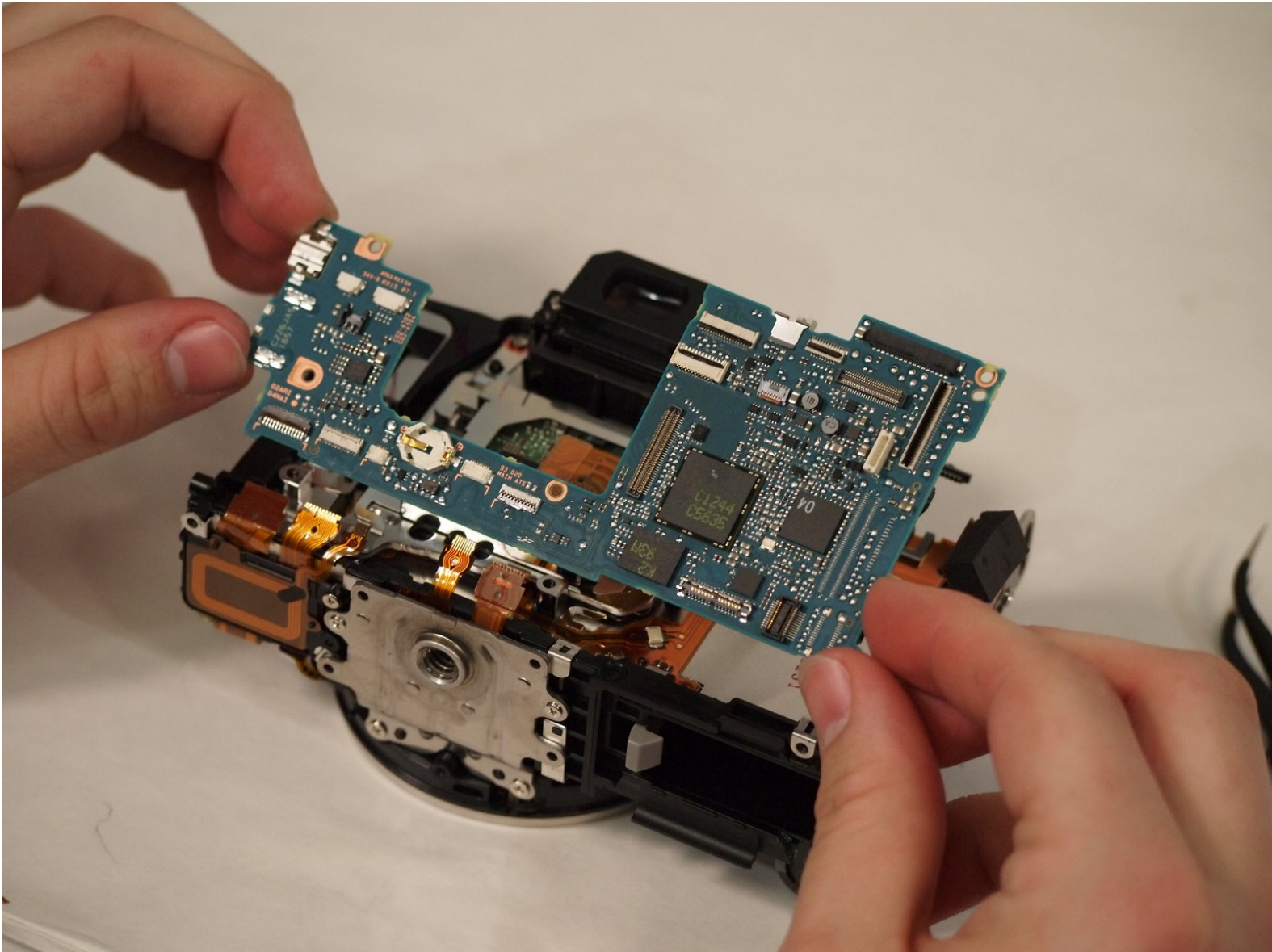




Canon EOS Rebel T6i Motherboard Replacement

How to replace the motherboard in a Canon EOS Rebel T6i camera.

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INTRODUCTION

This guide will show how to get to and replace the motherboard.



TOOLS:

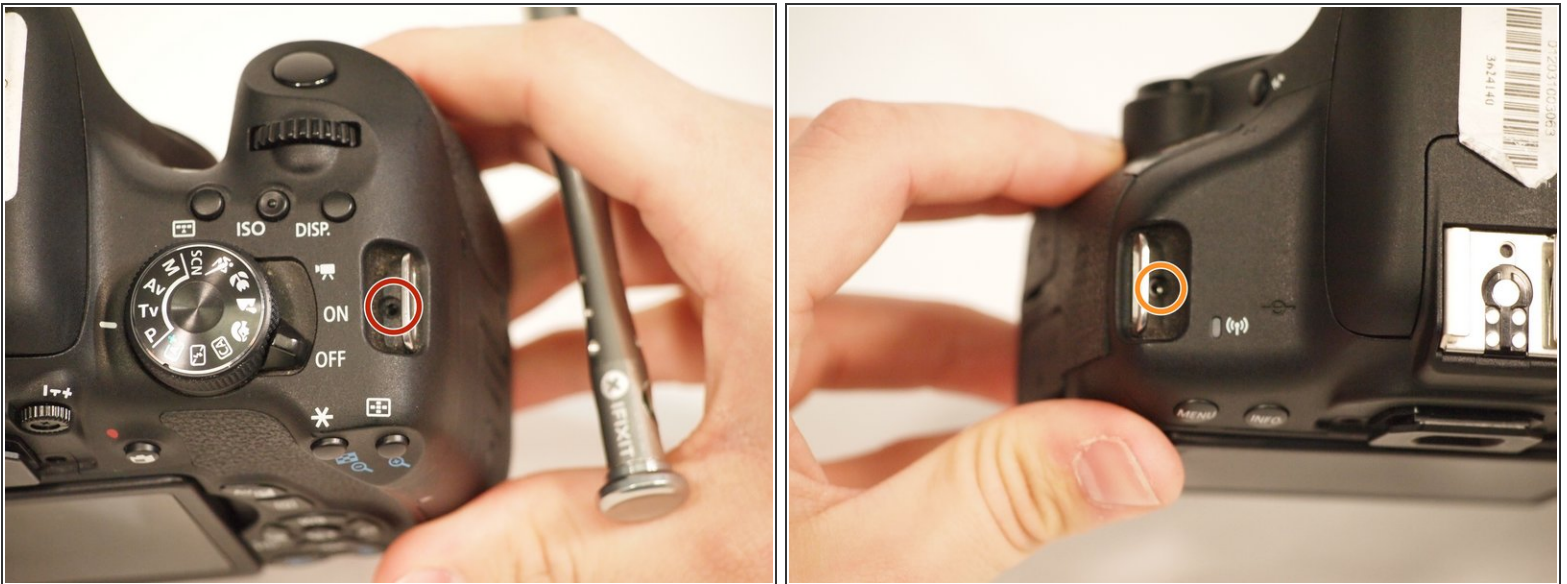
- [JIS #000 Screwdriver](#) (1)
 - [iFixit Opening Tools](#) (1)
 - [Tweezers](#) (1)
 - [Metal Spudger](#) (1)
 - [Spudger](#) (1)
-

Step 1 — Flash Assembly



- Remove two 6.8 mm JIS #000 screws on the right side.
- Remove six 5.3 mm JIS #000 screws on the bottom.
- Remove two 5.3 mm JIS #000 screws on either side of the viewfinder.

Step 2



- Remove one 5.9 mm JIS #000 screw on the top right.
- Remove one 3.4 mm JIS #000 screw on the top left.

Step 3

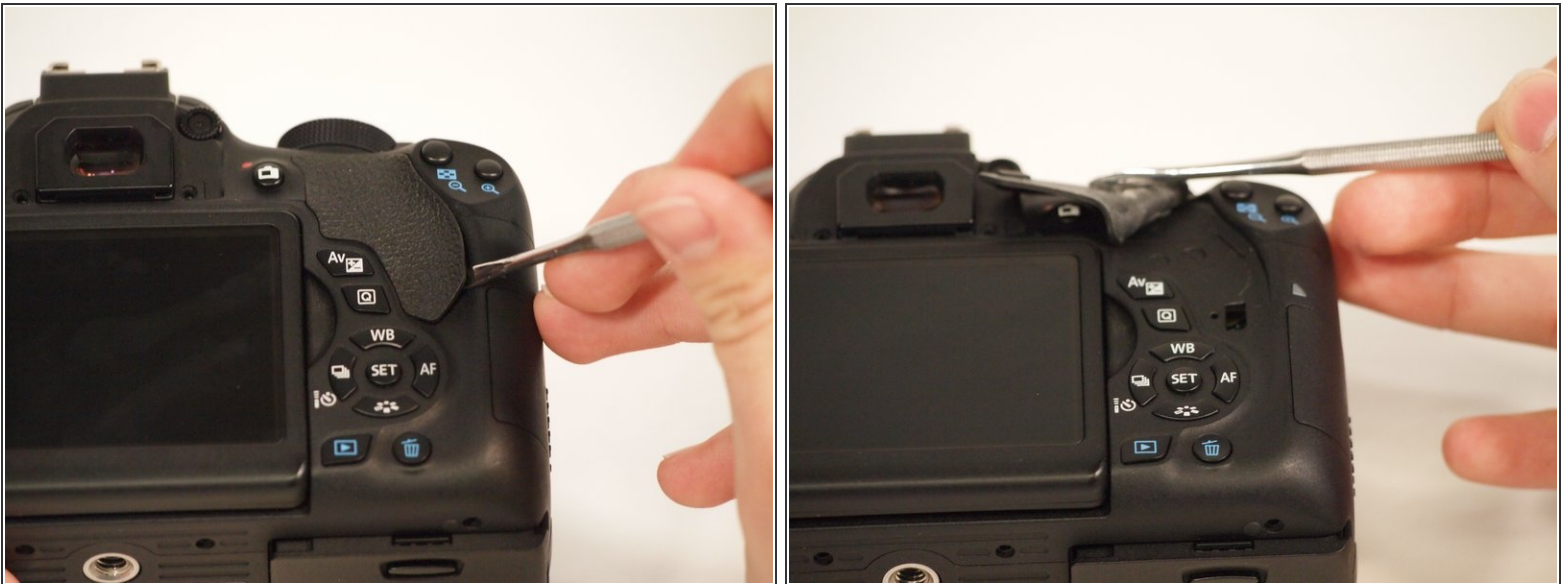


- Using a metal spudger, pry the rubber grip off of the casing on the left side of the camera.

⚠ Potential for device damage: Be careful not to rip the rubber with the metal spudger.

- Remove five silver 5.8 mm JIS #000 screws from underneath the grip.

Step 4




- Using the metal spudger, pry the rubber grip located just below the turn dial.

⚠ Potential for device damage: Be careful not to rip the rubber.

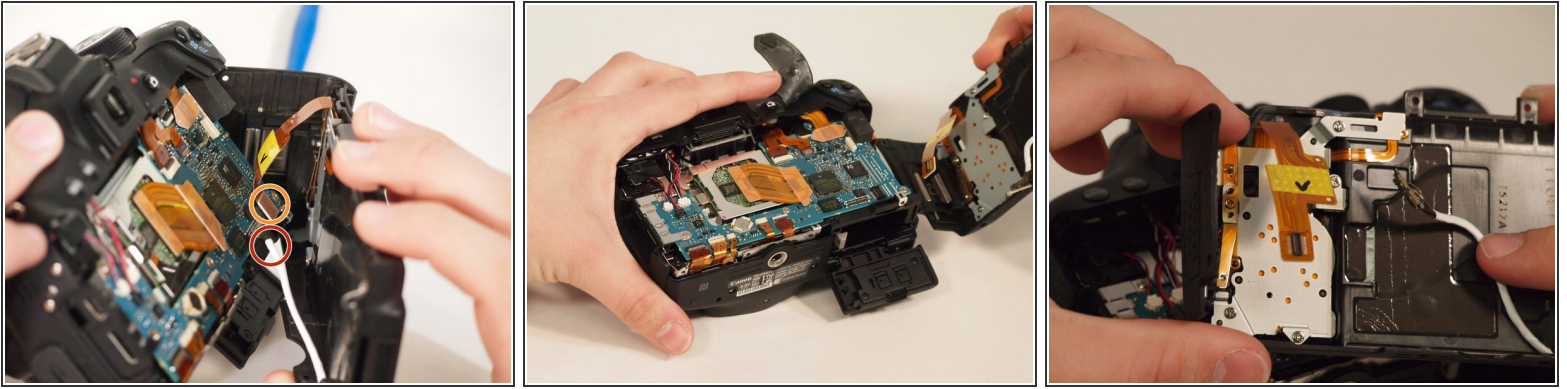
Step 5



- Carefully use the plastic opening tool to pry the casing apart along the seam.
- Follow the seam with the plastic tool until the back is ready to remove.

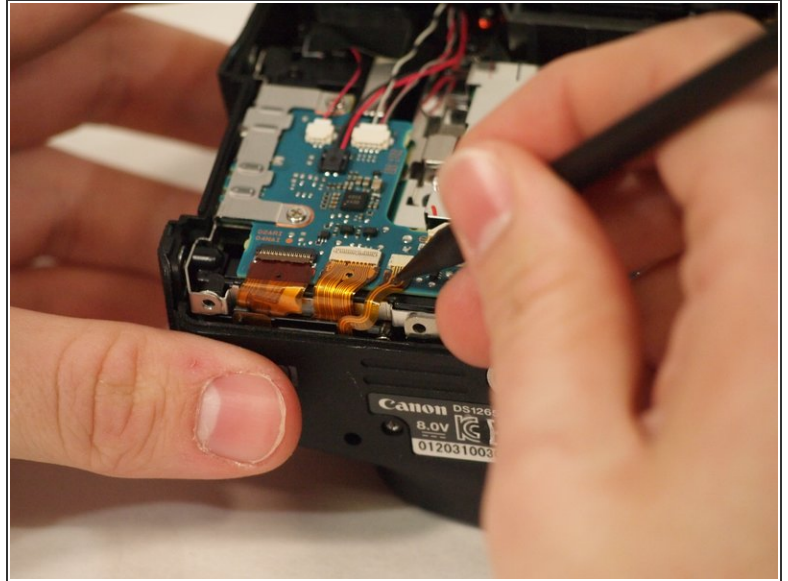
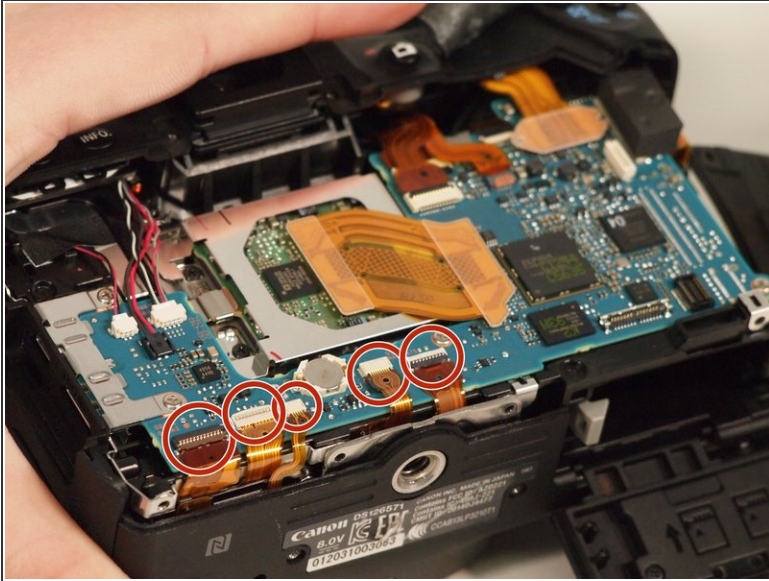
 Potential for device damage: Make sure you use the grounding strip to remove the chance of discharging static electricity into the internal components.

Step 6



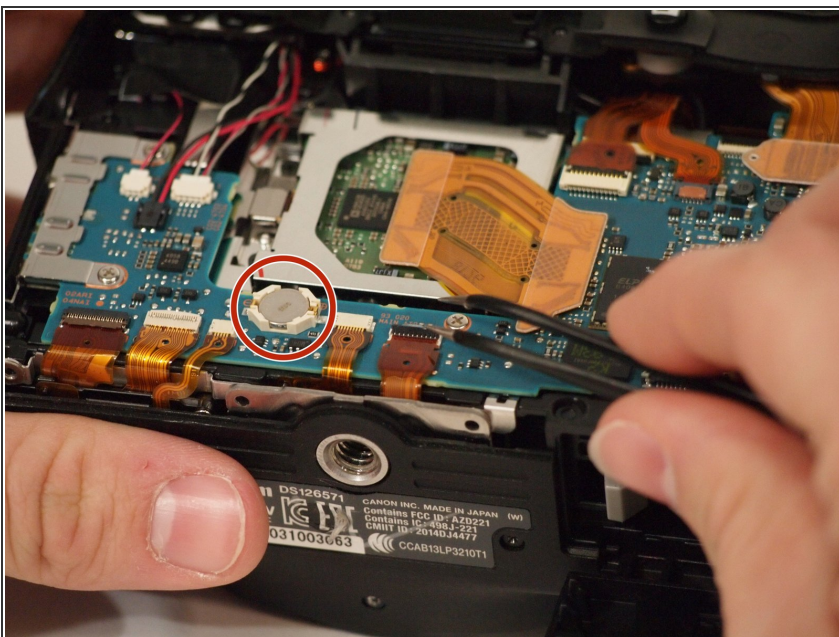
- ⓘ Notice the two connections attaching the back of the camera to the motherboard.
 - To disconnect the white wire, pinch the wire casing and pull it directly out from the camera.
- ⓘ This may take a very small amount of strength; however, do not force or pry it.
 - To disconnect the ribbon connector, softly pull the back away from the motherboard. It should come undone with little force.
 - Once removed, set the back in a safe place.

Step 7



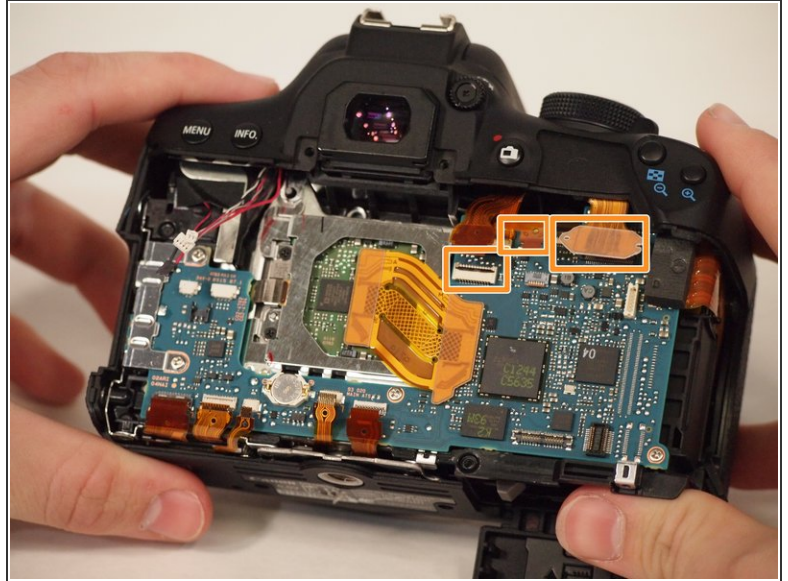
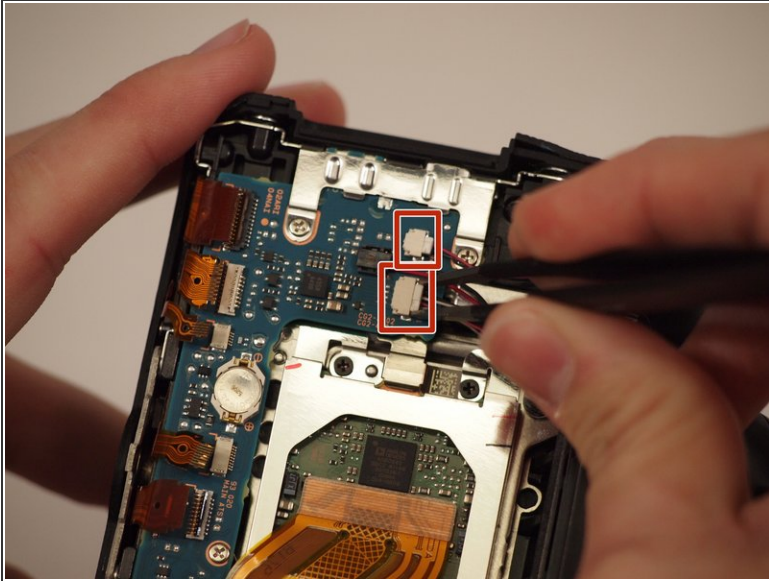
- Remove the five ribbon connectors along the bottom of the assembly using either needle nose tweezers or a plastic opening tool to flip the small flaps to the "up" position.
- Use a nylon spudger to pull each ribbon connector out of its connection using the hole in the center of the ribbon.

Step 8



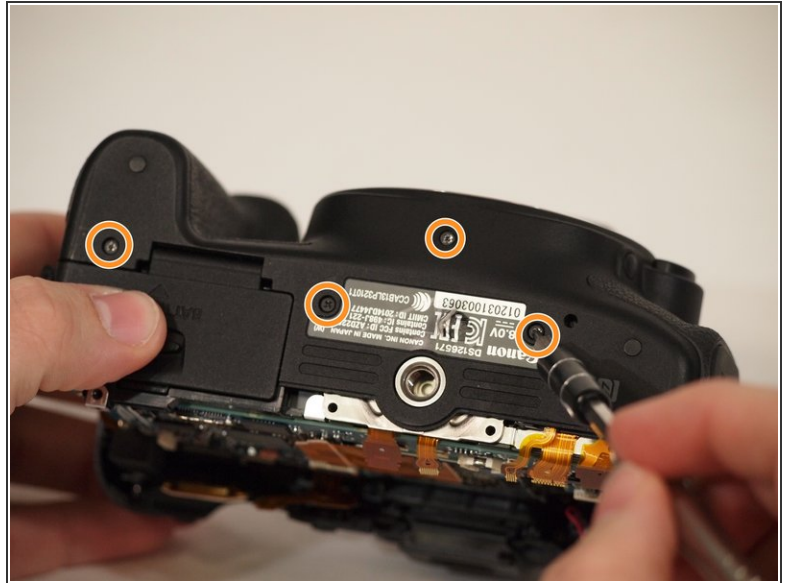
- Remove the button cell battery from the motherboard using a pair of tweezers.

Step 9



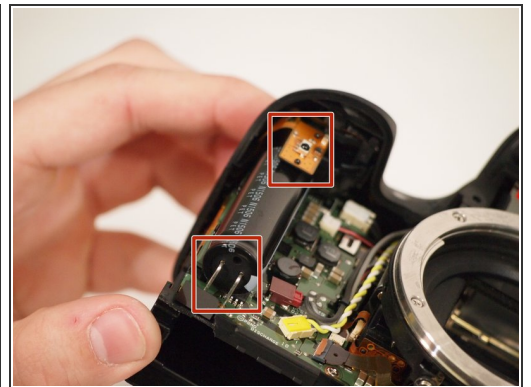
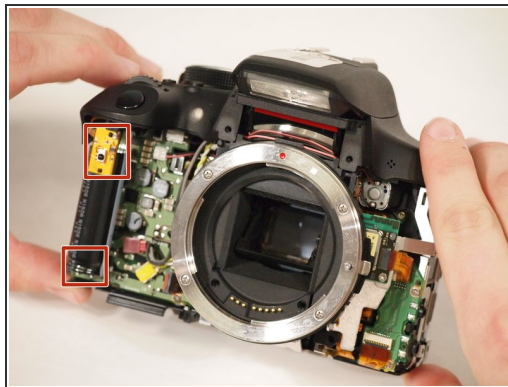
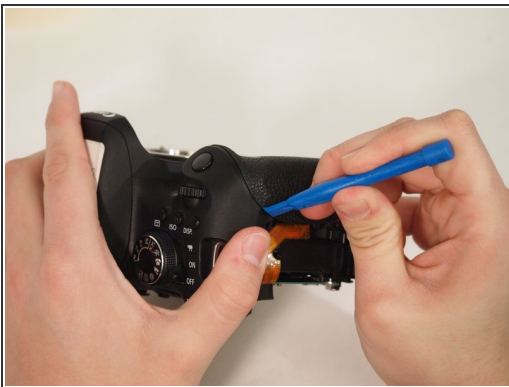
- Disconnect the small plastic connectors on the top left corner of the motherboard by gripping the small plastic portion of the wire and gently pulling out of the connector.
- Disconnect the three ribbon connectors along the top.
- ⓘ Don't detach the connectors underneath or the ribbon connectors with the foam block, as these will be removed later.

Step 10



- Remove the four screws from the front of the camera. There are two screws above the lens mount and two screws inside the lens mount.
- Remove the four screws from the bottom of the camera.

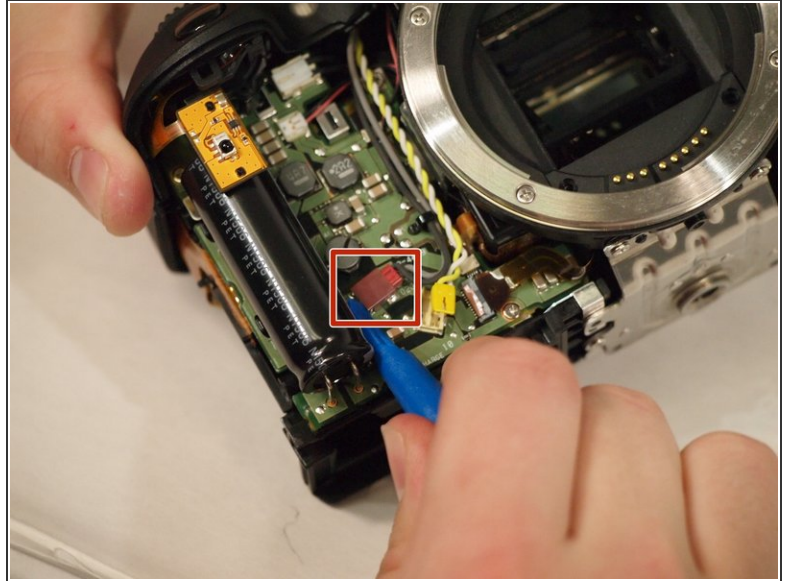
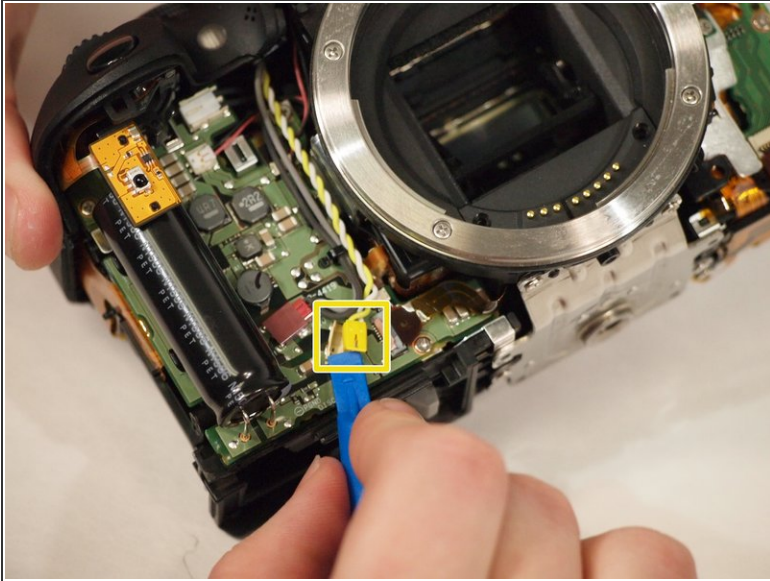
Step 11



- Using the plastic opening tool, pry the front of the casing off of the camera.

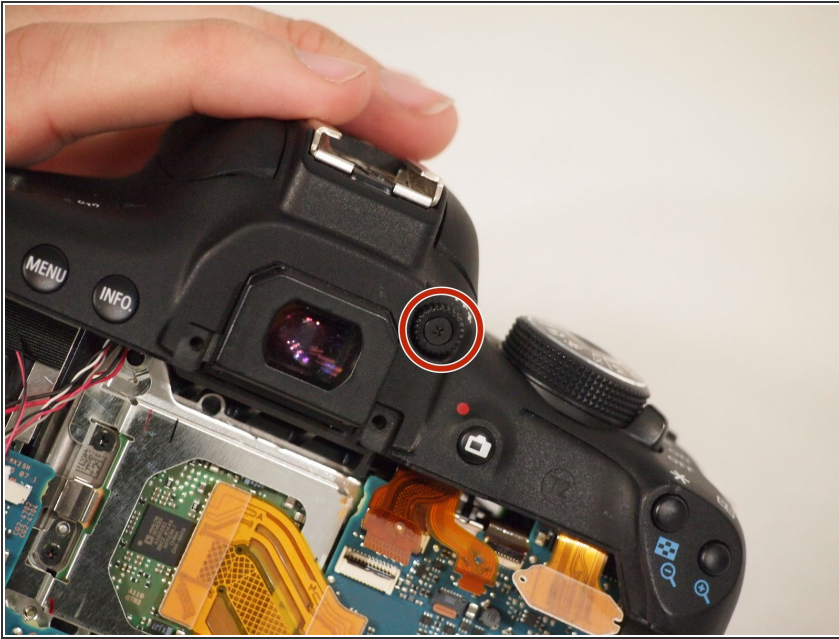
⚠ Warning: Electric Shock! Be careful not to touch the terminals of the capacitor (black cylinder). This can cause the capacitor to discharge.

Step 12



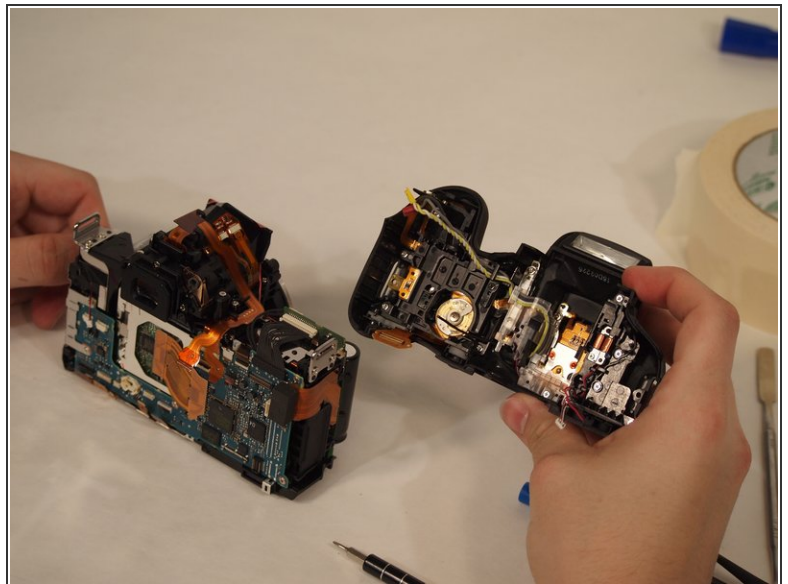
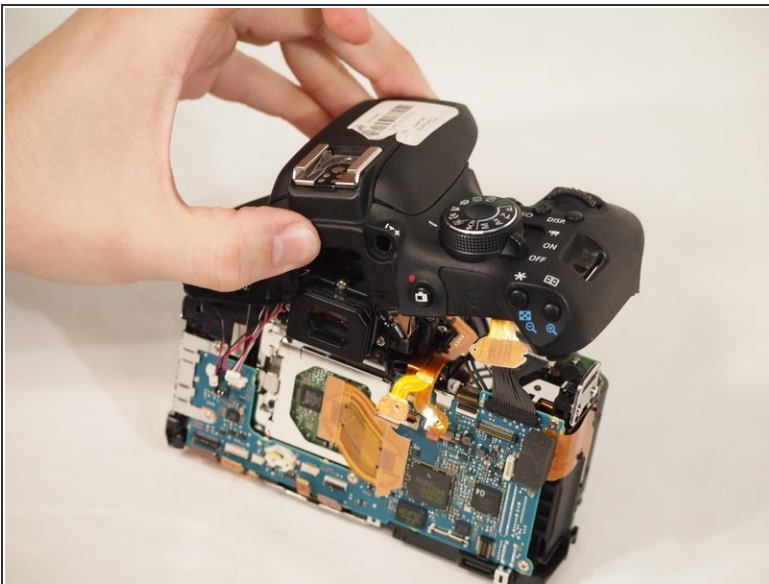
- Remove the yellow and red connections on the front near the black cylinder (capacitor).
 - The yellow connector will just pop out if pried from the bottom using a plastic opening tool.
 - The red connector will pull out of the casing with either a plastic opening tool or a thin set of tweezers.
- ⚠ **Warning: Electric Shock!** Be careful not to touch the terminals of the capacitor (black cylinder). This can cause the capacitor to discharge.

Step 13




- Remove the diopter adjustment knob next to the viewfinder using a JIS #000 screwdriver.

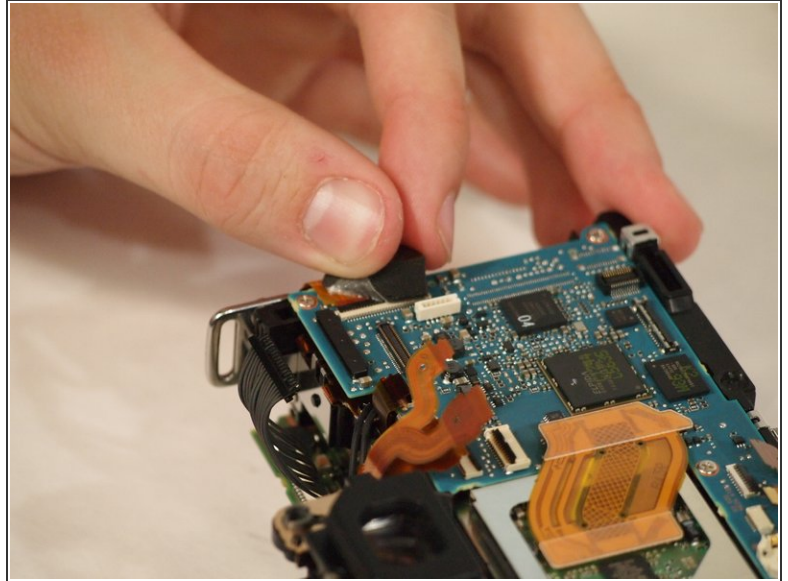
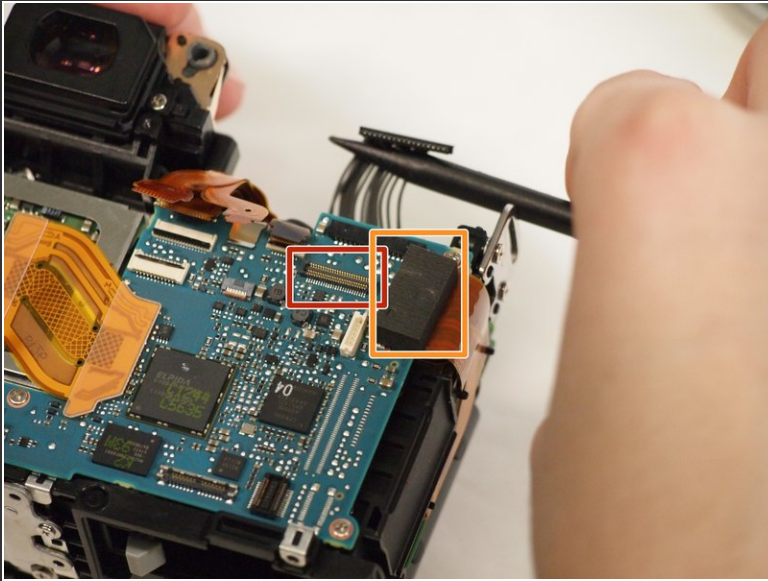
Step 14



- Remove the entire upper flash assembly by gently pulling it up and off the camera.

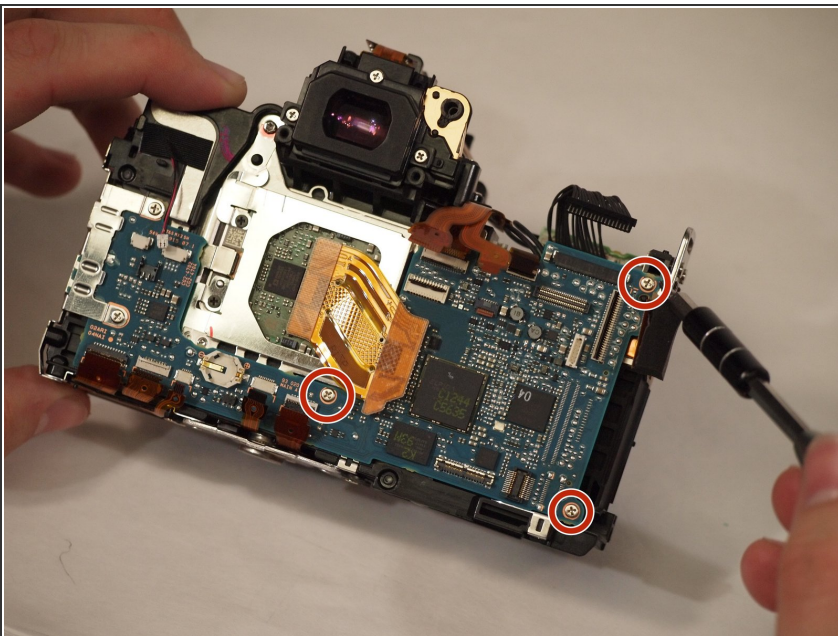
 The flash assembly is sold as a single piece.

Step 15 — Motherboard



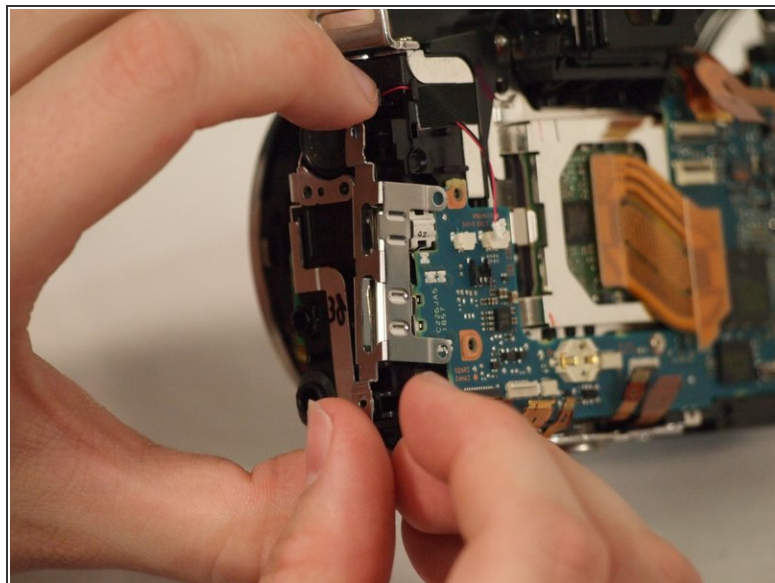
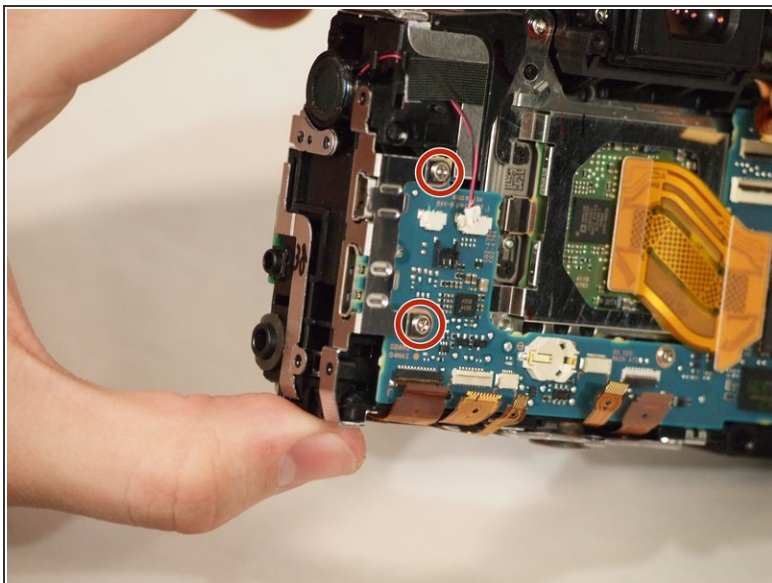
- Disconnect the ribbon connector on the upper right side of the motherboard.
- Pull back the foam on the connector on the far right side of the motherboard.
- Flip up the tab on the connector and remove the cable.

Step 16



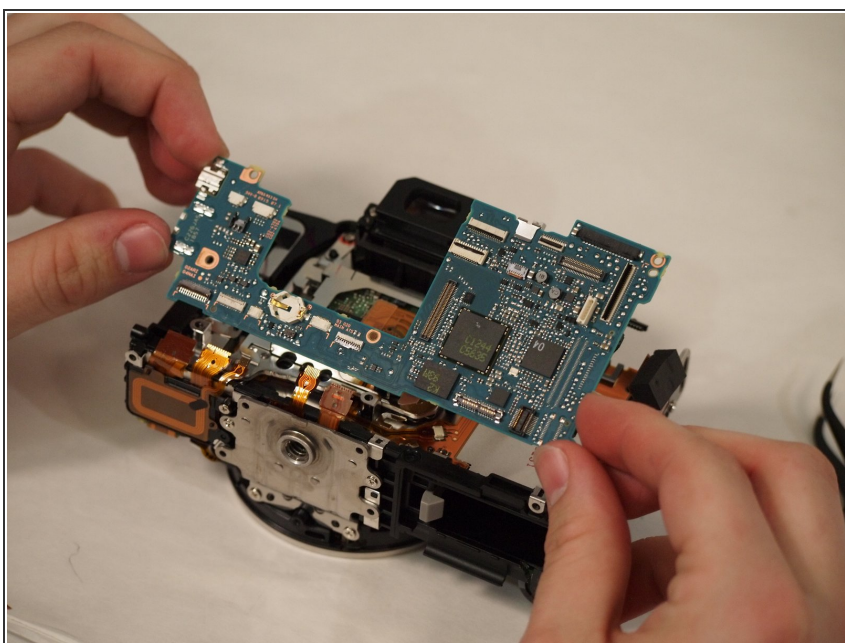
- Remove the two screws on the right side of the motherboard as well as the screw in the center.

Step 17



- Remove the two screws connecting the metal port bracket to the motherboard.
- Slide the metal bracket out of the camera.

Step 18



- Remove the motherboard from the device.

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