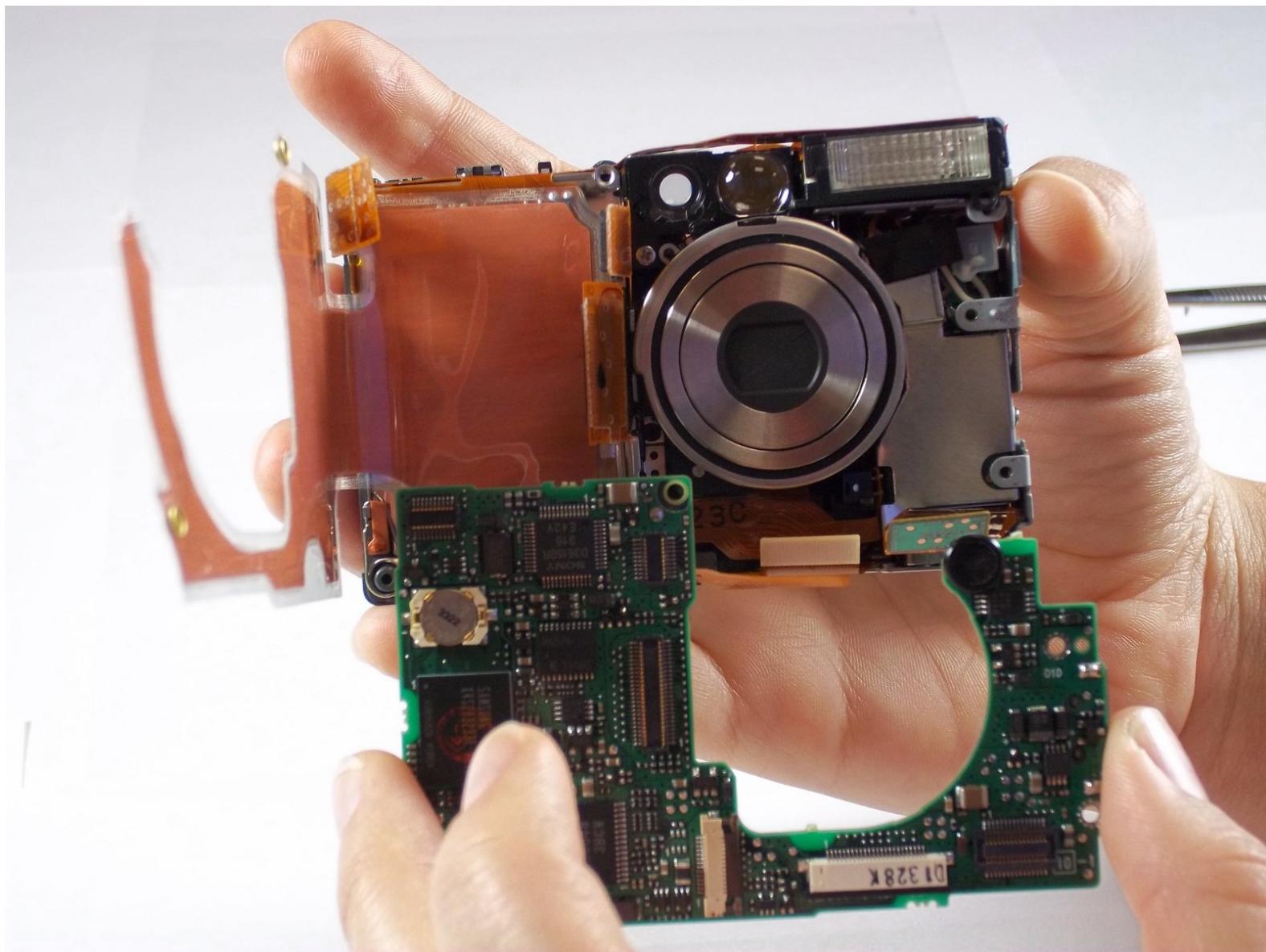




Canon PowerShot S230 Motherboard Replacement

Removing the motherboard.

Written By: Tanya Malalang



INTRODUCTION

This guide will show you how to remove the motherboard.

TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)

Step 1 — Battery



- On the bottom of the camera, use your thumb to press the rubber battery cover towards the side of the camera with the strap base. The cover will shift to extend beyond the rest of the camera.

Step 2



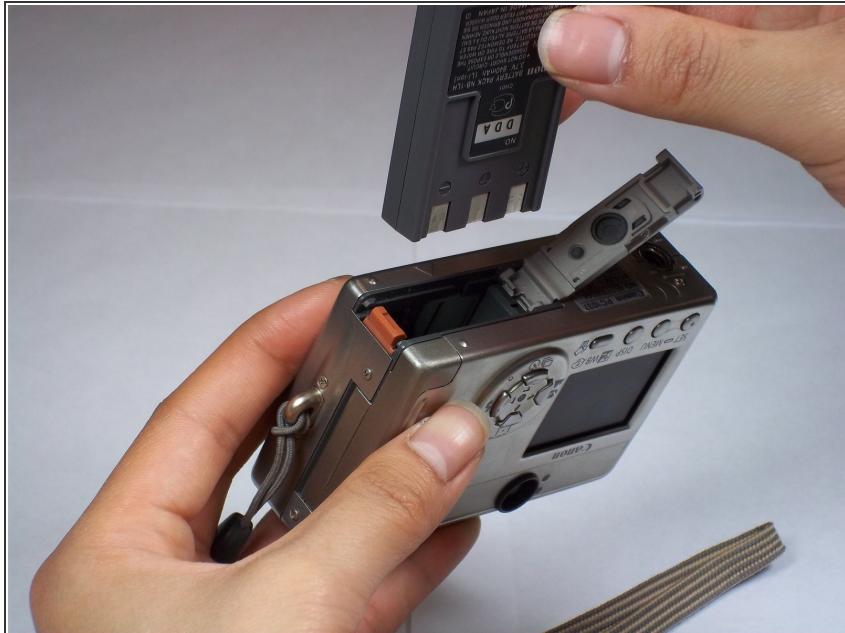
- Hold the end of the battery cover that extends beyond the camera and lift it up.

Step 3



- Pull back on the orange tab to release the battery.

Step 4



- Pull the battery out.

Step 5 — Memory Card



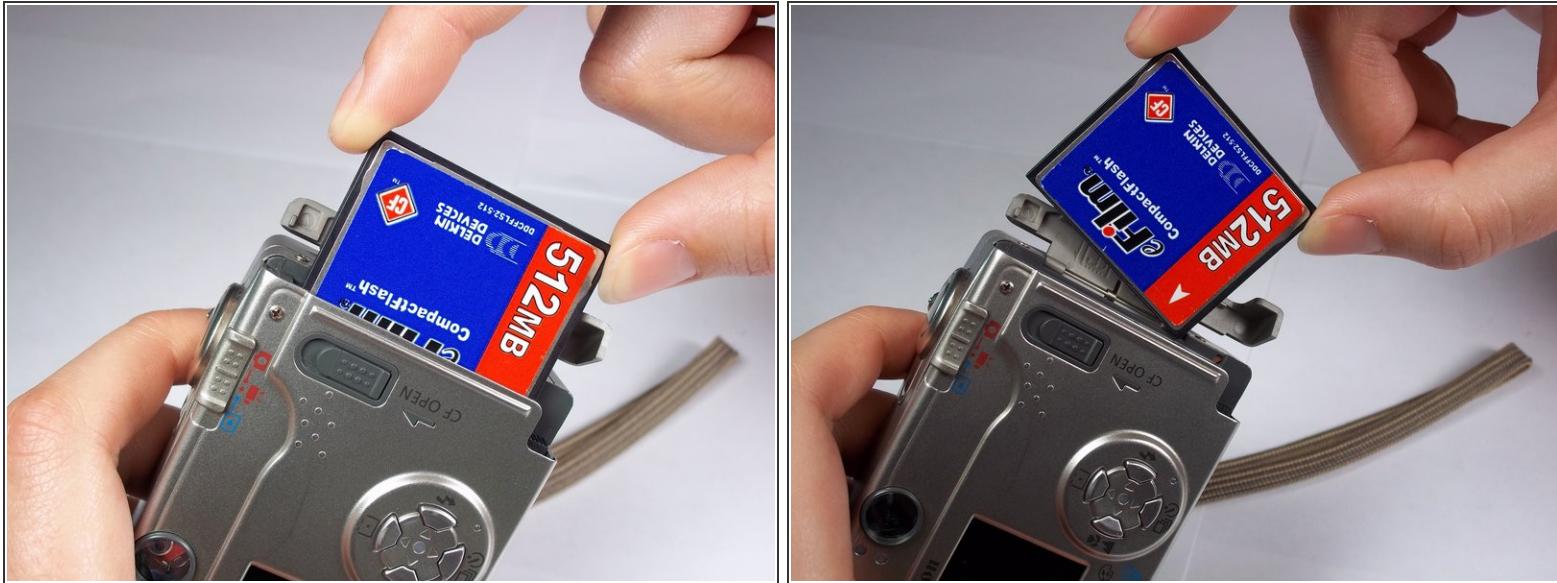
- Locate the sliding button labeled "CF open" on the back of the camera.
- Press and slide down the button labeled "CF open". The memory card cover will pop open.

Step 6



- Push down on the black square button next to the memory card slot. This will release the memory card from the slot.

Step 7



- Pull the memory card out of the memory card slot.

Step 8 — Camera Casing



- Remove two 2.4mm Phillips screws from the right side of the camera.

Step 9



- Remove two 2.4mm Phillips screws above the label on the bottom of the camera.
- Remove two 2.8mm Phillips screws next to the tripod hole.

Step 10



- Remove the two 3.2mm Phillips screws that are closer to the top and bottom edges of the camera.
- Remove the two 3.8mm Phillips screws on either side of the strap base.

Step 11



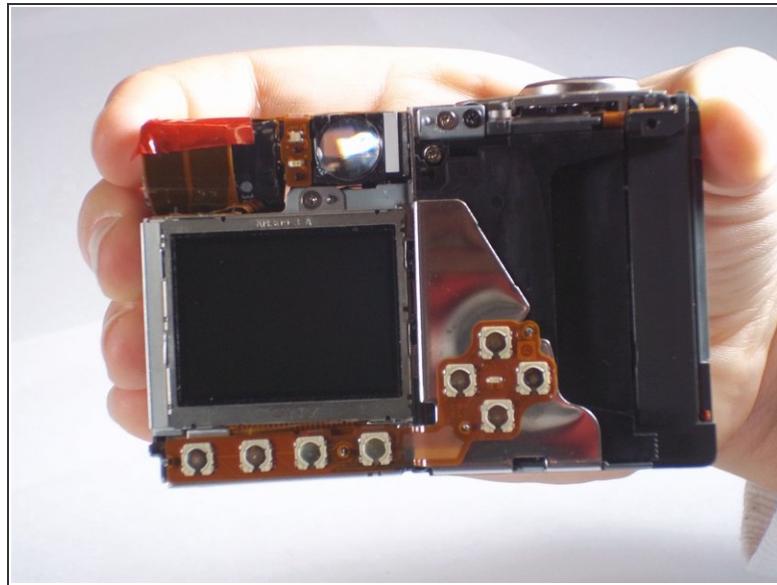
- Remove one 1.6mm Phillips screw from the above the CF open button on back of the camera.

Step 12



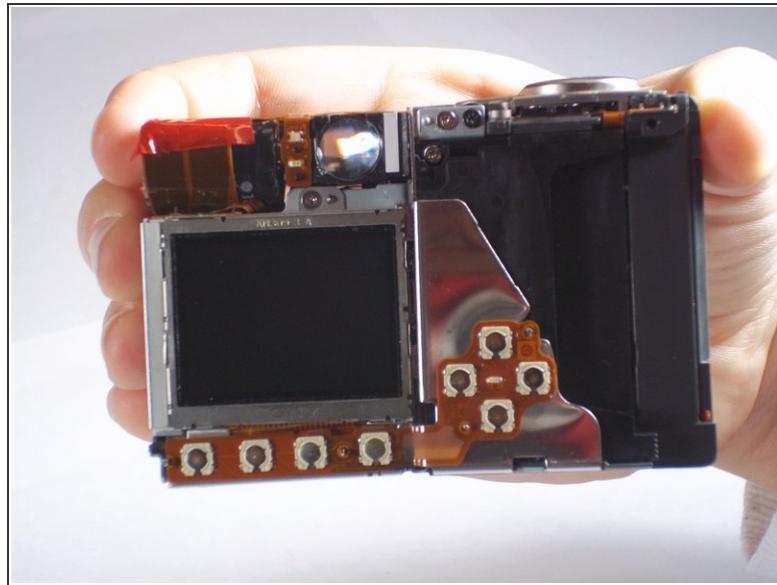
- Gently pull the front casing from the camera.
- i* The following items will either fall off or will be loose: the strap base, the gray rubber cover labeled "Digital A/V Out", and the black rubber piece over the view finder.
- Remove the memory card cover by sliding down the CF open button and moving the pin.

Step 13



- Gently pull the back casing from the camera.

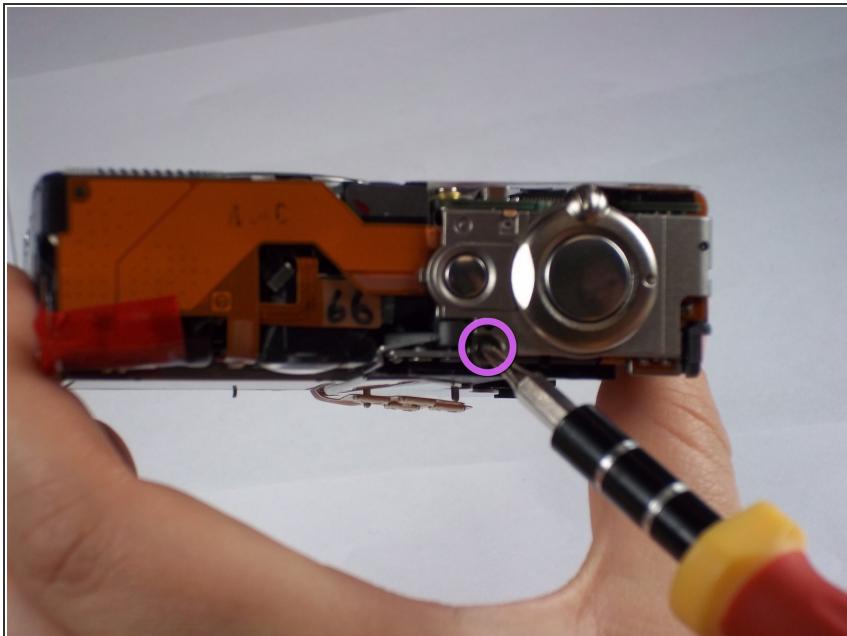
Step 14 — Buttons



- Locate the reverse side of the buttons by looking at the inside of the back camera casing.
- Locate the button sensors, which connect to the logic board by a connecting ribbon, by looking at the back of the camera once the back casing has been removed.

i The button sensors on the back of the camera should appear to match up with the reverse side of the buttons on the inside of the back camera casing. Imagine one as being the reverse image, or mirror image, of the other. This will help you locate where a problem is occurring if a button or a button sensor has been damaged.

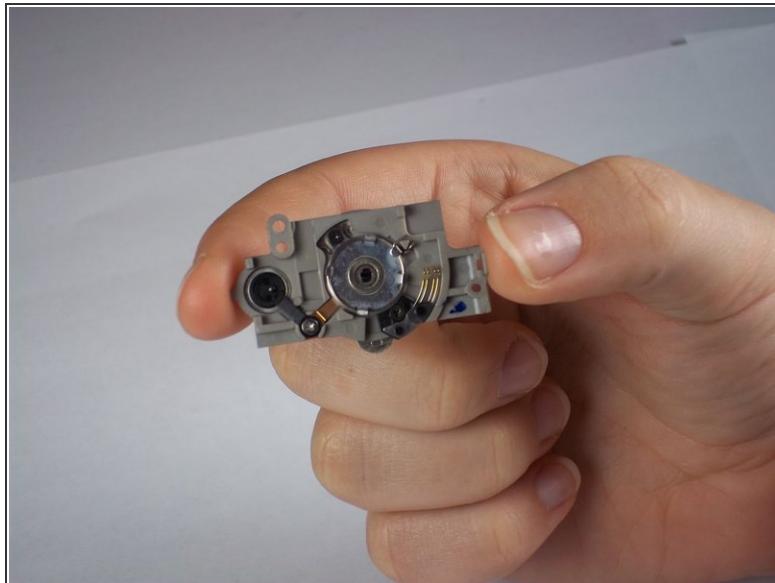
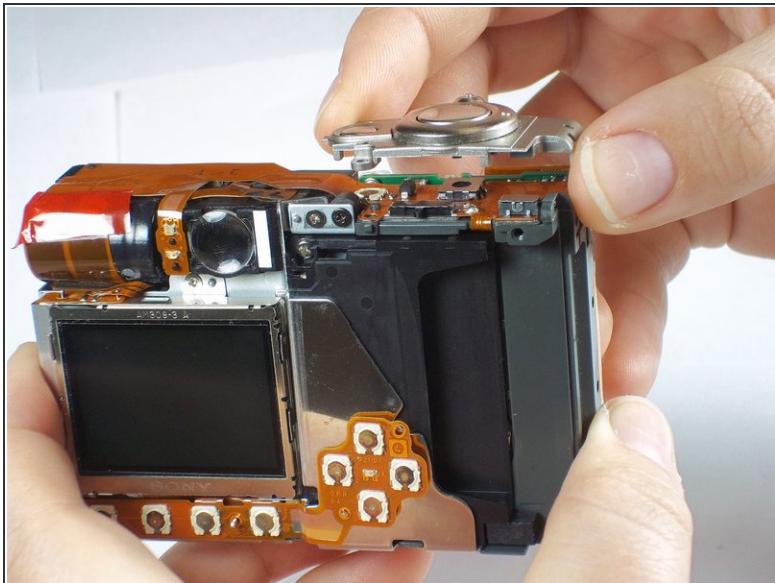
Step 15



- Remove one 4.3mm screw directly below the power button on the top of the camera.

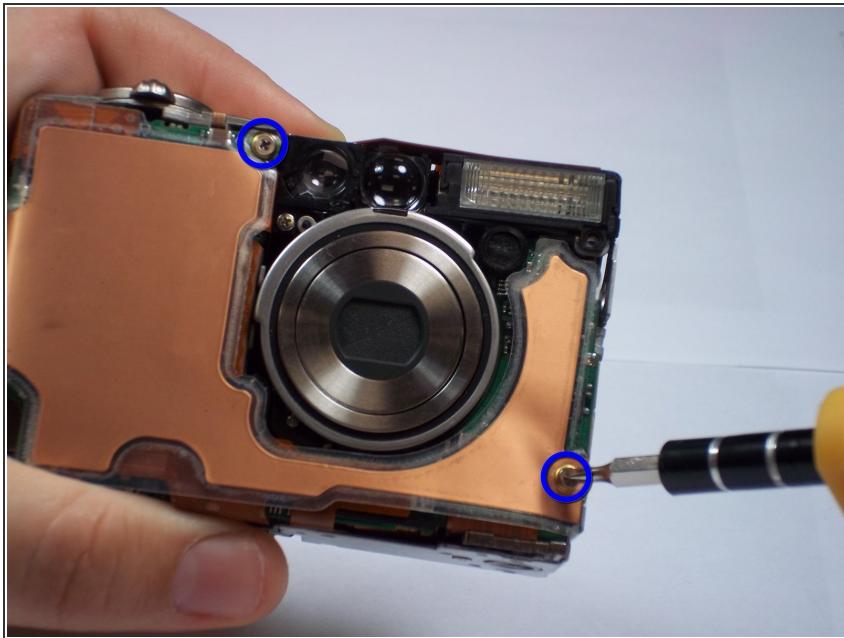
(i) This screw attaches the entire panel for the power and picture-taking buttons. Be sure you are removing the screw from the top of the camera, as it is close to another screw on the back side of the camera.

Step 16



- Gently lift the button panel from the top of the camera.
- This is what the reverse side of the button panel looks like after removal.

Step 17 — Motherboard



- Remove the two 3.9mm screws holding down the copper flap that insulates the motherboard.

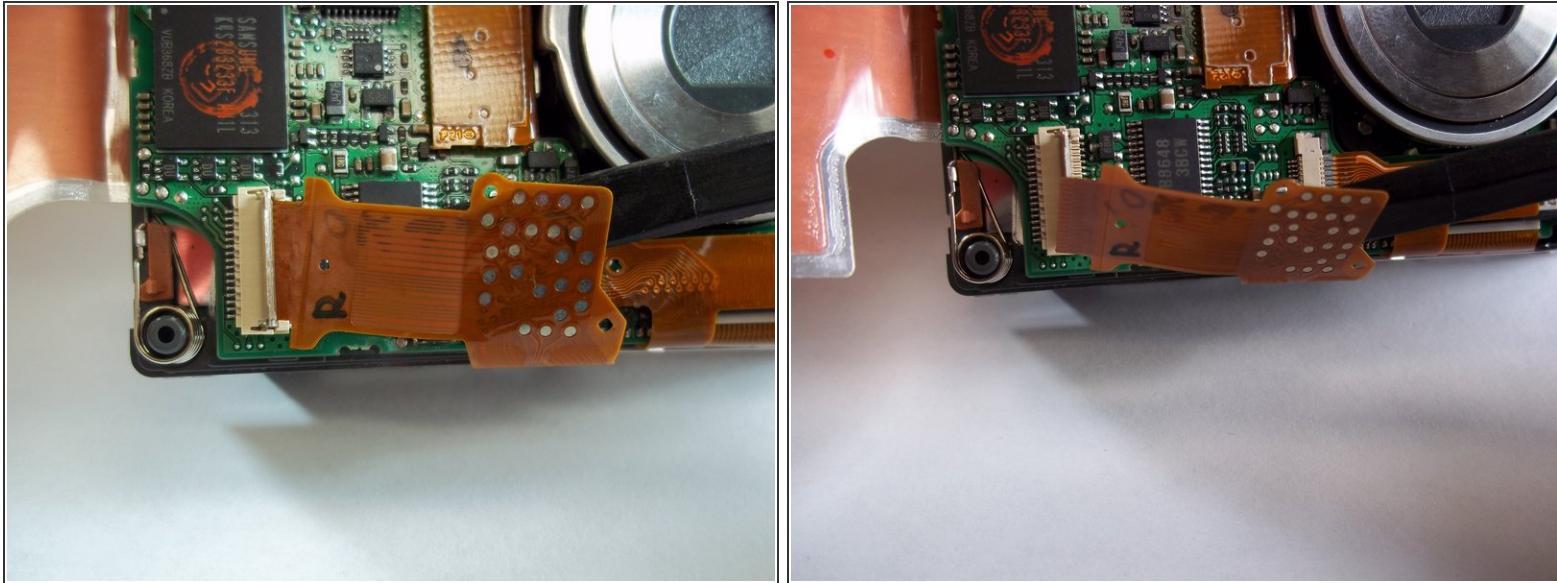
Step 18



⚠ The motherboard can be damaged easily and must be treated with care. Try to avoid removing ribbon cables with your fingers, since motherboards are extremely sensitive to static discharge. Use a spudger or plastic opening tool to lift any flaps or tabs or to pry connectors straight off their sockets on the motherboard.

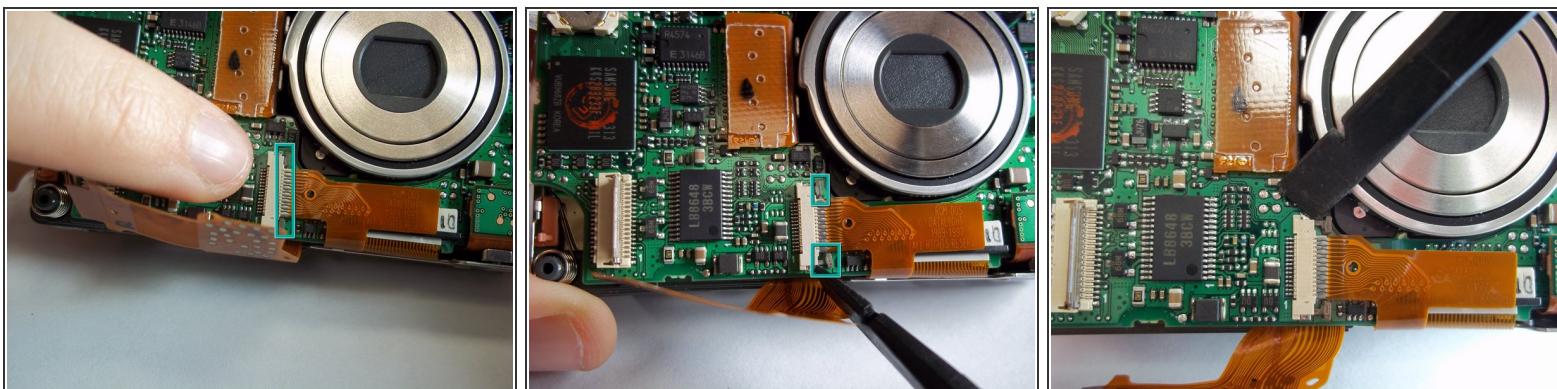
- ⓘ Before the motherboard can be removed, several ribbon cables must be disconnected from their respective ports. A few of the ribbon cables are held in place by locking ZIF connectors, which you must release before removing the cables. Removing each ribbon cable may require a gentle tug.
 - First, release the ZIF connector securing the ribbon cable in the bottom left corner of the motherboard. To do this, insert the flat end of a spudger under the connector's dark brown flap and gently wedge the flap open.

Step 19



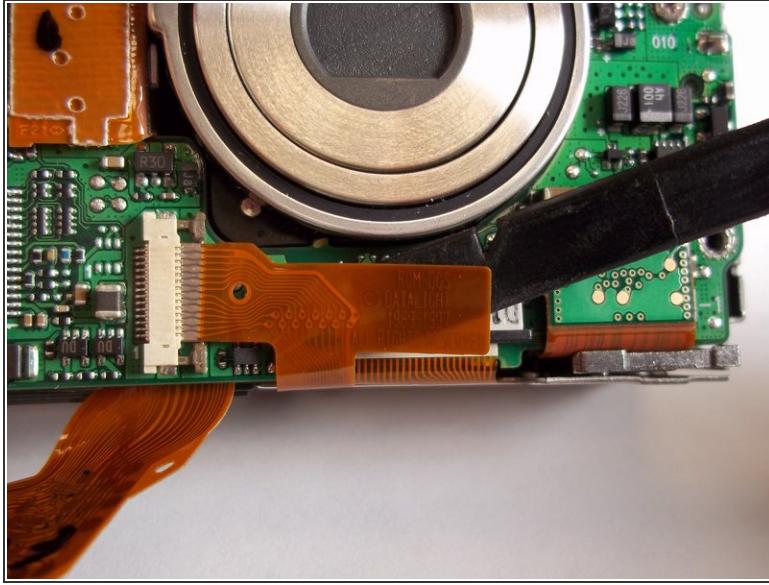
- Now, insert the spudger under the ribbon cable and gently pull the cable out of its port.

Step 20



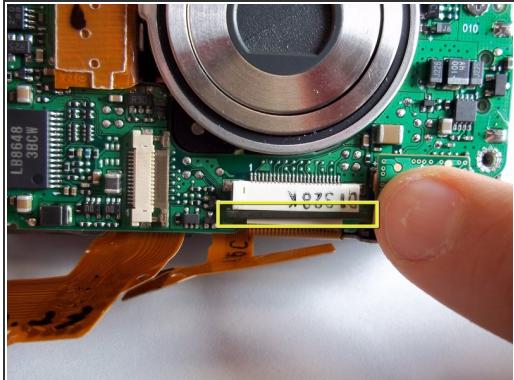
- Release the ZIF connector securing the next ribbon cable. To do this, insert the flat end of a spudger between the dark brown piece and the white piece of the connector. Since the dark brown piece is under the ribbon cable, move this piece to the right by wedging one end at a time.

Step 21



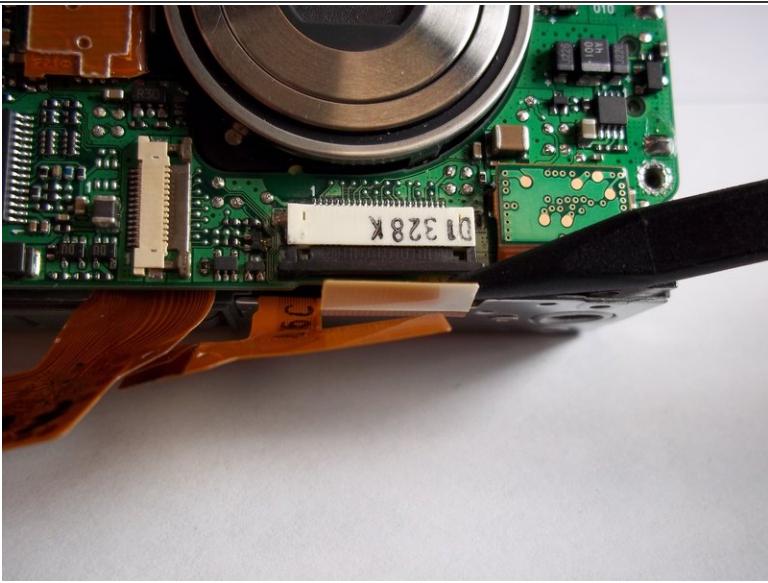
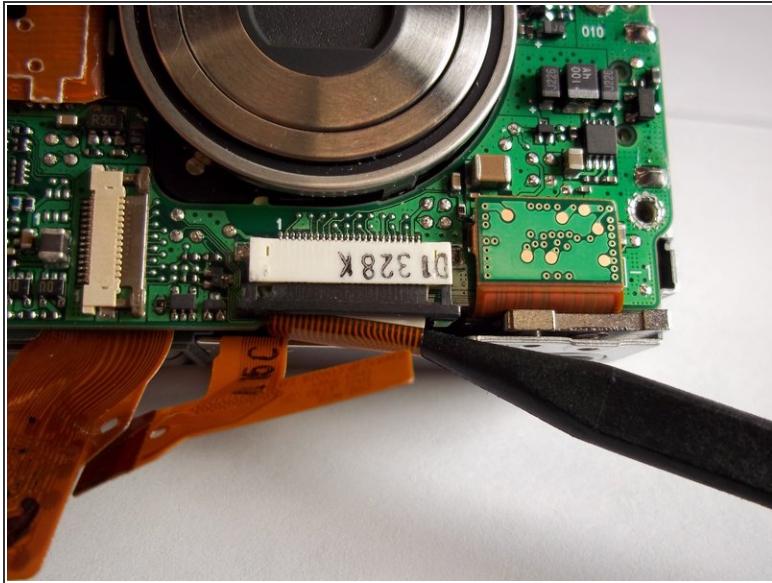
- Insert the spudger under the ribbon cable and gently pull the cable out of its port.

Step 22



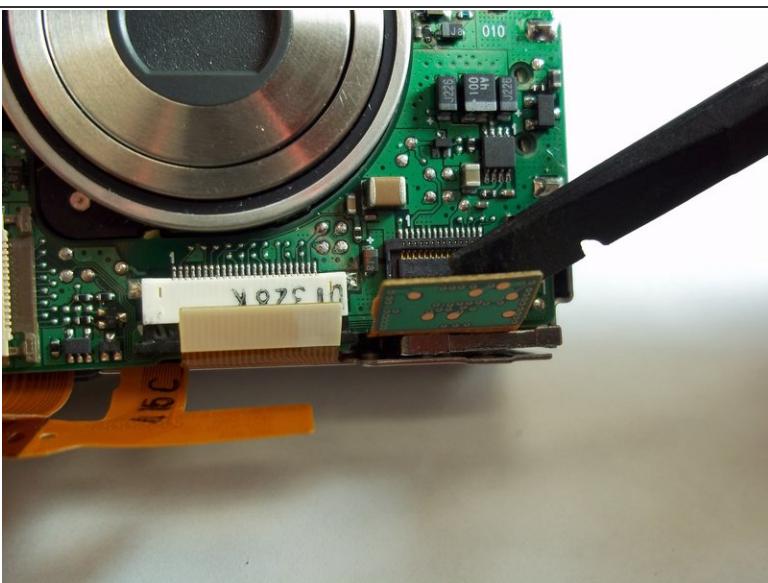
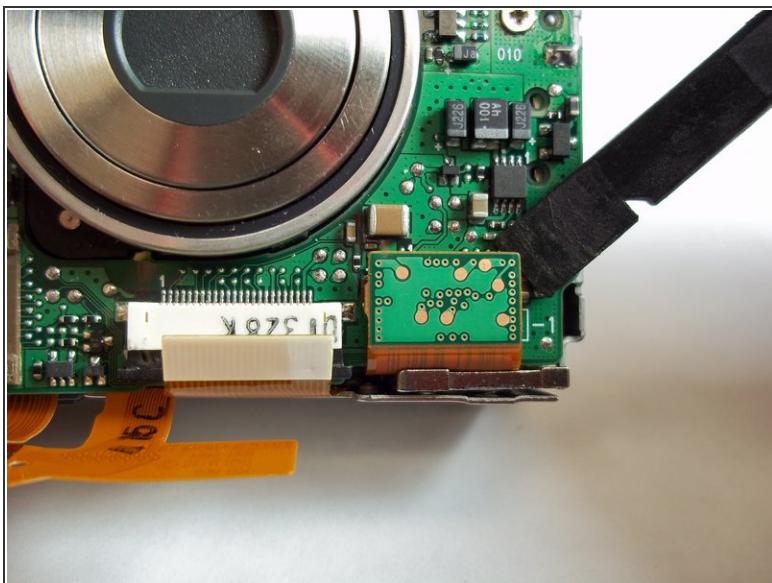
- Release the ZIF connector securing the ribbon directly below the lens. To do this, insert the pointed end of the spudger between the black piece of the connector and the white piece. Wedge the black piece down.

Step 23



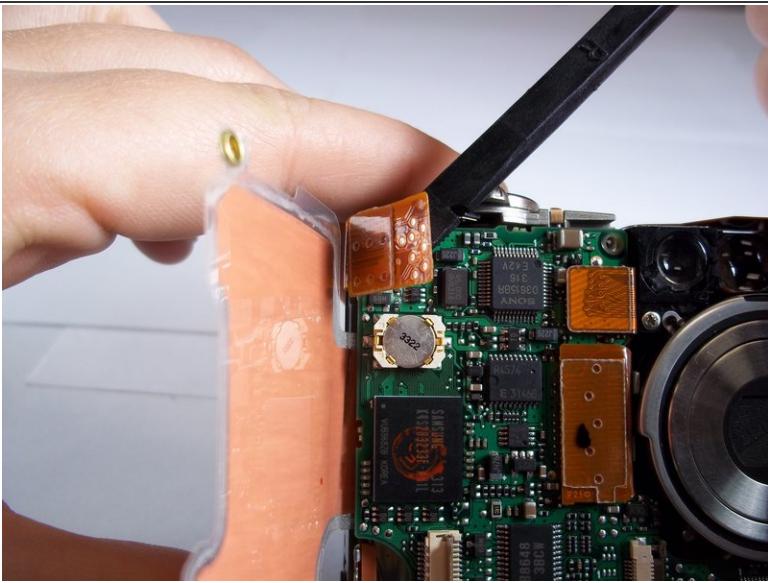
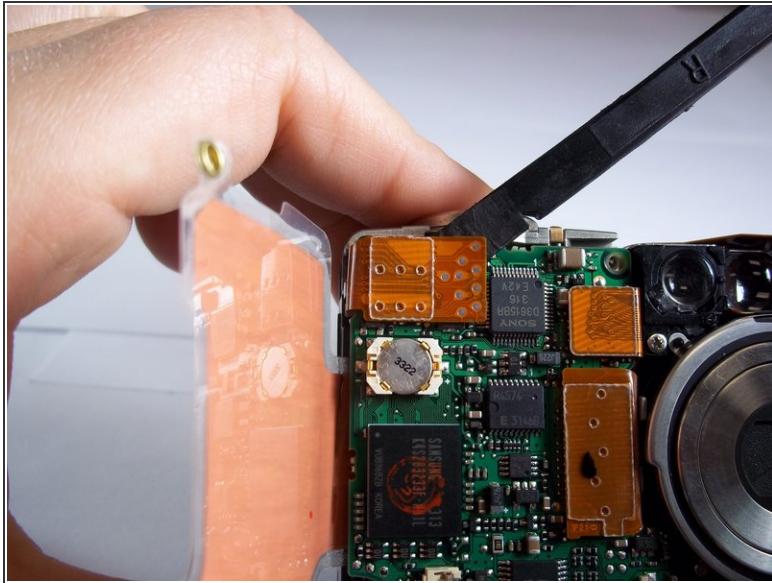
- Insert the pointed end of the spudger under the ribbon cable and gently pull the cable out of its port.

Step 24



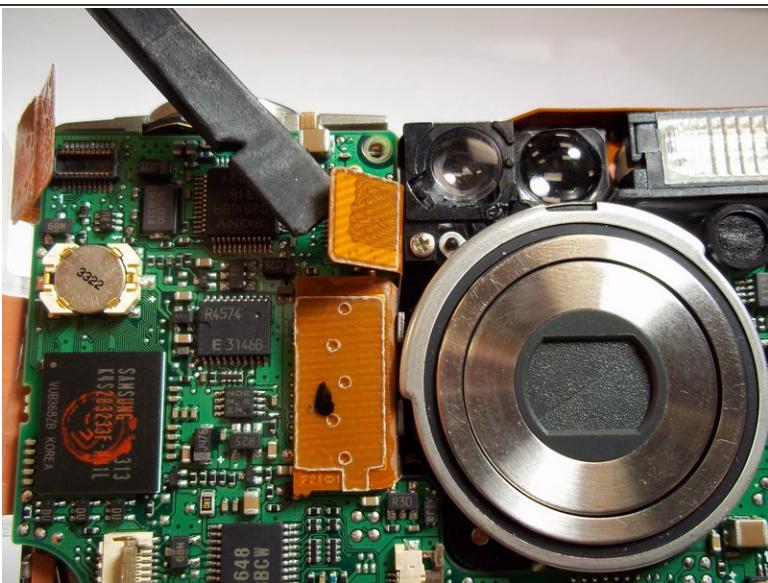
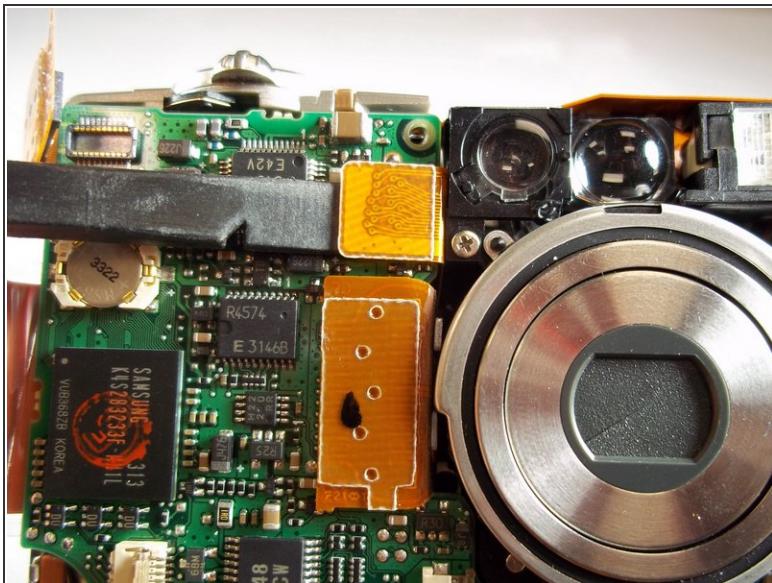
- The rest of the ribbon cables are not secured with ZIF connectors. Remove the ribbon cable on the bottom right corner of the motherboard by using the flat end of the spudger to pry the cable from the board.

Step 25



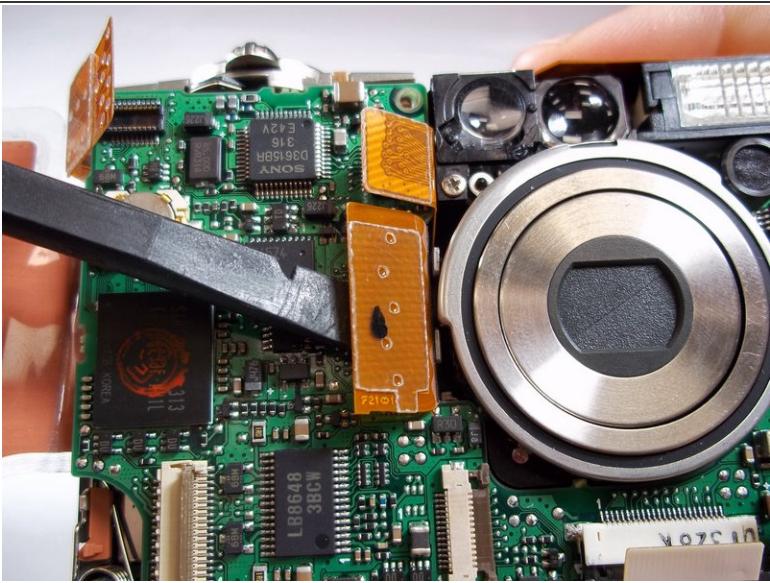
- Remove the ribbon cable on the top left corner of the motherboard by using the flat end of the spudger to pry the cable from the board.

Step 26



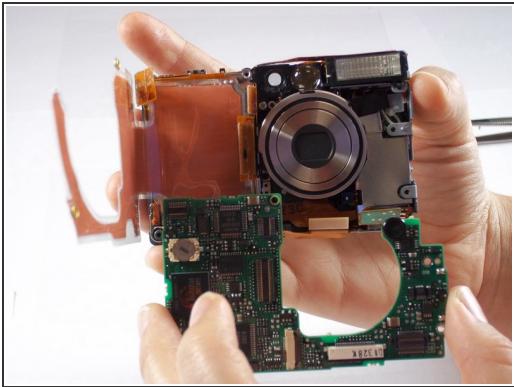
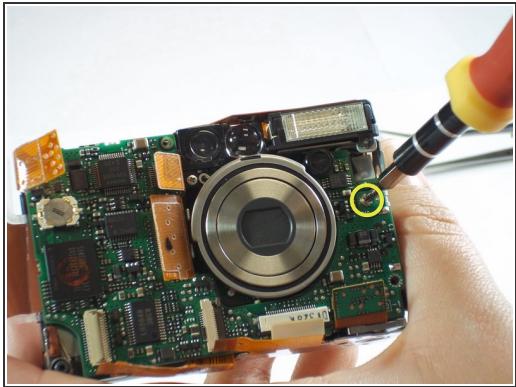
- Remove the next ribbon cable by using the flat end of the spudger to pry the cable from the board.

Step 27



- Remove the last ribbon cable by using the flat end of the spudger to pry the cable from the board.
- When replacing the ribbon cables, keep in mind that these last four cables simply snap back onto the motherboard.

Step 28



- Remove one 3.9mm screw from the right side of the motherboard and under the flash.
- The ends of the connecting ribbons may get caught on the motherboard as you remove it from the camera.
- Gently pull the motherboard away from the front of the camera.

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