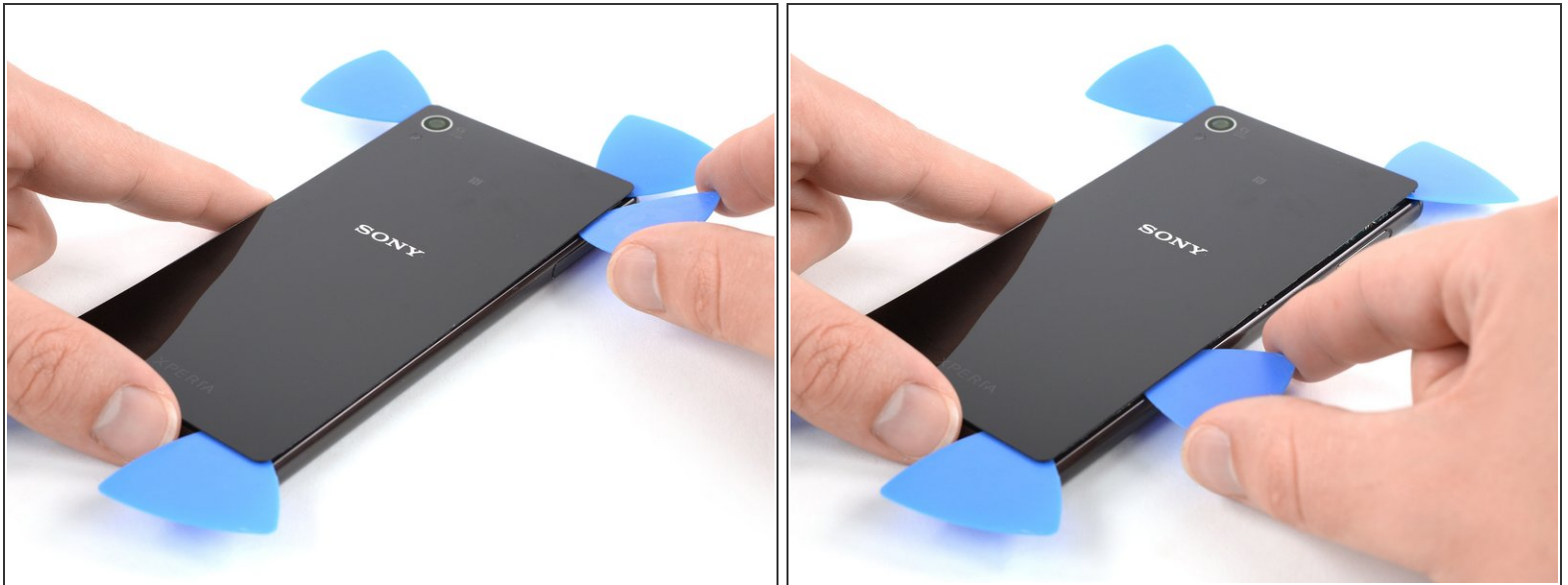
- Start to slide the tip of the opening pick from the bottom left corner along the side of the phone to cut the adhesive.
- Leave the opening pick in its place at the top left corner to prevent the adhesive from resealing.

Step 5



- If the adhesive becomes hard to cut it most likely cooled down. [Use your iOpener](#) to reheat it.
- Insert a fourth opening pick under the top left corner of the back cover.
- Slide the opening pick along the top edge of the phone to cut the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from resealing.

Step 6



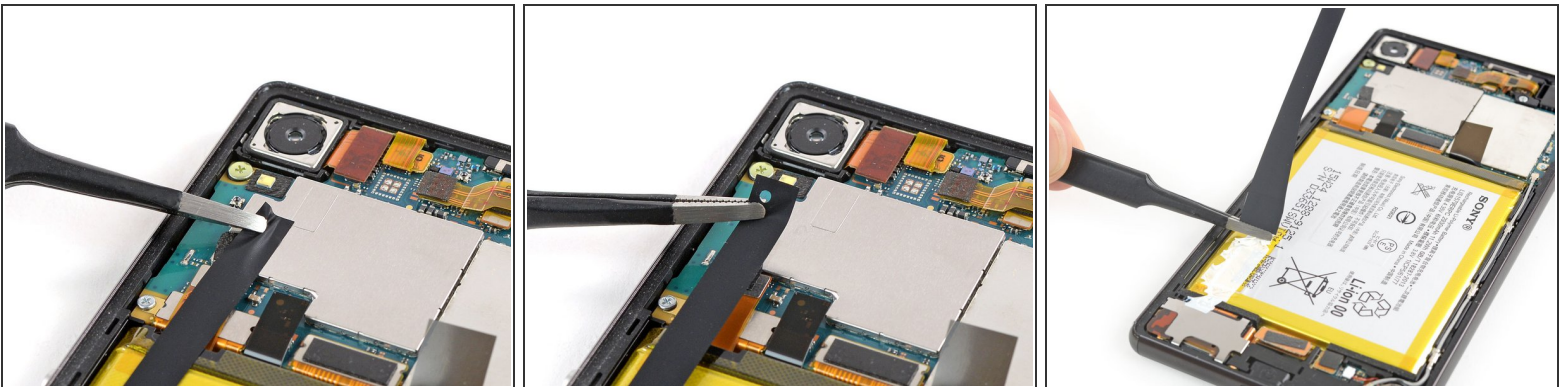
- Insert a fifth opening pick at the top right corner of the phone.
- Slide the opening pick along the right side to cut the remaining adhesive.

Step 7



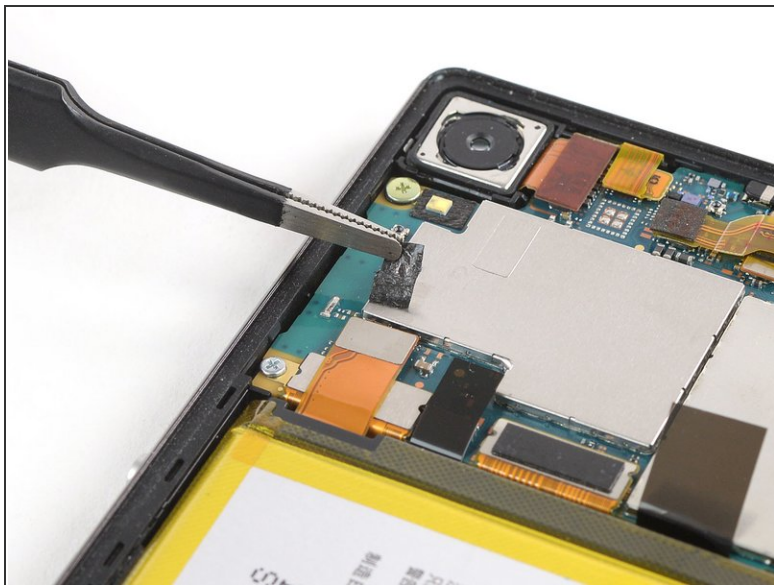
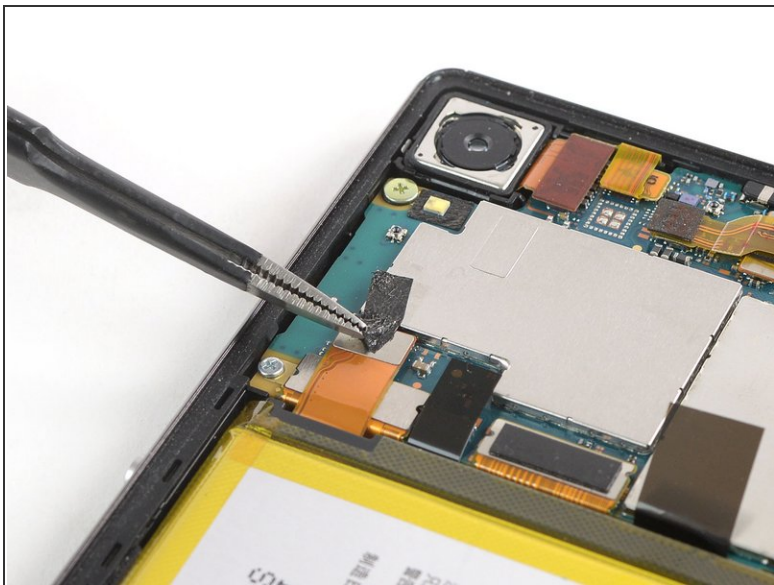
- Lift and remove the back cover.
- ☑ After installing the back cover, apply strong, steady pressure to your phone for several minutes to help the adhesive form a good bond, such as by placing it under a stack of heavy books.

Step 8 — Battery Disconnect



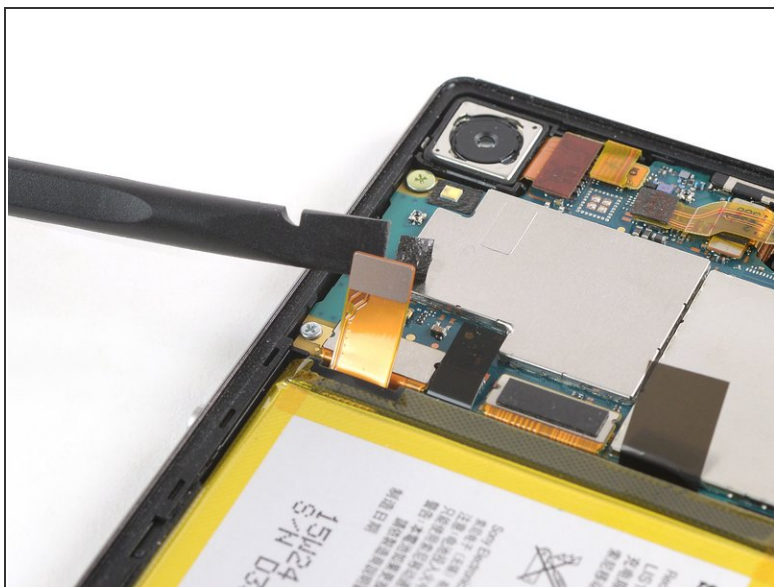
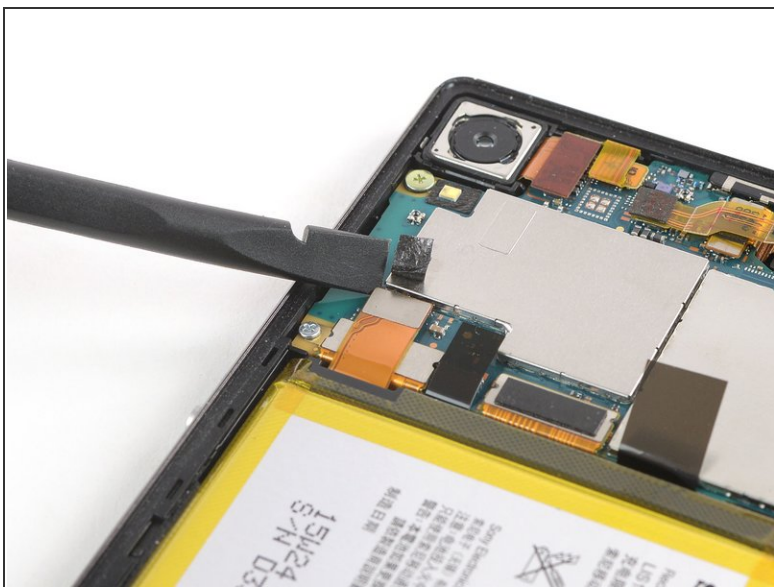
- Use a pair of tweezers to carefully peel the adhesive strip off the mother board and the battery and remove it.

Step 9



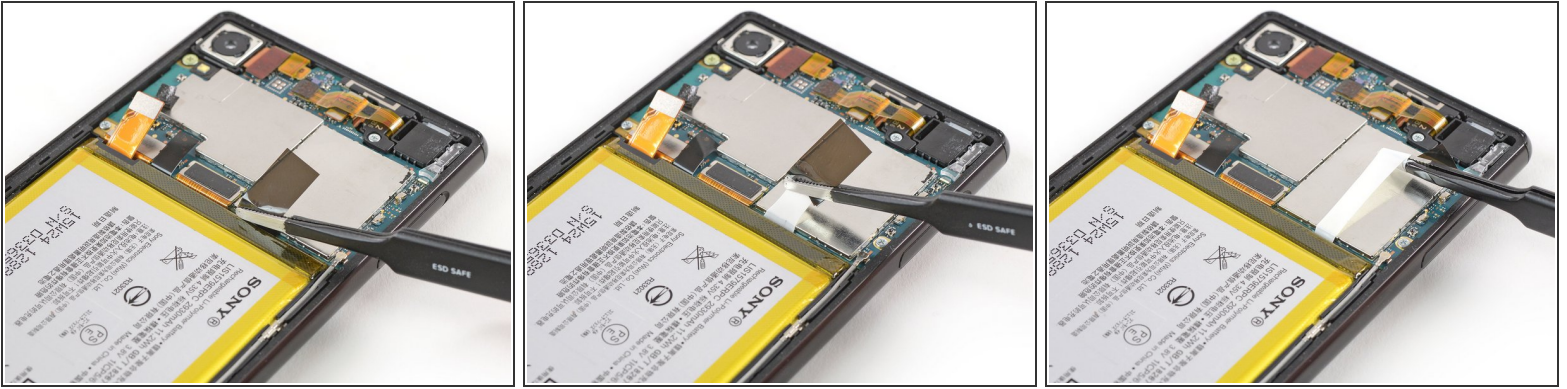
- Use a pair of tweezers to peel the black adhesive strip off the battery connector and fold it out of the way.

Step 10



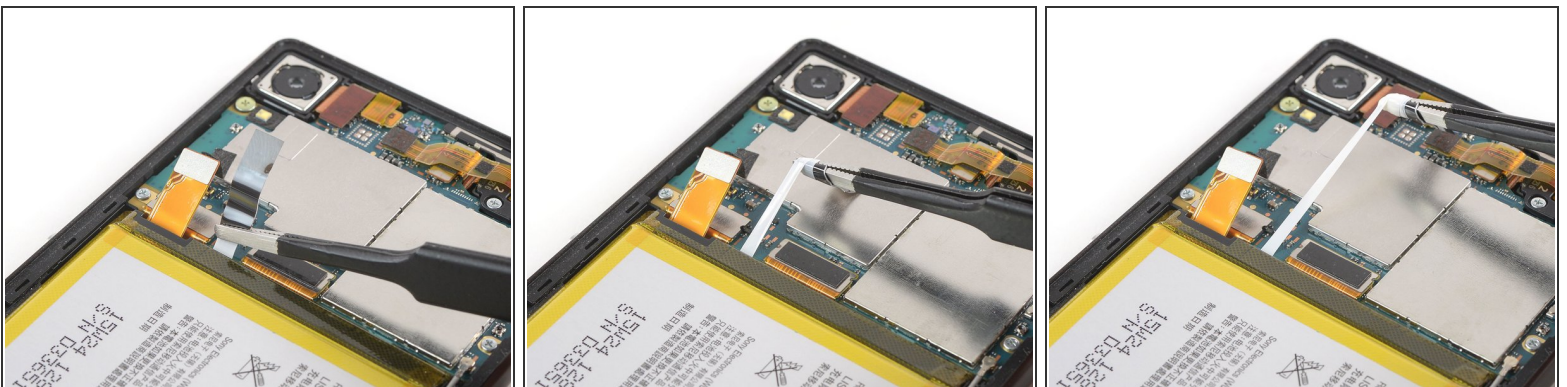
- Use a spudger to pry up and disconnect the battery connector.

Step 11 — Battery



- Use a pair of tweezers and grab the pull tab at the top right corner of the battery.
- Pull out the adhesive strip with a pair of tweezers.
 - ⓘ Make sure you pull out the strip in a slow and steady motion and in a flat angle. To prevent the adhesive strip from ripping, it is helpful to twist the strip around the tweezers.
 - ⓘ In case one of the adhesive strips rips and it's not possible to pull it out completely, you can use high isopropyl alcohol (>90%) and/or a [heated iOpener](#) to loosen the adhesive. After the adhesive is soft enough use a prying tool such as an opening pick, a plastic/playing card or a spudger to carefully pry out the battery.

Step 12



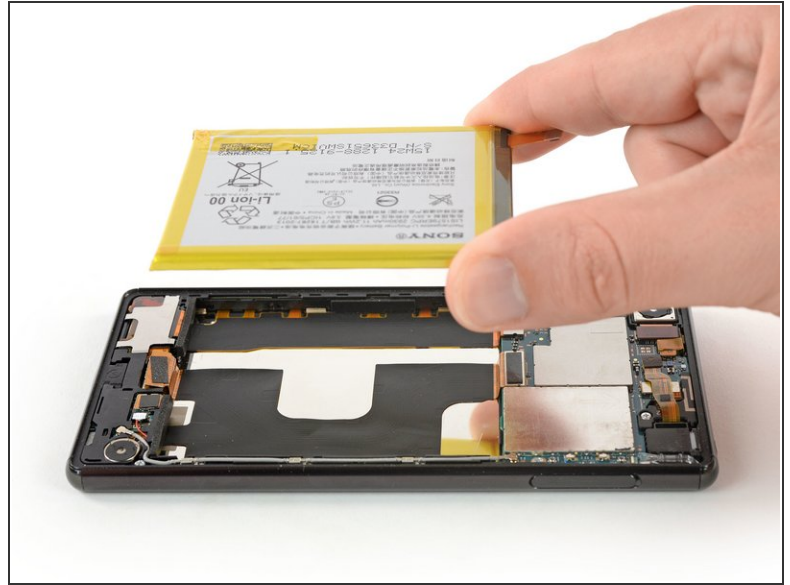
- Repeat the previous process with the adhesive tab next to the battery flex cable.

Step 13



- Use an opening pick to pry the battery out of its recess until you can get a good grip.

Step 14

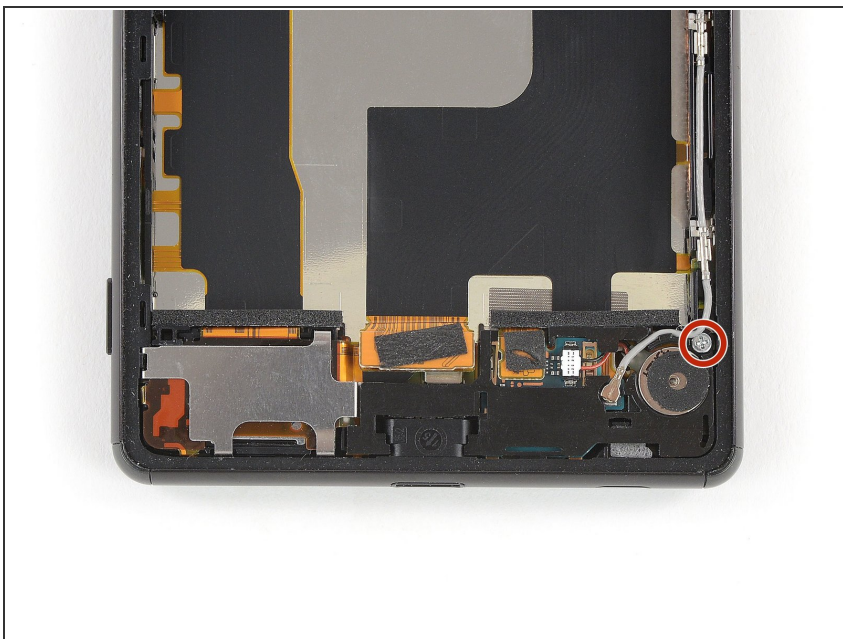


- Remove the battery.

⚠ Do not reinstall a damaged or deformed battery, as doing so is a potential safety hazard.

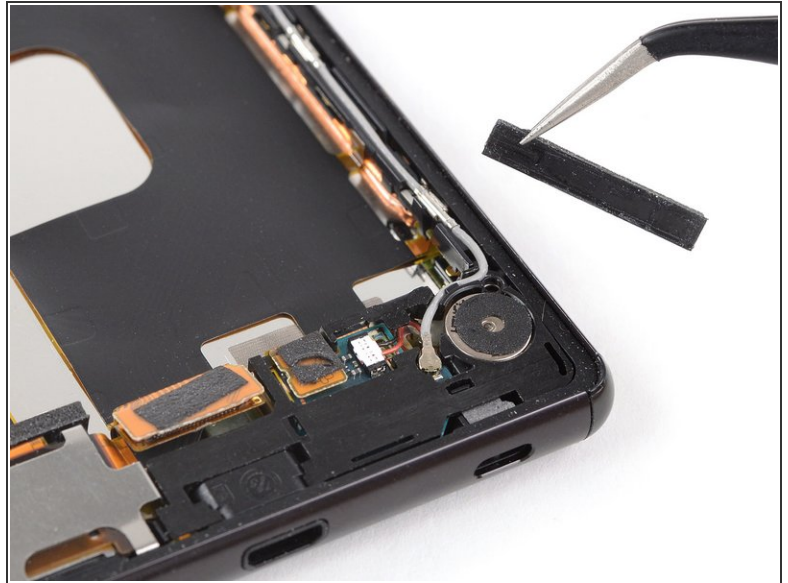
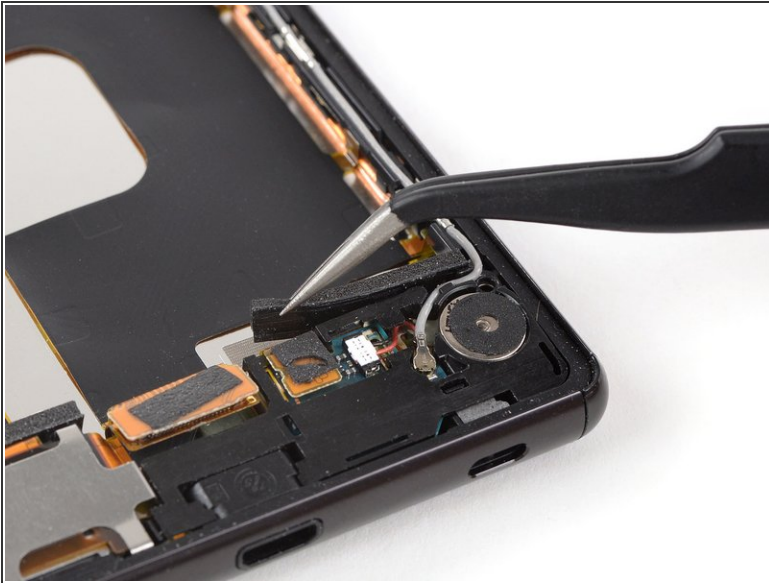
- ☑ Remove any remaining adhesive from the midframe, and clean the glued areas with isopropyl alcohol and a lint-free cloth before applying new adhesive.

Step 15 — Daughterboard with Cover



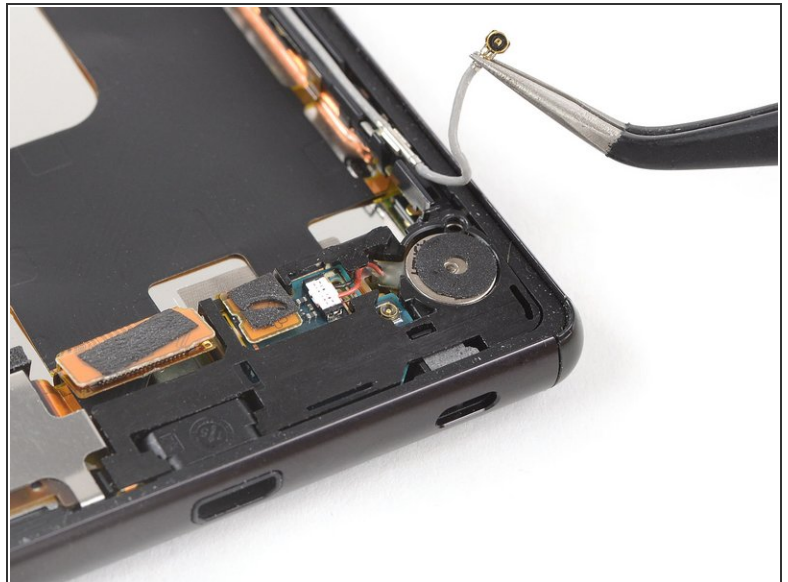
- Remove the Phillips #00 screw (3 mm length).

Step 16



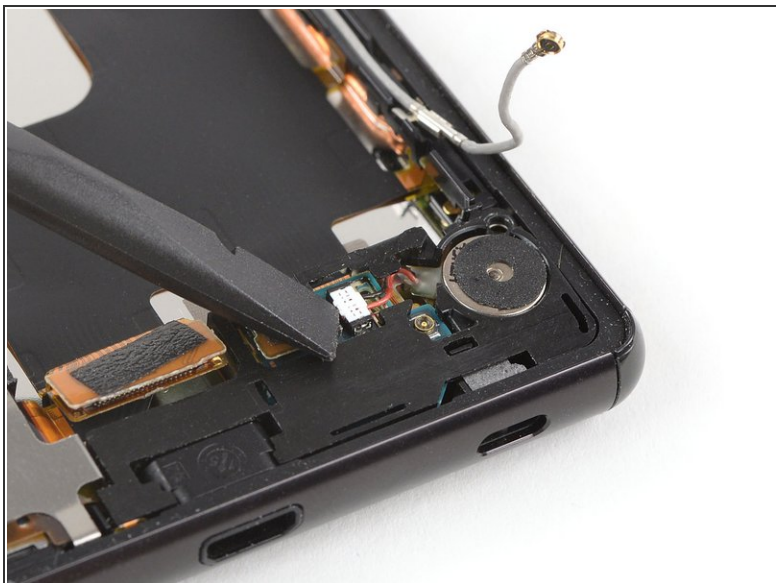
- Use a pair of tweezers to peel off and remove the foam pad on top of the daughterboard.

Step 17



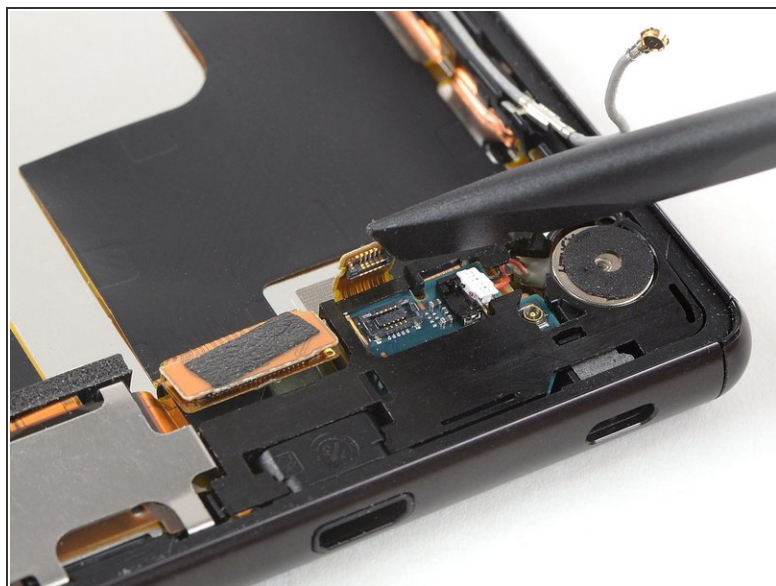
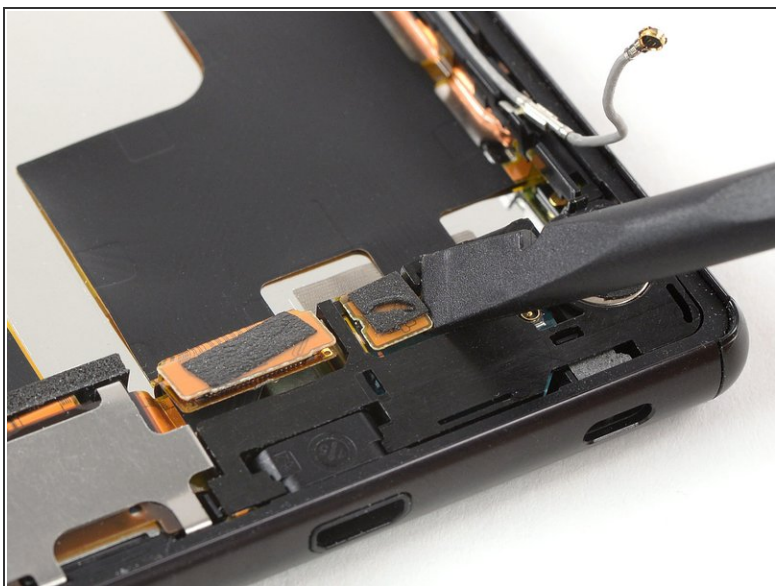
- Use a pair of tweezers to pry up and disconnect the antenna cable.

Step 18



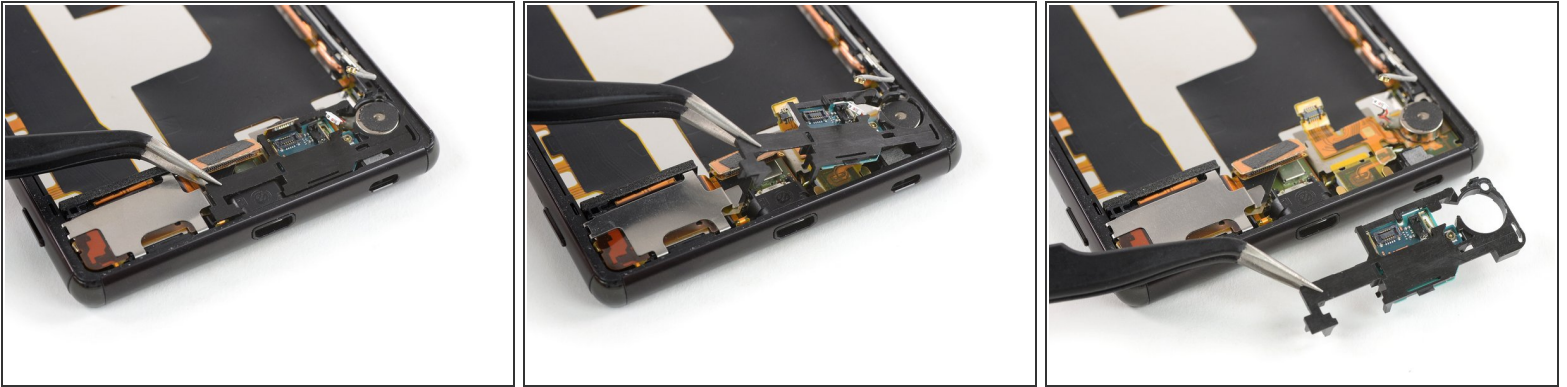
- Use a spudger to pry up and disconnect the vibration motor connector.

Step 19



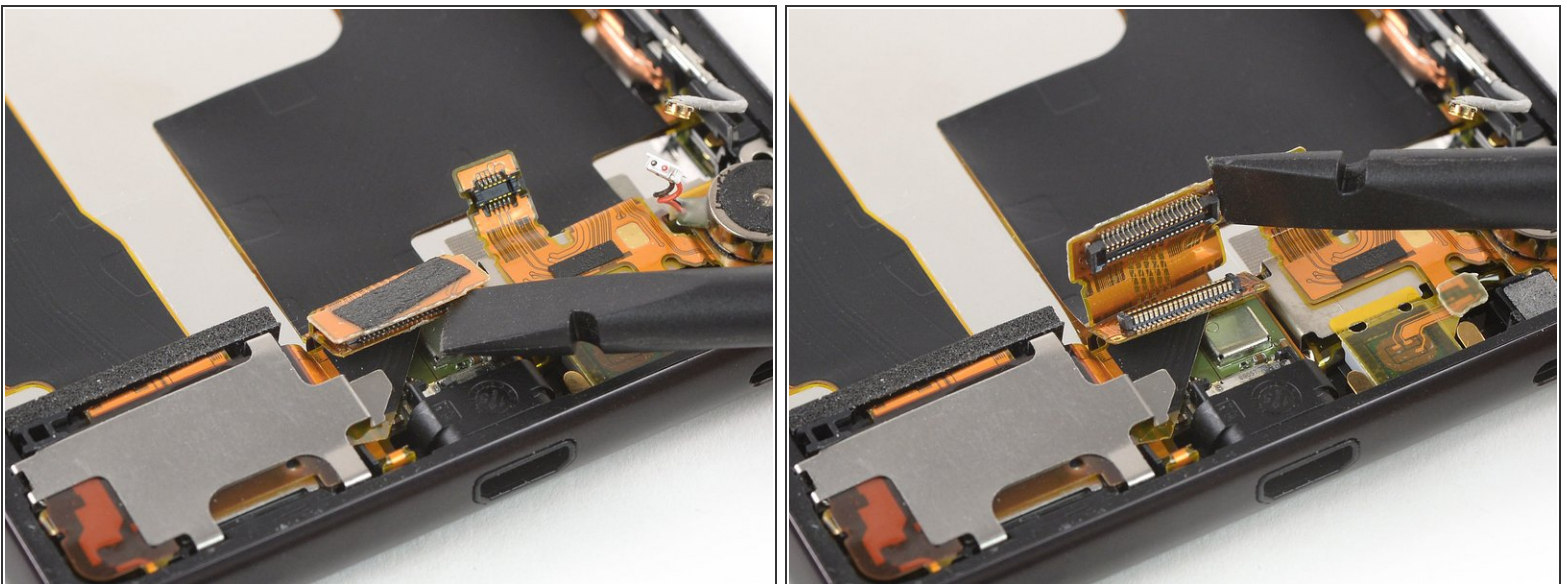
- Use the flat end of a spudger to pry up and disconnect the small main flex connector next to the vibration motor connector.

Step 20



- Lift the daughterboard cover using a pair of tweezers or a spudger by prying it up from its left side.
- Remove the daughterboard cover carrying the daughterboard.
- ⓘ In case you only want to replace the daughterboard you can easily separate it from the plastic cover with an opening pick or a pair of tweezers.

Step 21 — Flex Cable Assemblies and Loudspeaker



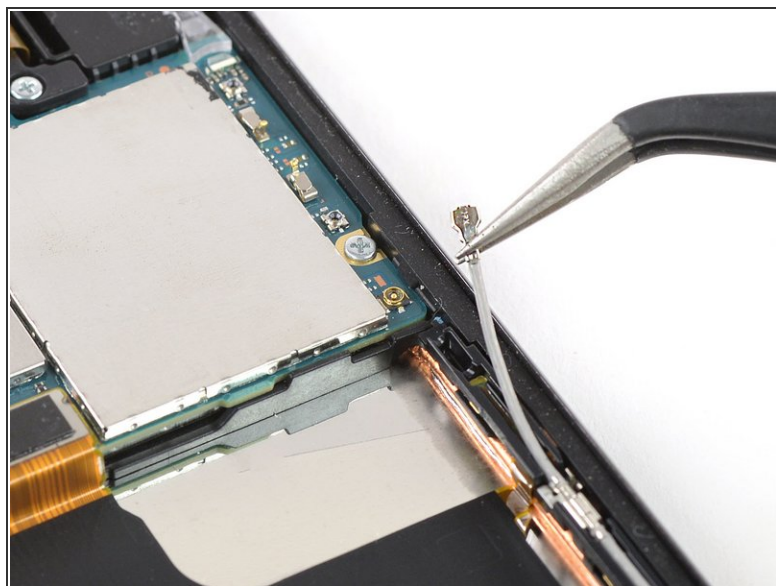
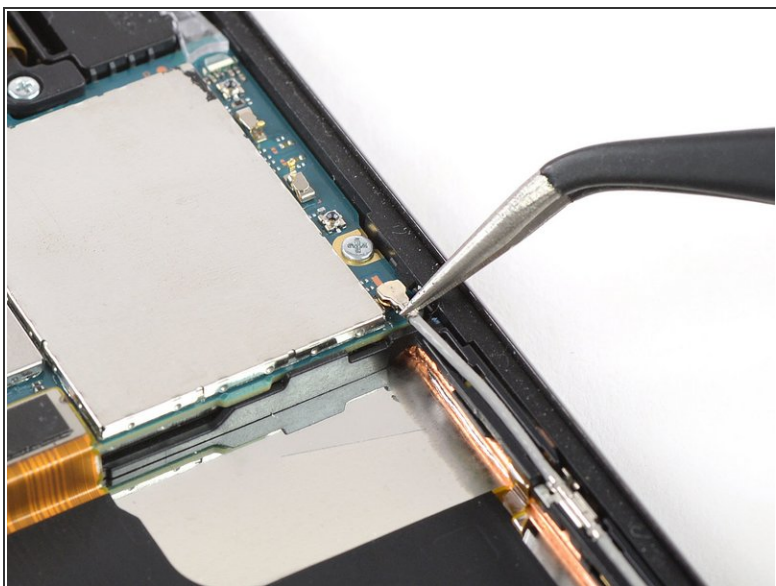
- ⓘ In case you only want to remove the loudspeaker and/or the left side button flex cable including the charging port and the loudspeaker cover, [jump to this step](#).
- Use the flat end of a spudger to pry up and disconnect the main flex cable connector.

Step 22



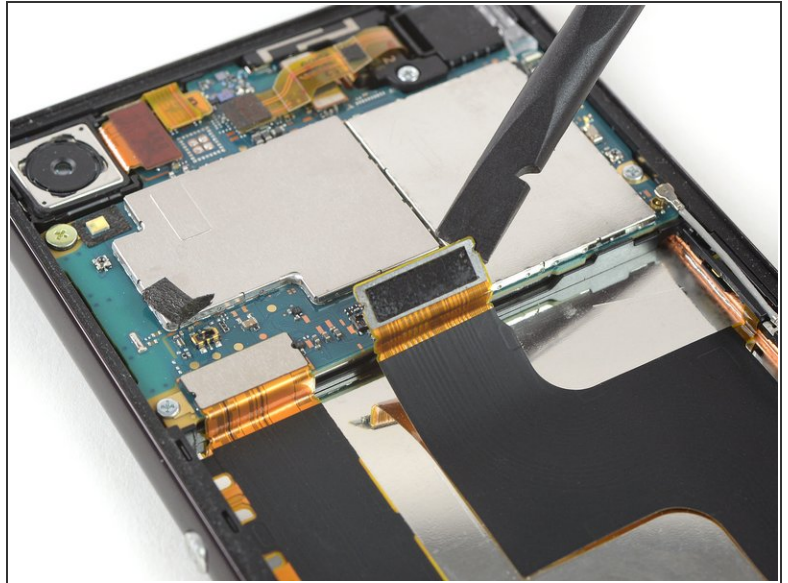
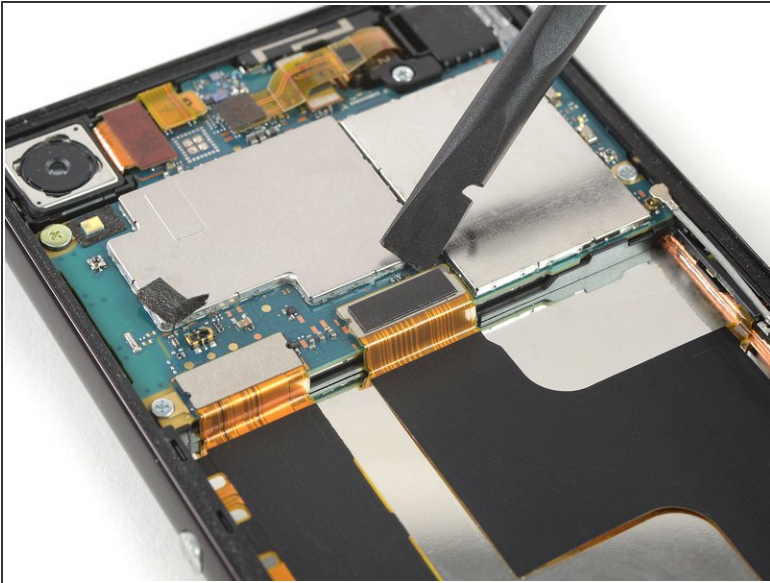
- Use the pointed end of a spudger to lever the microphone out of its recess.

Step 23



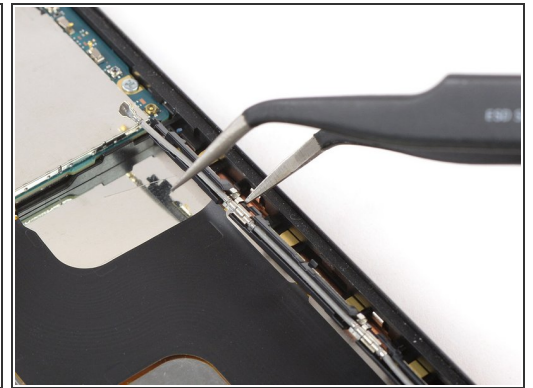
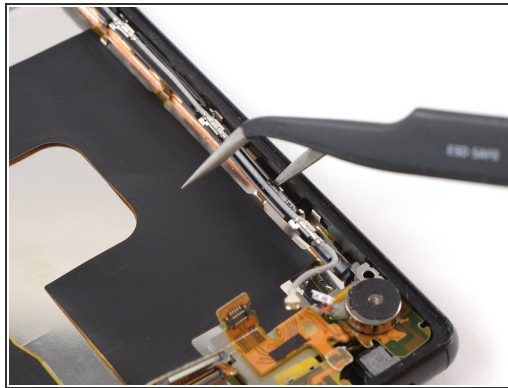
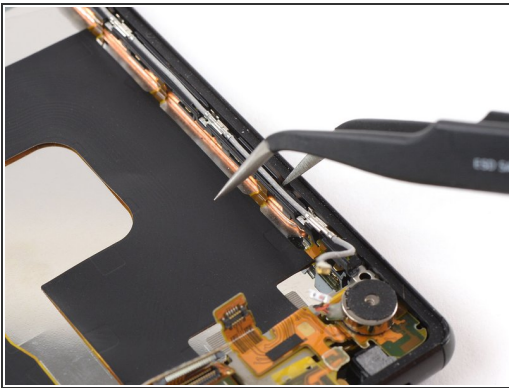
- Use a pair of tweezers to pry up and disconnect the upper connector of the antenna cable.

Step 24



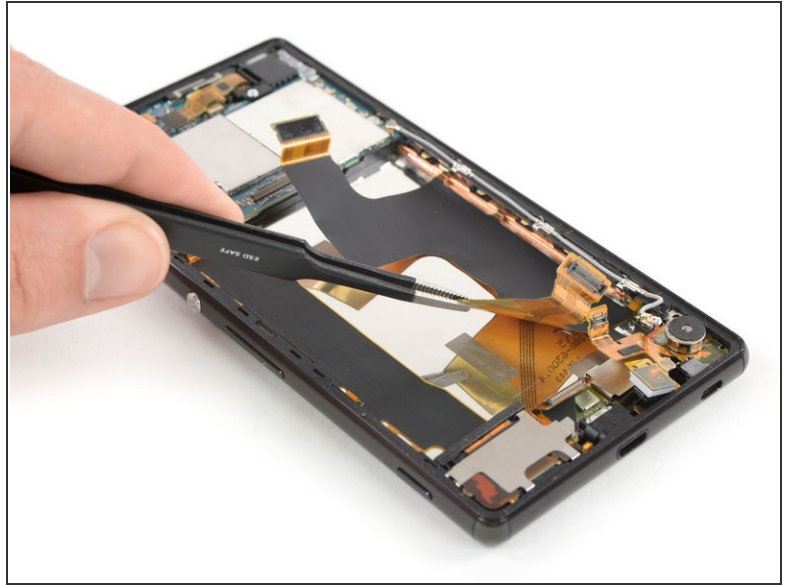
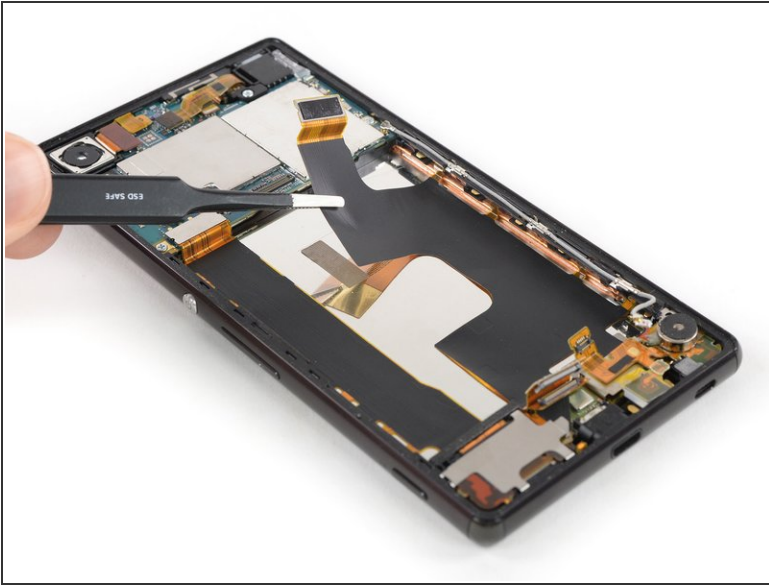
- Use a spudger to pry up and disconnect the main flex cable from the motherboard.

Step 25



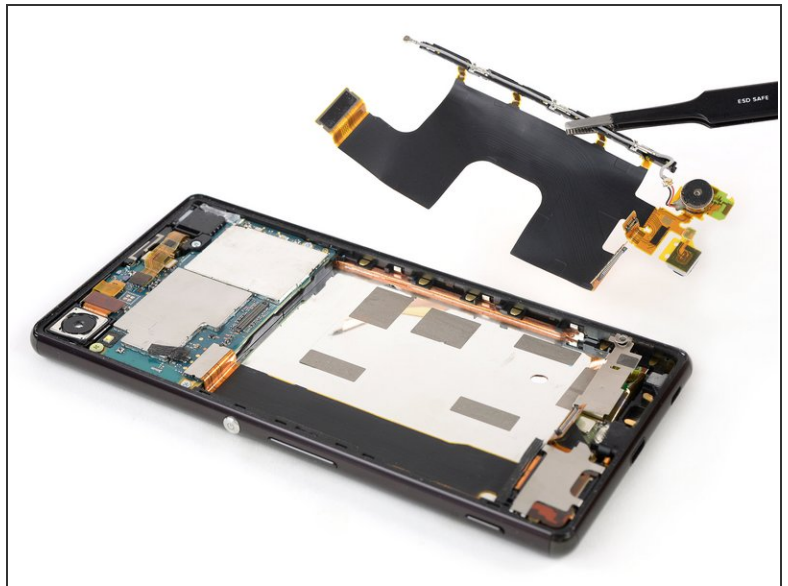
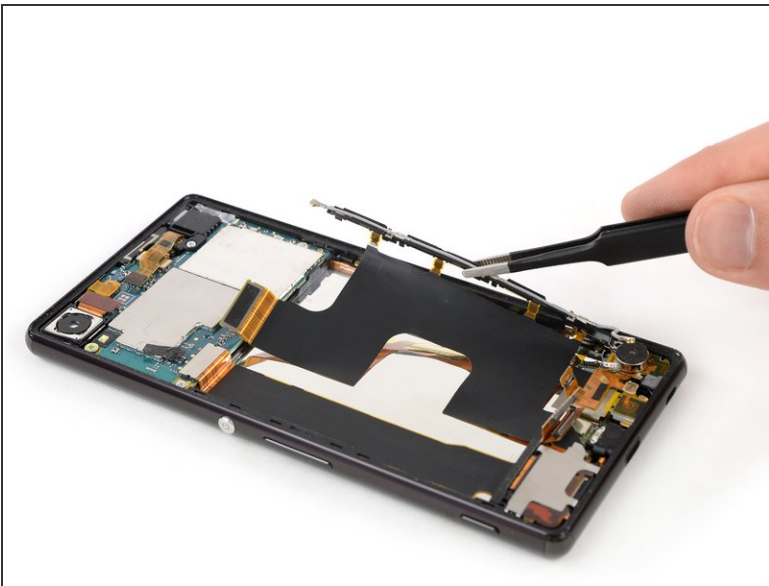
- Insert one arm of the tweezers into the gaps between antenna cable routing and midframe.
- Loosen the clips along the antenna cable on the right side of the midframe by gently twisting the tweezers sideways until the cable routing pops out of the clips.

Step 26



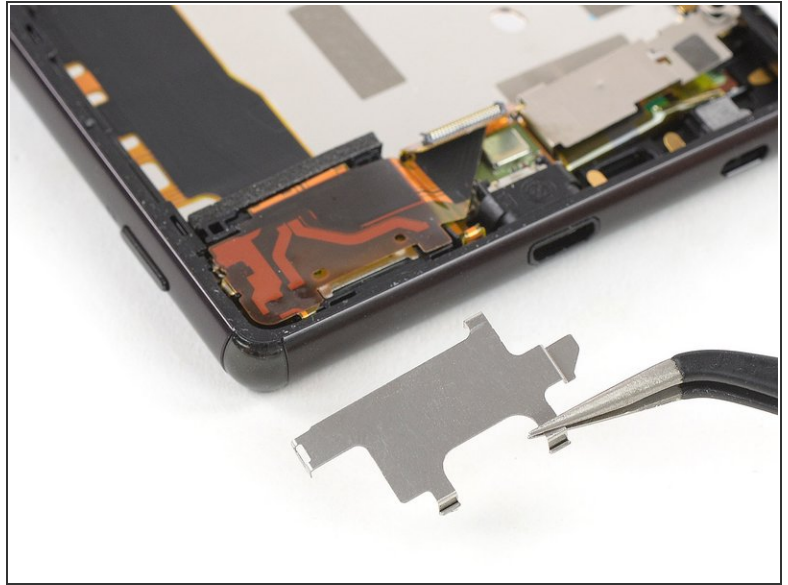
- Use a pair of tweezers to peel up the main flex cable and separate it from the midframe.
- ⓘ In case you're having trouble to separate the main flex cable from the mid frame you can [place an iOpener](#) onto the display to loosen the adhesive underneath the flex cable.

Step 27



- Use a pair of tweezers to remove the main flex cable assembly including the vibration motor and the microphone.

Step 28 — Loudspeaker



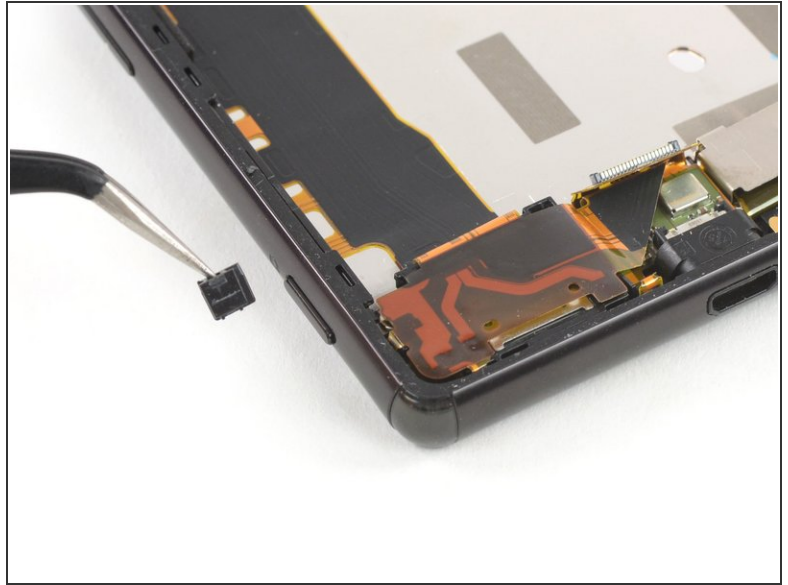
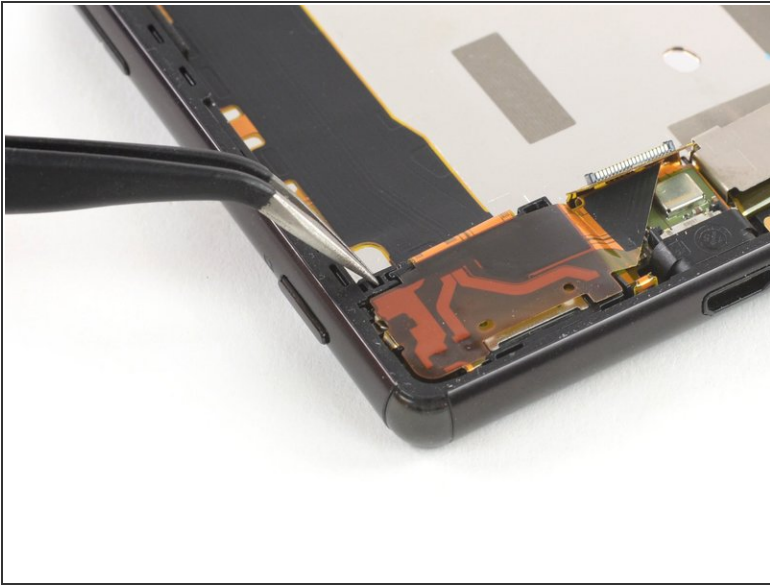
- Unhook and remove the metal shield above the loudspeaker cover located at the bottom left.

Step 29



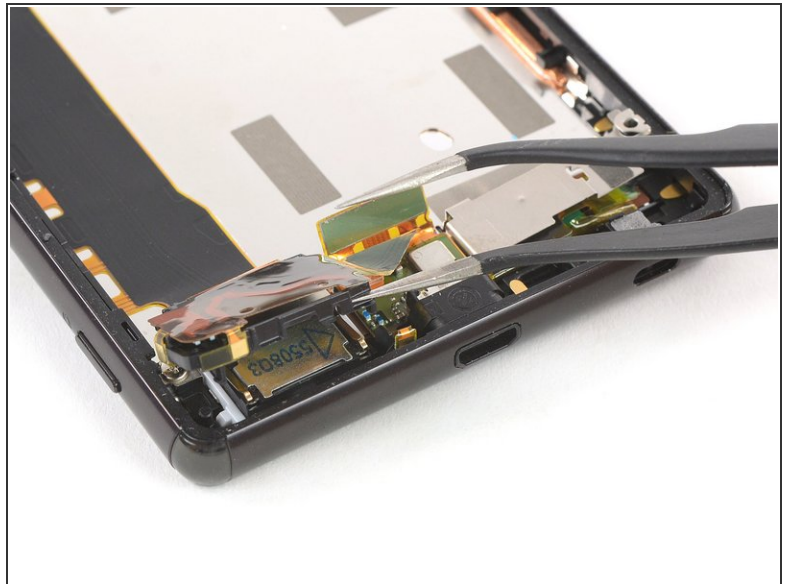
- Peel off and remove the foam pad next to the loudspeaker cover.

Step 30



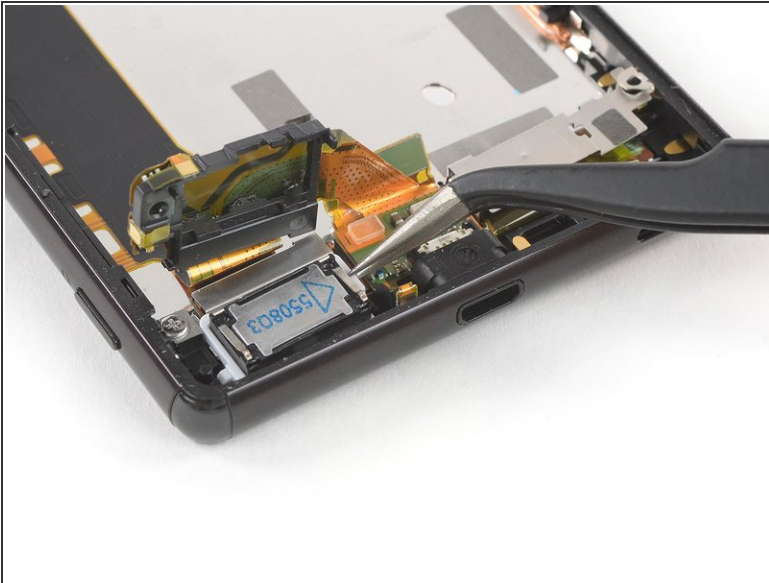
- Also remove the plastic safeguard between the midframe and the loudspeaker cover.

Step 31



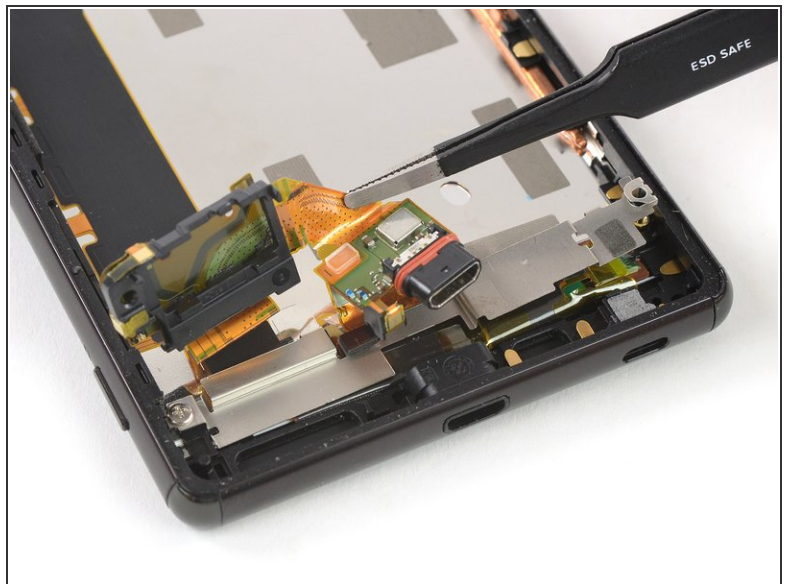
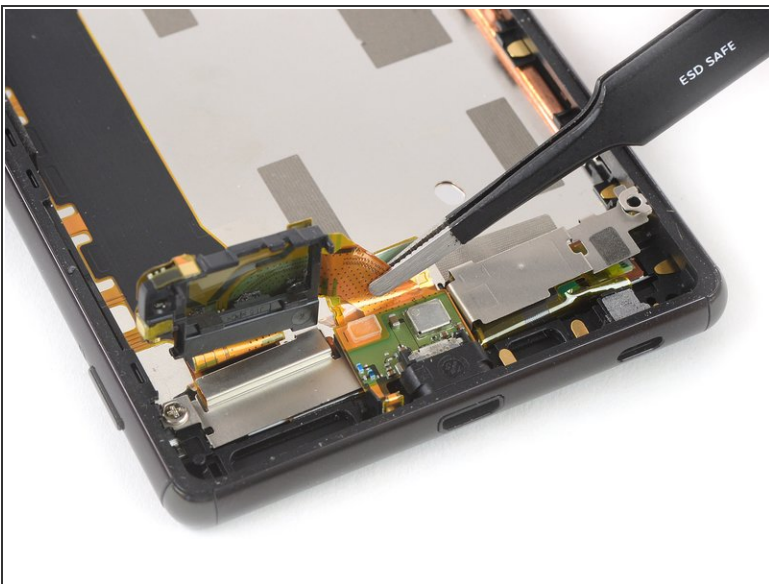
- Use a pair of tweezers to pry up the loudspeaker cover.
- Fold the loudspeaker cover upwards until you have enough space to remove the loudspeaker in the next step.

Step 32



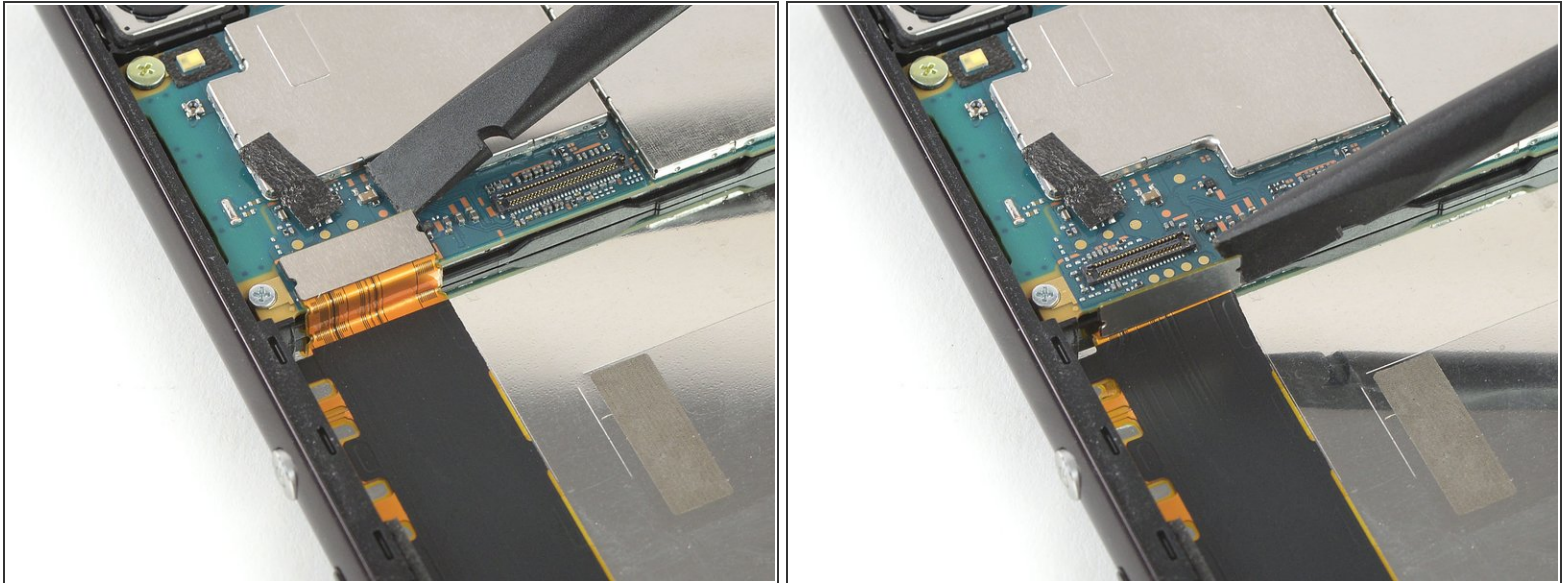
- Use a pair of tweezers to lift the loudspeaker out of its recess and remove it.

Step 33 — Sidebutton Flex Cable including Charging Port



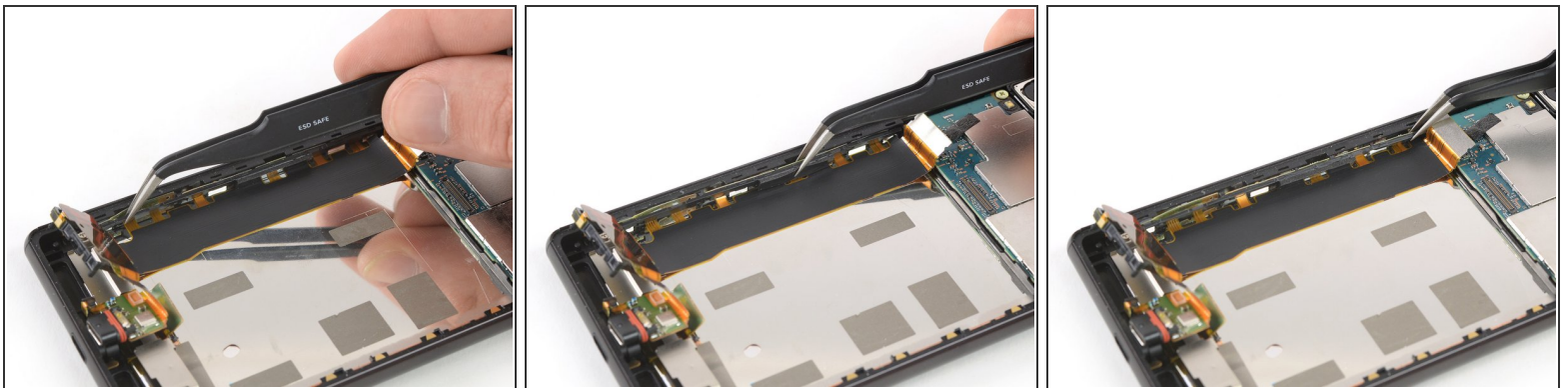
- Use a pair of blunt nose tweezers to grab the flex cable between the charging port and the loudspeaker cover.
- Carefully pull the charging port out of its housing.

Step 34



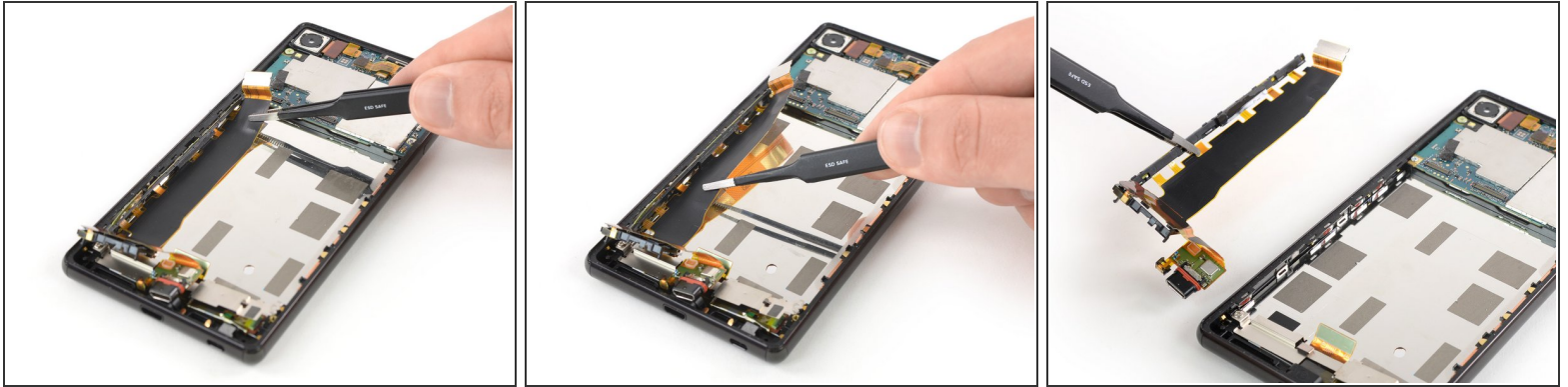
- Use a spudger to pry up and disconnect the side button flex cable on the left side of the motherboard.

Step 35



- Use a pair of tweezers to loosen the plastic clips along the side button flex cable on the left side of the midframe.

Step 36



- Peel up the side button flex cable and separate it from the midframe.
- ⓘ In case you're having trouble separating the side button flex cable from the midframe you can [place an iOpener](#) onto the display to loosen the adhesive underneath the flex cable.
- Remove the side button flex cable including the loudspeaker cover and the charging port.

If possible, turn on your phone and test your repair before installing new adhesive and resealing the phone.

Secure the new battery with pre-cut adhesive or double-sided adhesive tape. In order to position it correctly, apply the new adhesive into the phone at the places where the old adhesive was located, not directly onto the battery. Press the new battery firmly into place.

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? Check out our [Answers community](#) for troubleshooting help.