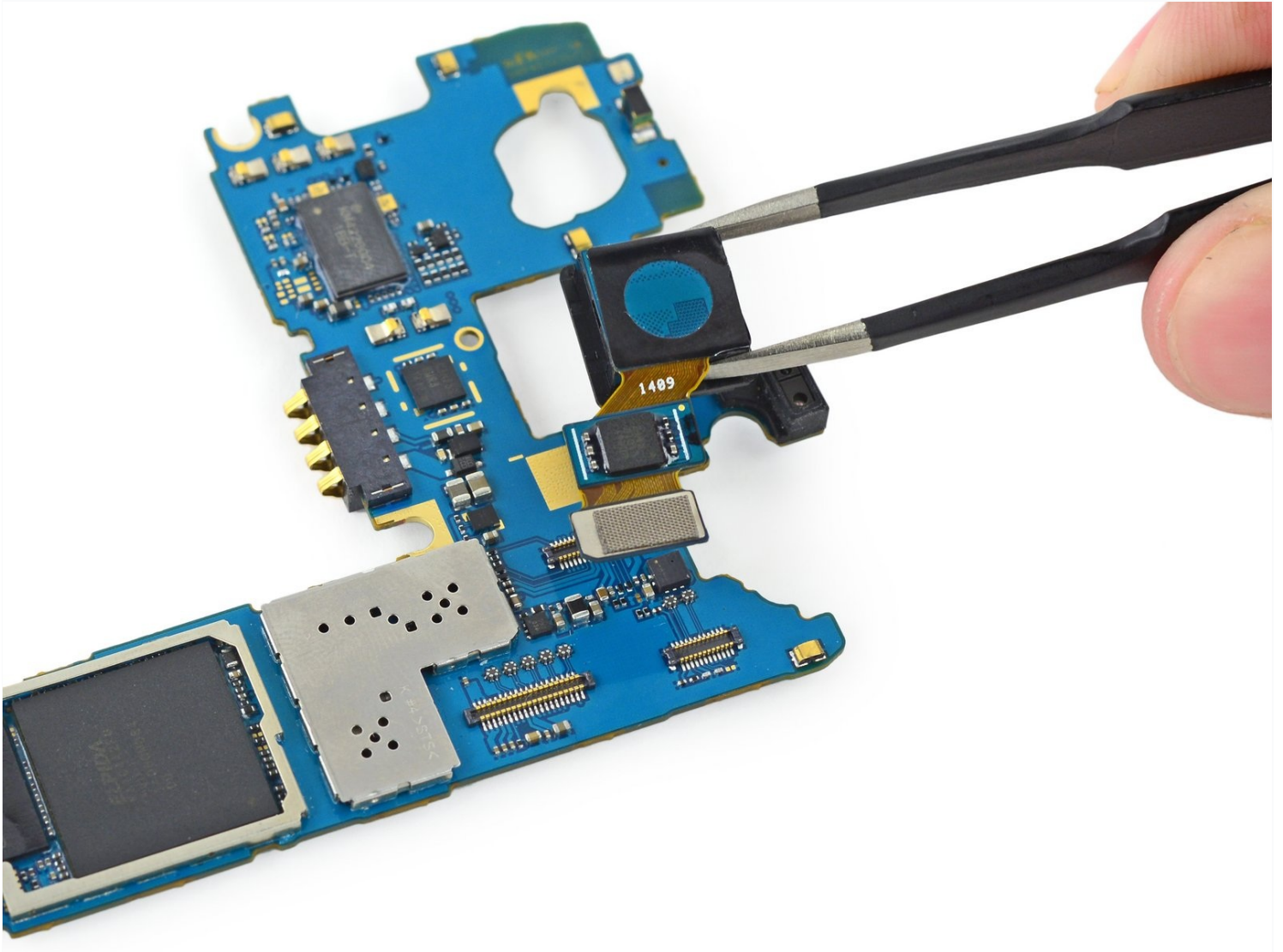




Samsung Galaxy S5 Motherboard Replacement

Use this guide to replace the motherboard.

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INTRODUCTION

Use this guide to replace the motherboard.

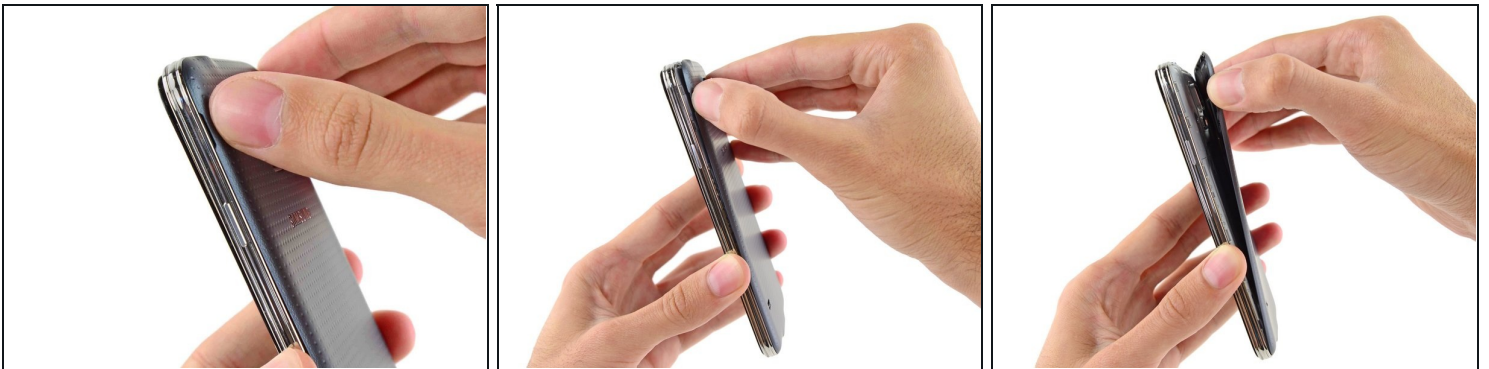
TOOLS:

[iFixit Opening Picks \(Set of 6\)](#) (1)
[iOpener](#) (1)
[Phillips #00 Screwdriver](#) (1)
[iFixit Opening Tool](#) (1)
[Spudger](#) (1)
[Phillips #000 Screwdriver](#) (1)

PARTS:

[Galaxy S5 \(AT&T\) Motherboard](#) (1)
[Galaxy S5 \(Verizon\) Motherboard](#) (1)
[Galaxy S5 Motherboard \(Sprint\)](#) (1)
[Galaxy S5 Motherboard \(Boost Mobile\)](#) (1)
[Galaxy S5 \(Verizon\) Midframe](#) (1)
[Galaxy S5 \(AT&T\) Midframe](#) (1)
[Samsung Galaxy S5 Vibrator](#) (1)
[Galaxy S5 Motherboard \(T-Mobile\)](#) (1)

Step 1 — Rear Case



- Insert a fingernail or plastic opening tool into the divot to the left of the rear-facing camera.
- Gently pry and twist the flexible rear cover off the back of the phone.

Step 2 — Battery



- Insert a fingernail or plastic opening tool into the recess in the bottom right corner of the battery and lift upward.
- Remove the battery away from the phone.

Step 3 — microSD Card



- Using a fingertip, pull the microSD card straight down out of its slot.
- Remove the microSD card from the phone.

Step 4 — SIM Card



- Repeat the above procedure to remove the SIM card.

Step 5 — Display Assembly



- Use a plastic opening tool to pry up the plastic midframe connector panel.
 - Remove the connector panel with a pair of [tweezers](#).
- ☒ There should be enough adhesive to readhere the panel upon reassembly, otherwise use a small amount of double-stick tape.

Step 6



- Use the sharp tip of a spudger to pry the home button cable connector straight up off its socket.

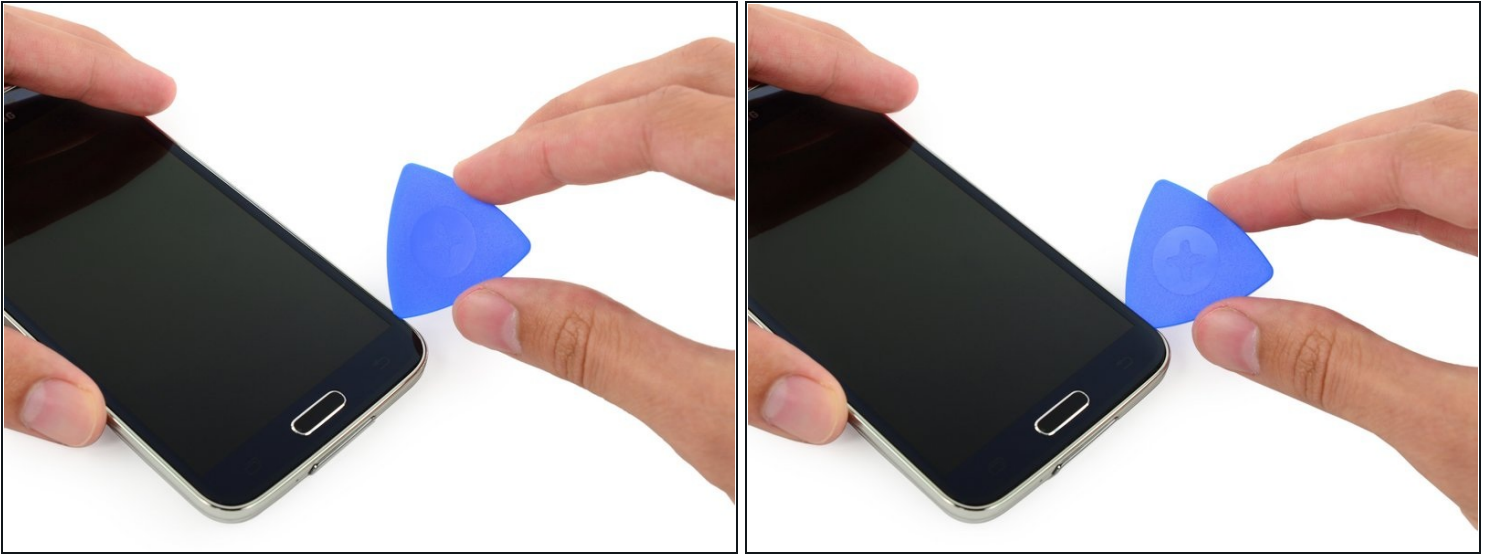
Step 7



ⓘ In the following steps you will be using an iOpener to warm the adhesive affixing the display assembly to the rest of the phone. This will allow for a safer, easier screen removal. For proper iOpener use, follow our [iOpener heating guide](#), make sure to pay attention to all warnings.

- Place a heated iOpener on the left side of the phone for at least 90 seconds.
- Reheat the iOpener and place it on the right half of the phone.

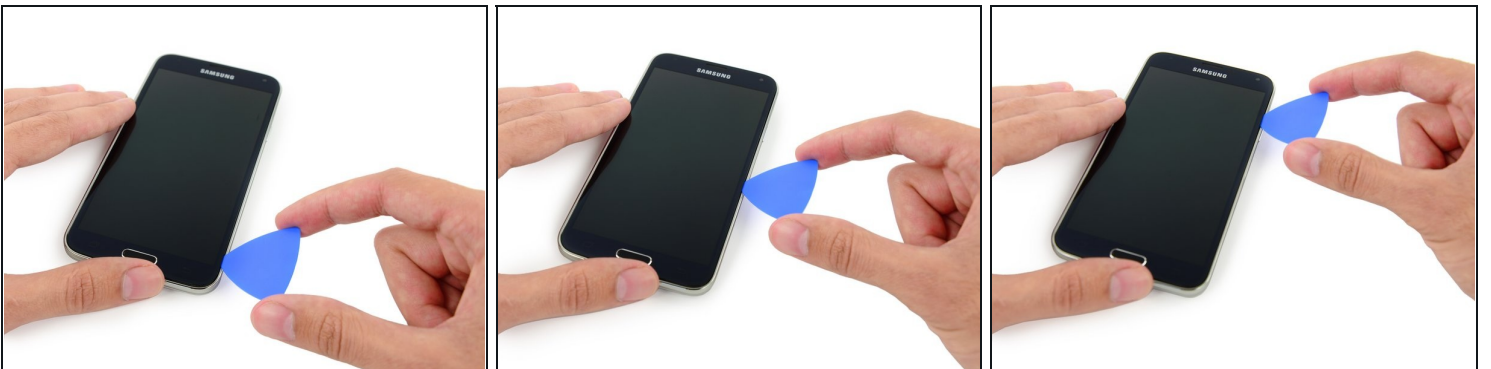
Step 8



❗ In the following steps you will be using an opening pick to separate the adhesive securing the front panel glass. Only pry where directed. If you experience resistance, stop sliding the opening pick and reapply heat.

- Insert the edge of an opening pick underneath the bottom right side of the front glass.

Step 9



- Slide the opening pick up along the right side of the display.

Step 10



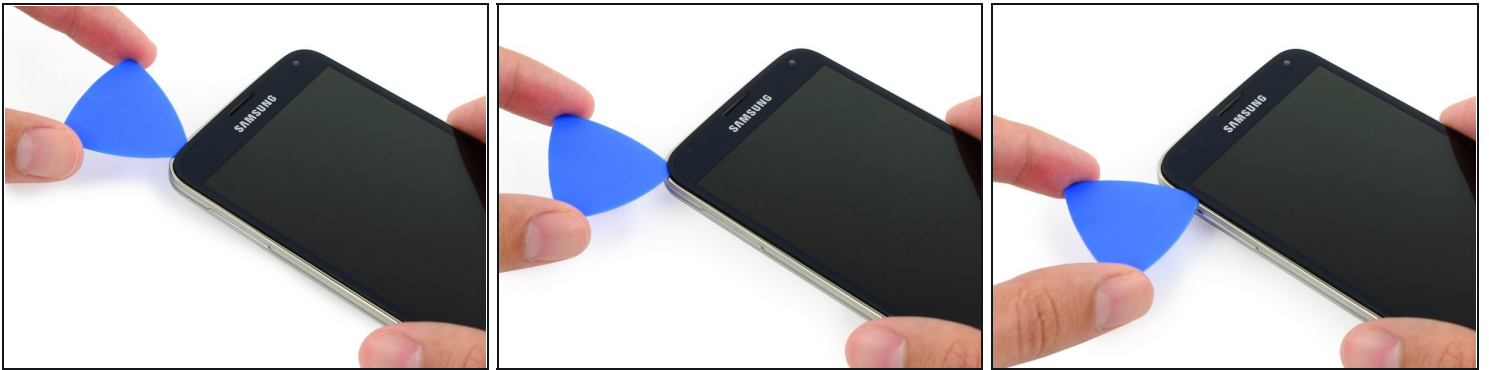
- Carefully slide the pick around the corner, stopping before the speaker grille at the top of the phone.

Step 11



- ① The adhesive securing the top of the phone is only a narrow strip above the earpiece speaker. Slide the pick along the top of the speaker to avoid damaging internal components.
- Slide the opening pick across the top of the phone, being very careful **not** to insert the pick too deeply.

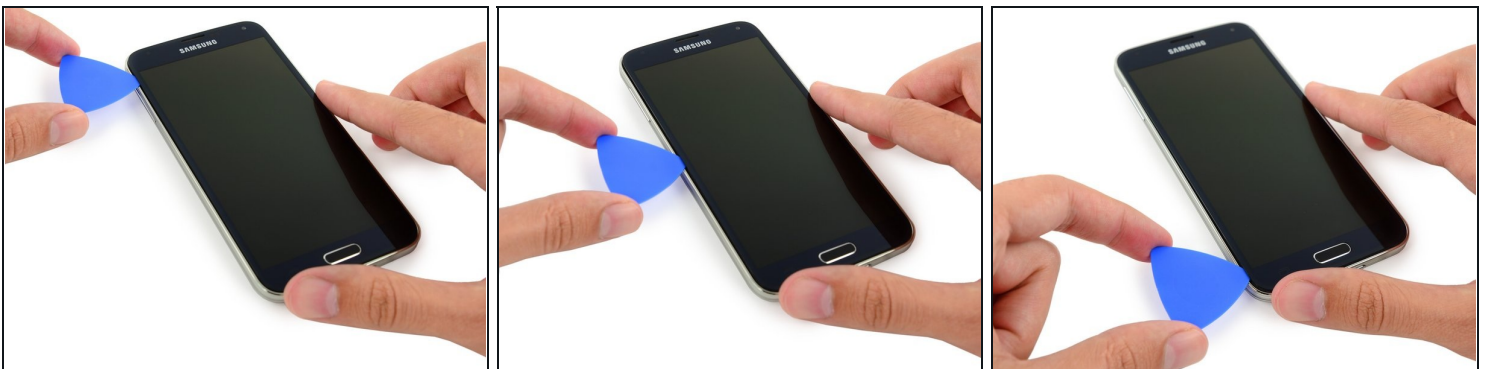
Step 12



- Carefully slide the pick around the upper left corner.

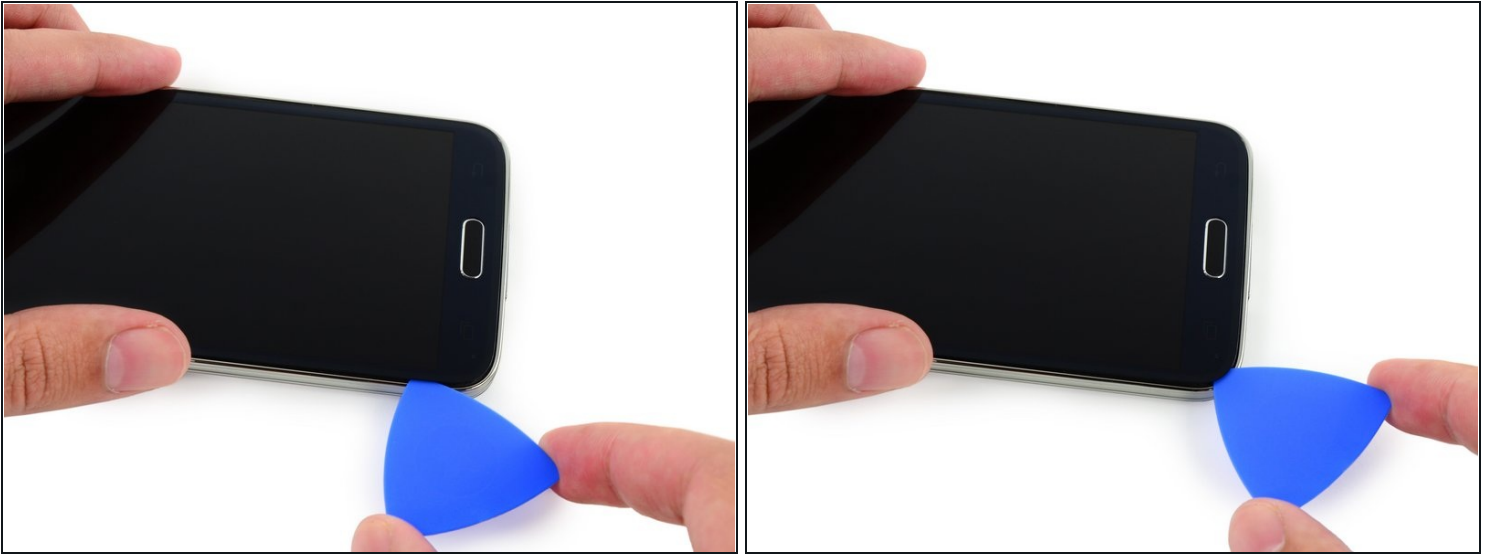
⚠ If you encounter any resistance from cooling adhesive, reapply a heated iOpener to the left side of the phone.

Step 13



- Slide the opening pick down along the left half of the phone stopping at the lower left corner.

Step 14



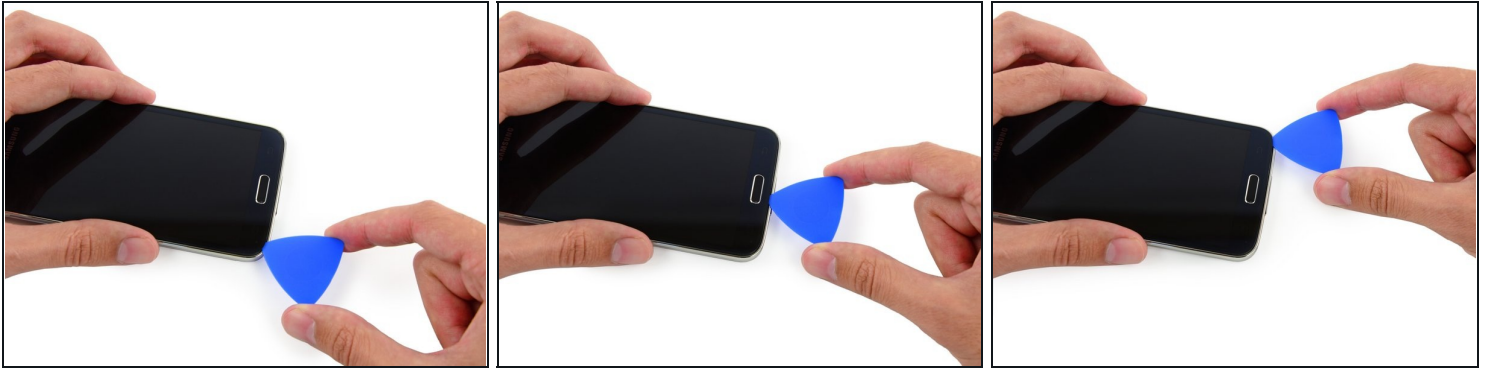
- Slide the opening pick all the way to the bottom left corner of the phone, making sure it is securely placed.
- ⓘ In the following step you will be placing an iOpener over the home button end of the phone, you won't want your opening pick to slip out.

Step 15



- Place a reheated iOpener over the bottom portion of the display assembly.
- ⓘ There are delicate components in this portion of the phone, you want to ensure the adhesive is warm and easy to loosen to protect the phone.

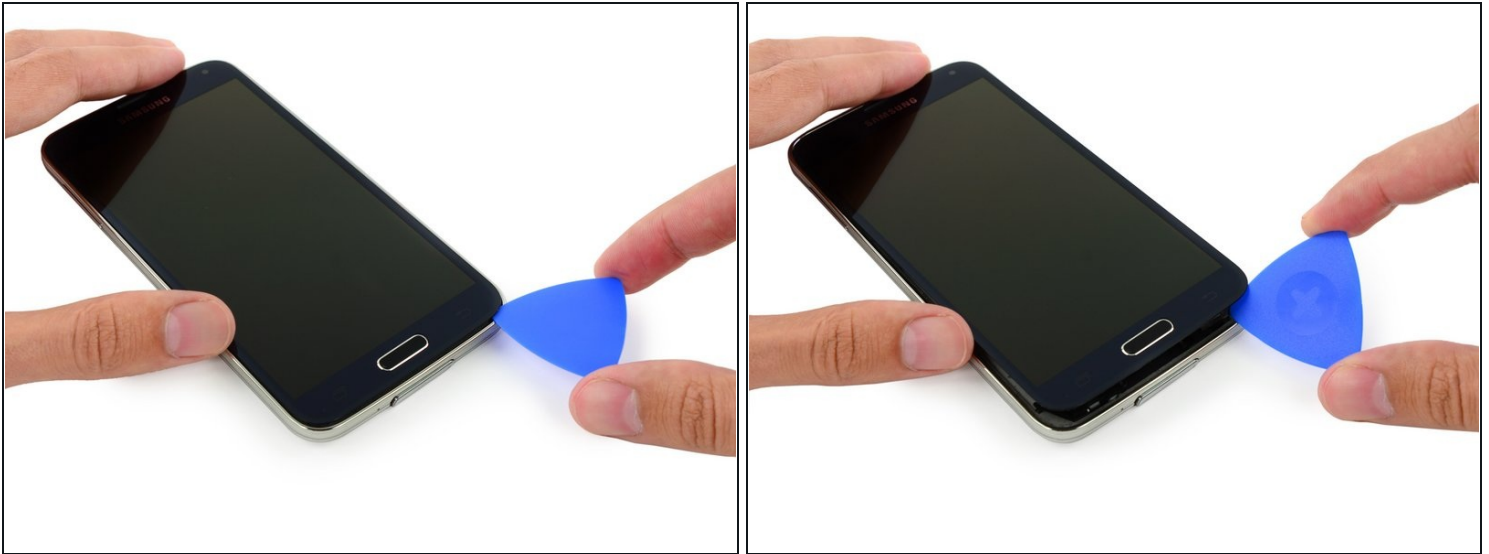
Step 16



⚠ The bottom end of the phone contains the soft button and home button ribbon cables. If you insert the opening pick too far into the phone you risk cutting these cables.

- Slide the very end of the opening pick across the bottom edge of the display to separate the last of the remaining adhesive.

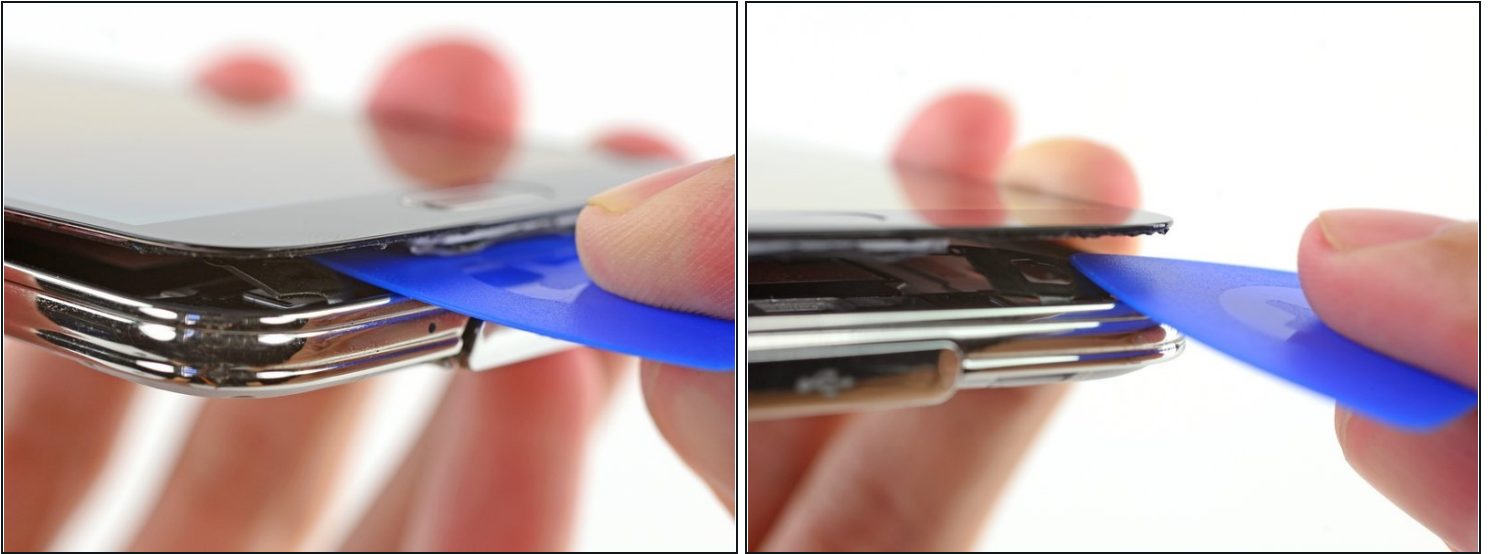
Step 17



- Twist the opening pick to detach the glass from the phone.

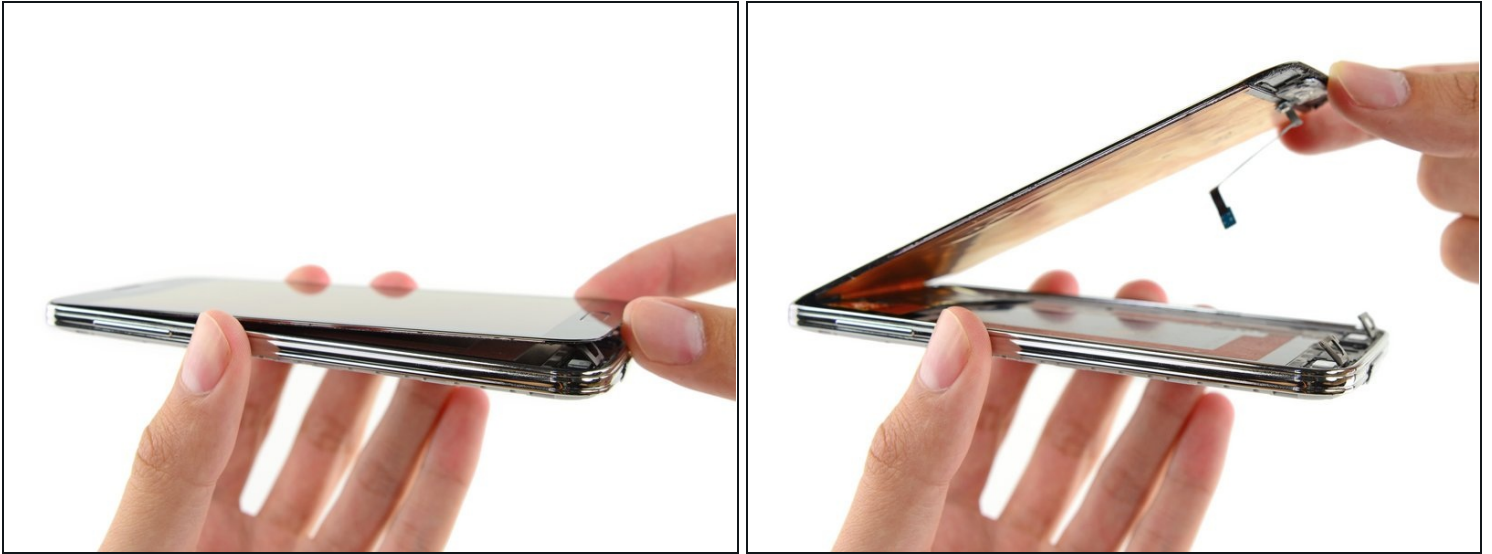
⚠ If the front panel does not detach easily, it may require additional adhesive cutting.

Step 18



- ① If the front panel is not easily freed, the adhesive on the soft button cable may need to be separated.
- ⚠ These cables are thin and easily damaged, therefore be certain you are only peeling them off the display assembly and not lacerating them.
- Insert an opening pick under the soft button icons on the display and pry the button cables down off the inside of the front panel.

Step 19

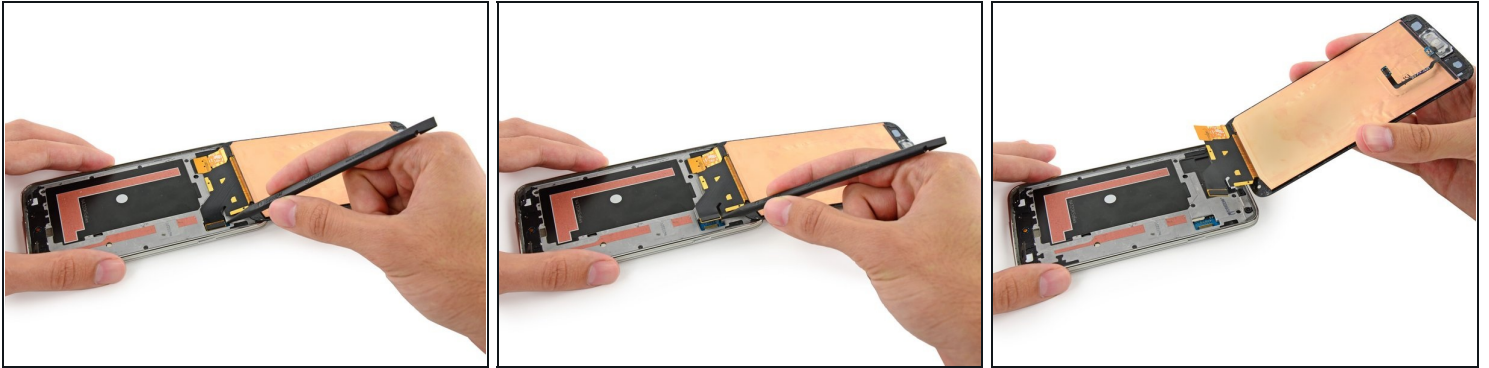


- Slightly lift, but do **not** remove, the home button end of display assembly.

⚠ Do not remove the front panel entirely. It is still attached by a connector.

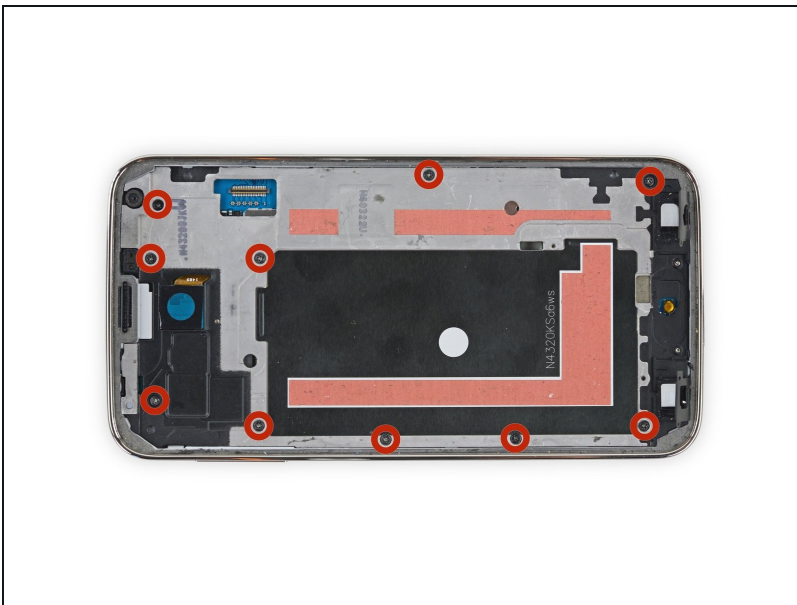
⚠ If you are reusing the home button flex cable, be careful not to sever the cable from the home button. Adhesive can cause the cable to rip apart from the home button. While the home button will still work, the fingerprint scanner will not.

Step 20



- Use the sharp tip of a spudger to lift the front panel assembly cable connector straight up off its socket on the motherboard.
 - Safely remove the front panel assembly from phone.
- ☑ If your replacement display did not come with a home button, follow our [Home Button Assembly](#) guide to transfer your old button over to the new display, or install a new button.

Step 21 — Interior Midframe Assembly



- Remove the ten 3.4 mm Phillips #000 screws from the display side of the midframe.

Step 22



i Flip the phone over and remove the following screws from the battery side of the midframe:

- Two 4.4 mm Phillips #000 screws near the USB port on the battery side of the phone
- One 4.4 mm Phillips #000 screw

Step 23



- Gently run a plastic opening tool down along the left inner side of the interior frame to separate the three white plastic clips.

Step 24



① The midframe is composed of two halves that encase the motherboard.

- Gently pull the long sides of the silver bezel out away from the phone to separate the two halves of the midframe.

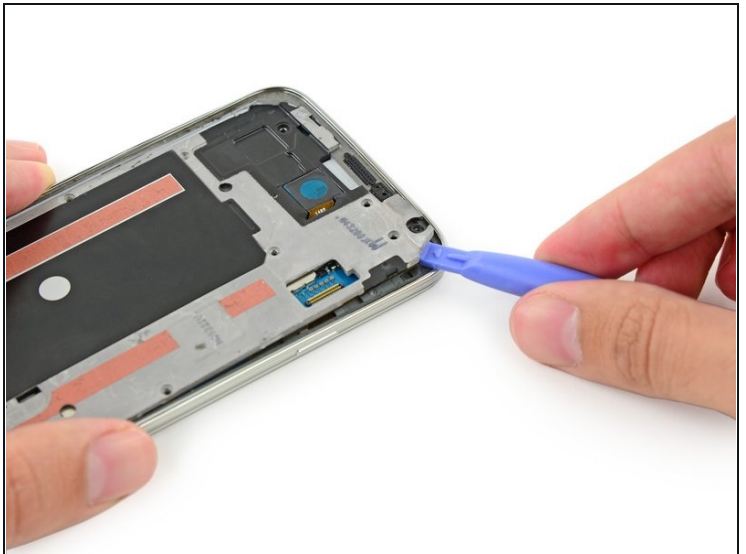
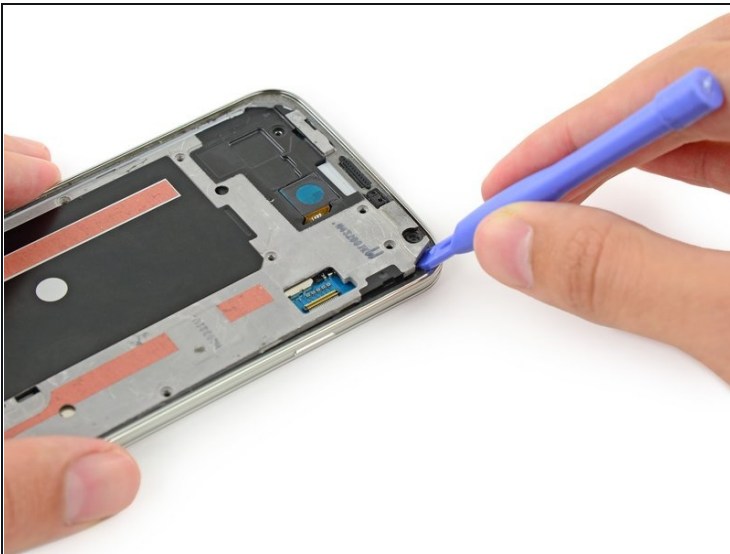
⚠ It may be helpful to gently push in from the inside of the battery compartment, but be careful not to flex the interior half of the midframe, as the motherboard is mounted to it.

Step 25



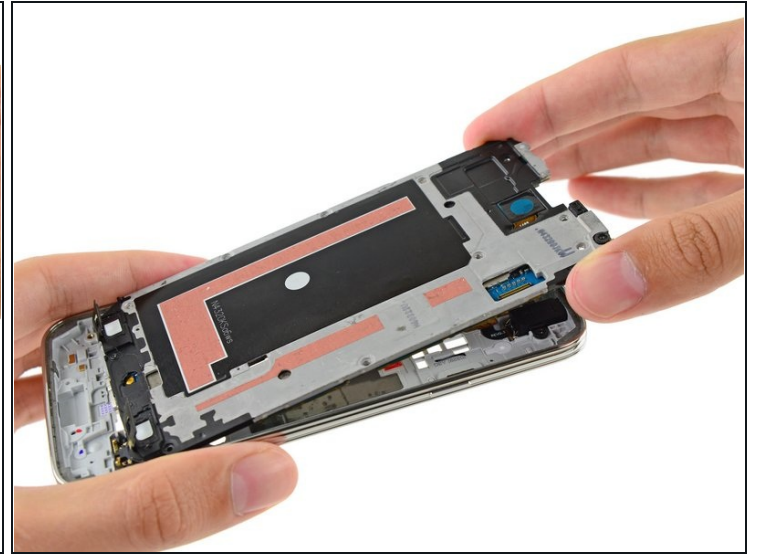
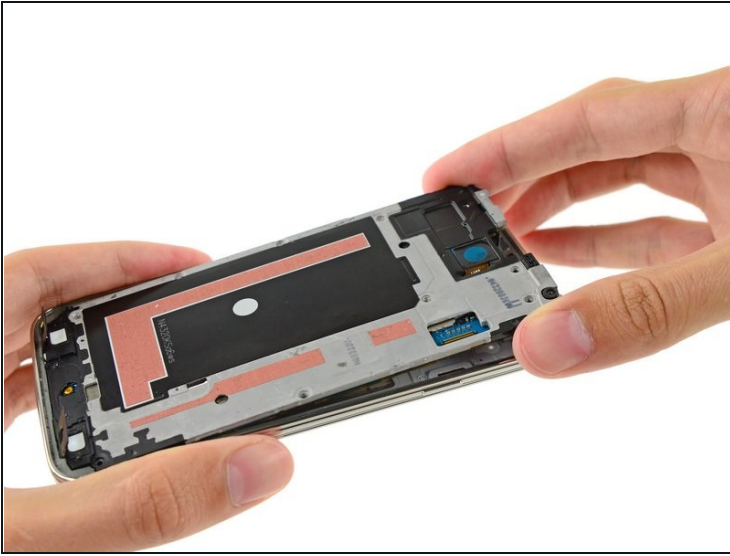
- Continue on to the right side of the silver bezel, pulling away from the interior section of the midframe to separate the two halves.

Step 26



- Use a plastic opening tool to pry any remaining corners out of the silver bezel.

Step 27



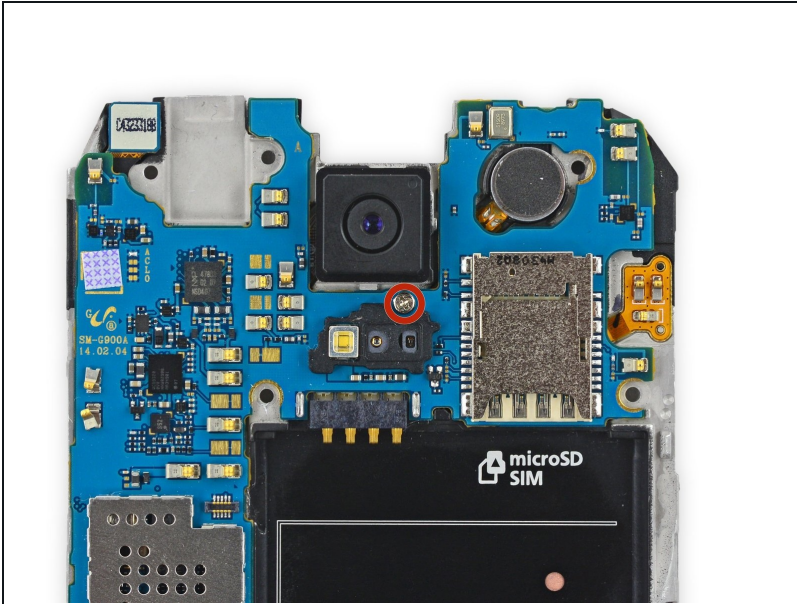
- Carefully remove the interior midframe/motherboard assembly from the white inner midframe.

Step 28 — Motherboard Assembly



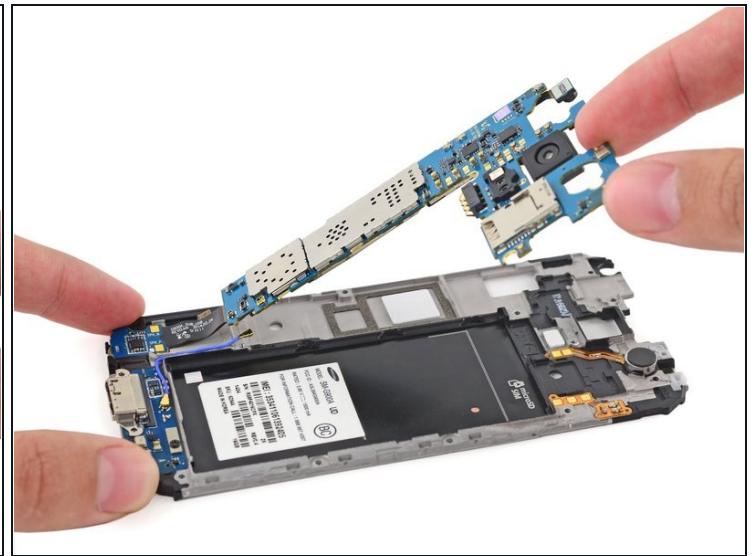
- Carefully wedge the tip of a spudger underneath the antenna cable connector.
 - Delicately lift the spudger directly upwards to disconnect the antenna connector off its socket on the motherboard.
- ⓘ Some models have two antenna cables (blue and grey/white). Remove both of the cables.

Step 29



- Remove the single 3.0 mm Phillips #000 screw securing the motherboard to the midframe.

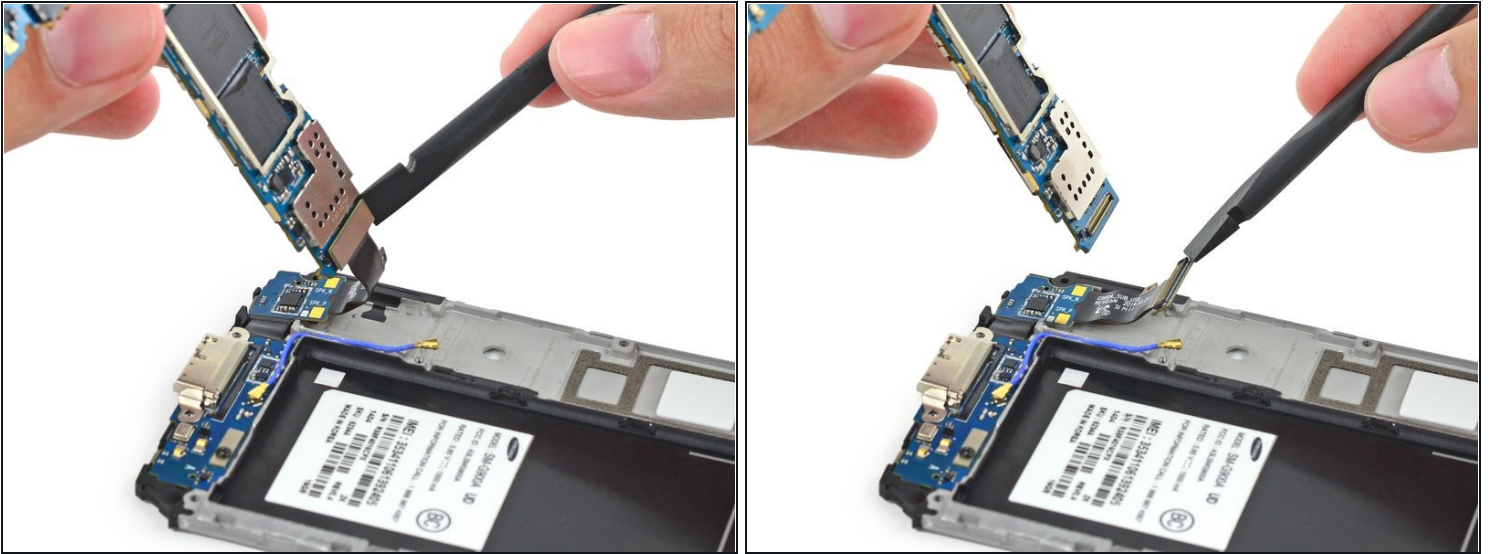
Step 30



- Pull, but do **not** remove, the camera end of the motherboard up from the midframe to allow access to the connectors on the rear.

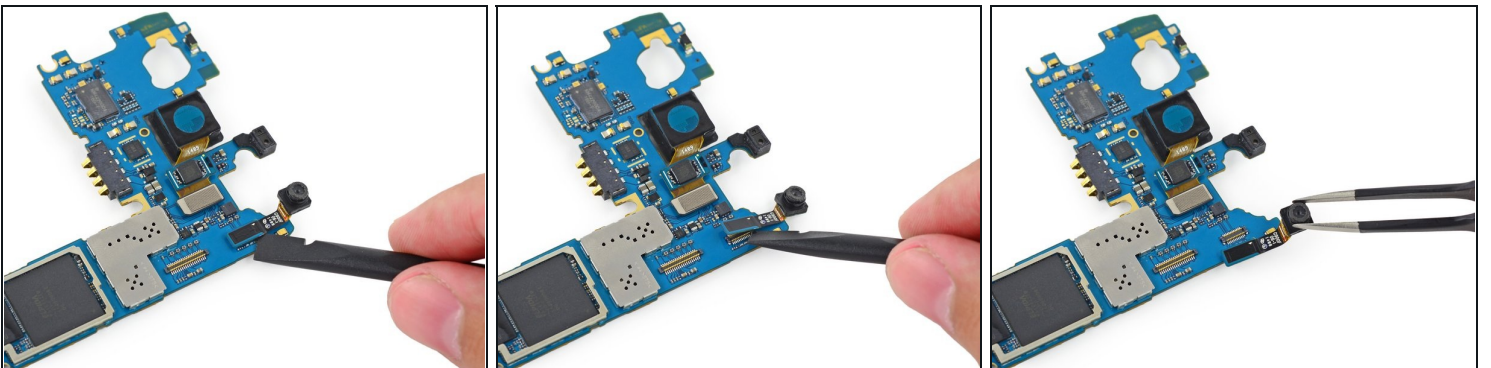
⚠ Do **not** attempt to fully remove the motherboard as it is still attached to the interior midframe by the Micro-USB port daughterboard connector.

Step 31



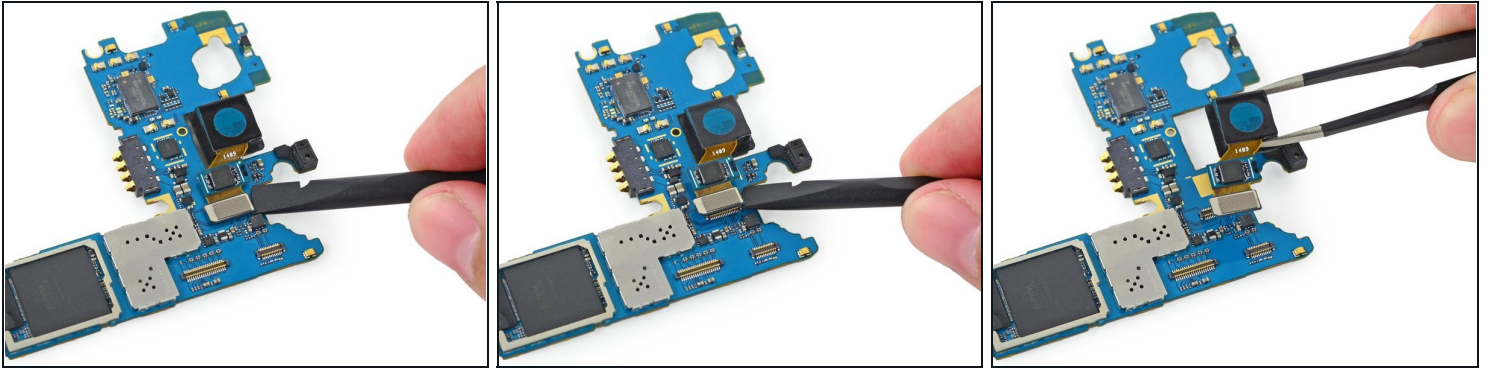
- Use the flat end of a spudger to pry the daughterboard connector straight up off its socket on the motherboard.

Step 32 — Motherboard



- Use the flat end of a spudger to disconnect the front-facing camera connector off its socket on the motherboard.
- Remove the front-facing camera from the motherboard.

Step 33



- Use the flat end of a spudger to disengage the rear-facing camera connector straight up off its socket on the motherboard.
- Remove the rear-facing camera from the motherboard.

To reassemble your device, follow these instructions in reverse order.