Canon EOS Rebel T6i PCB Flashboard Replacement

Use this guide to remove and replace the PCB...

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INTRODUCTION

Use this guide to remove and replace the PCB flashboard from your Canon EOS Rebel T6i camera. The PCB flashboard should be replaced following damage or exposure to the capacitor and/or the circuit itself. This is a step-by-step guide and each step should be followed in chronological order to ensure desired results.

You will need an iFixit opening tool, a spudger, a JIS #000 screwdriver, needle-nosed tweezers, a grounding strap, and a digital multimeter to complete the removal process.

Take caution when unassembling your Canon EOS Rebel T6i device. There is potential for device damage during the unassembling process.

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

🔧 TOOLS:

iFixit Opening Tool (1)
Spudger (1)
JIS #000 Screwdriver (1)
Metal Spudger (1)
Tweezers (1)
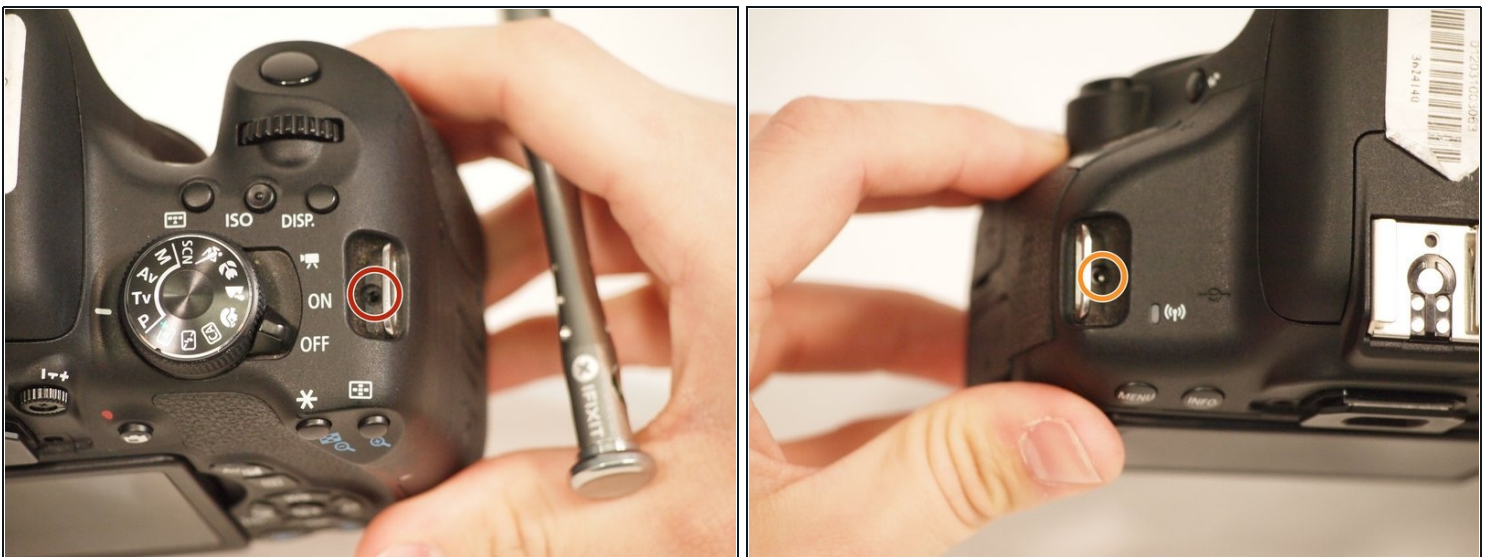Digital Multimeter (1)
Anti-Static Wrist Strap (1)

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.

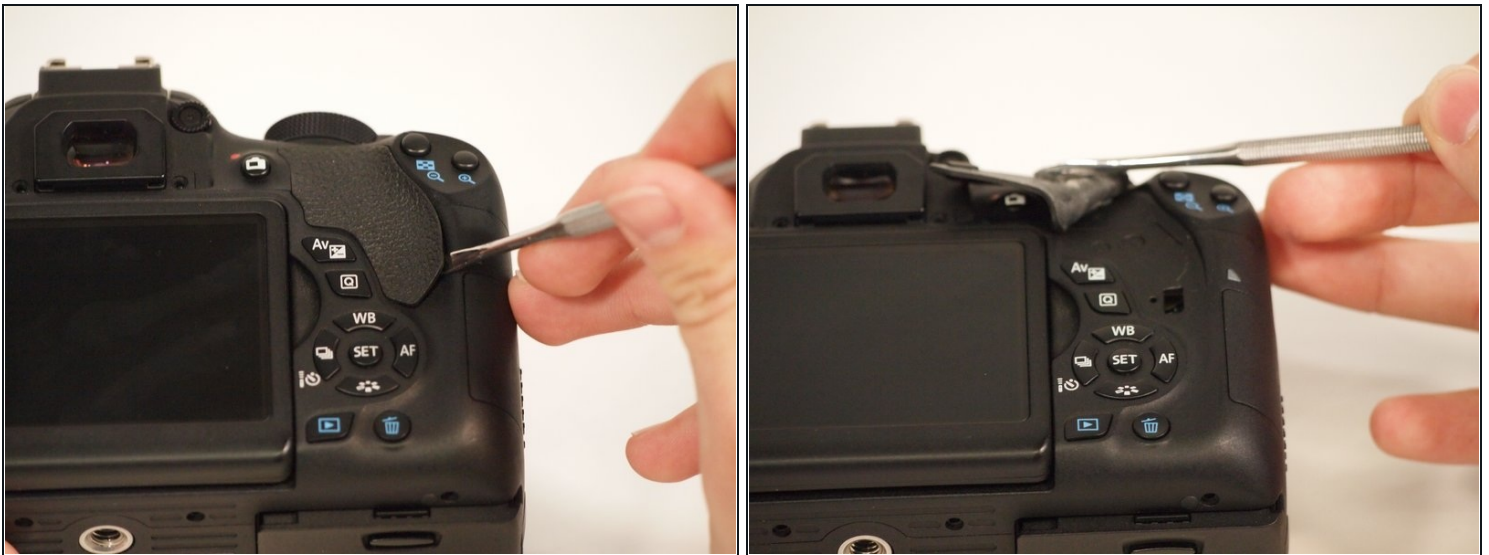- Remove one 3.4 mm JIS #000 screw on the top left.

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.

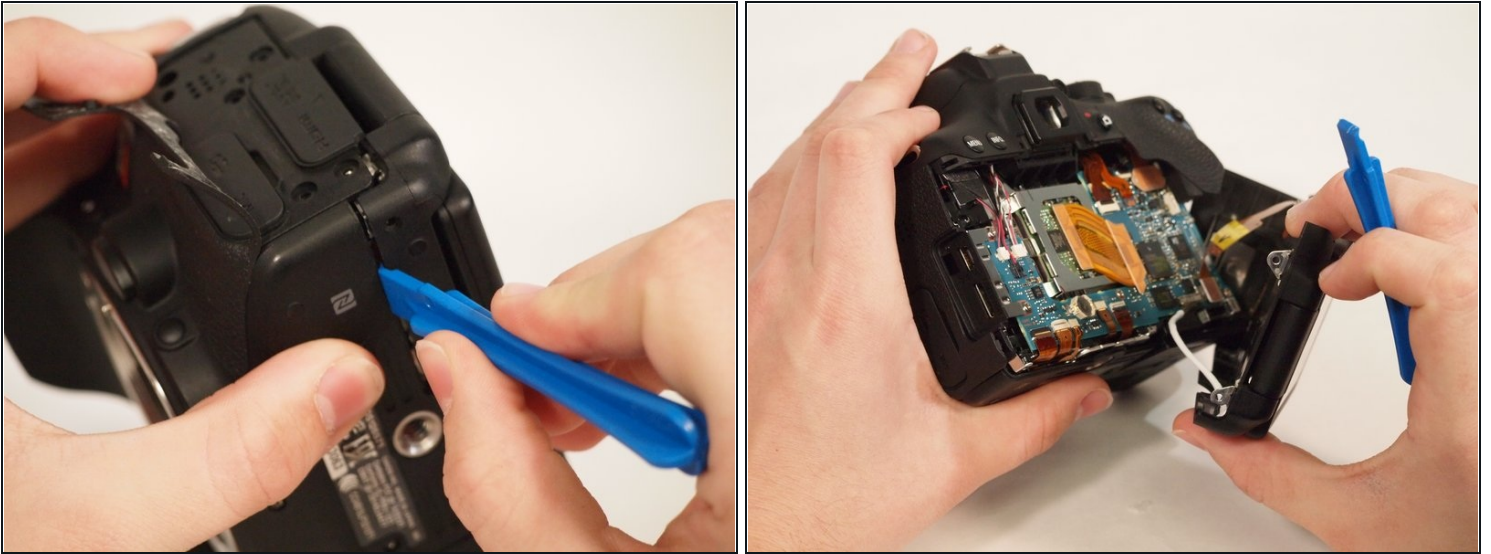- Remove five silver 5.8 mm JIS #000 screws from underneath the grip.

Step 4

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

⚠ 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
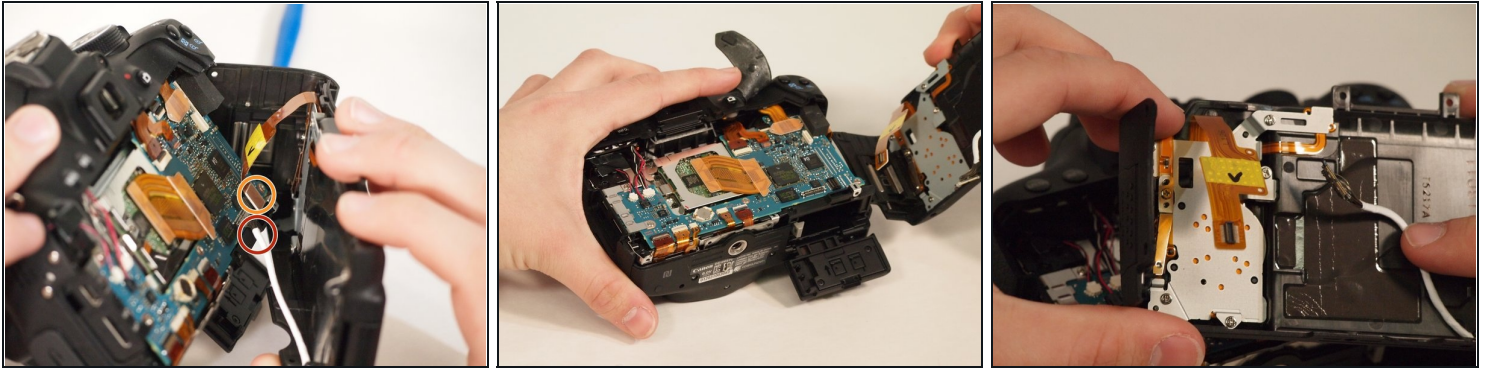
ⓘ Notice the two connections attaching the back of the camera to the motherboard.

● 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.
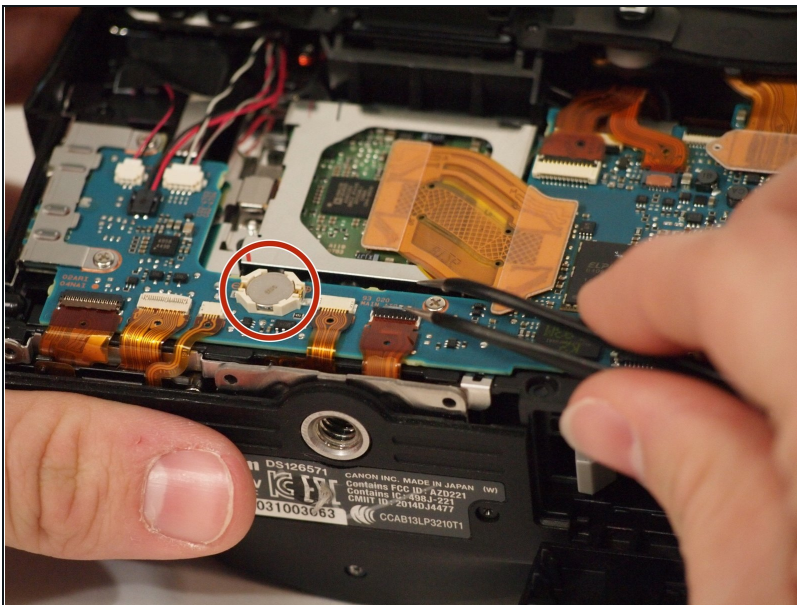
● Once removed, set the back in a safe place.

Step 7
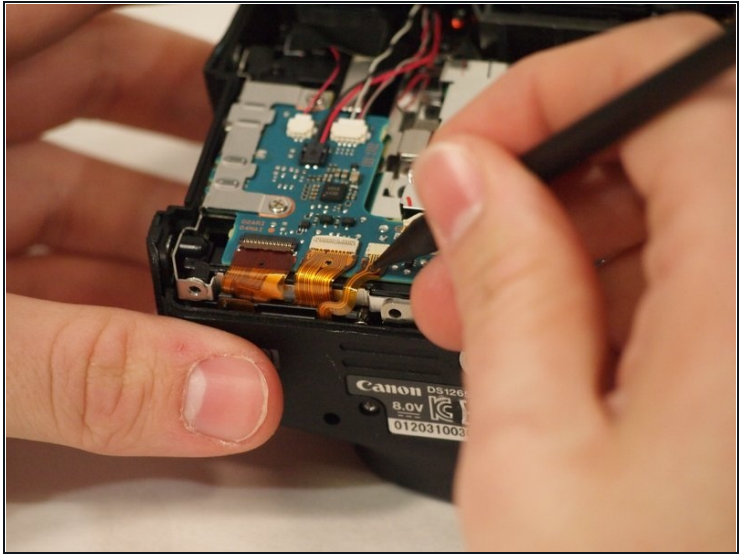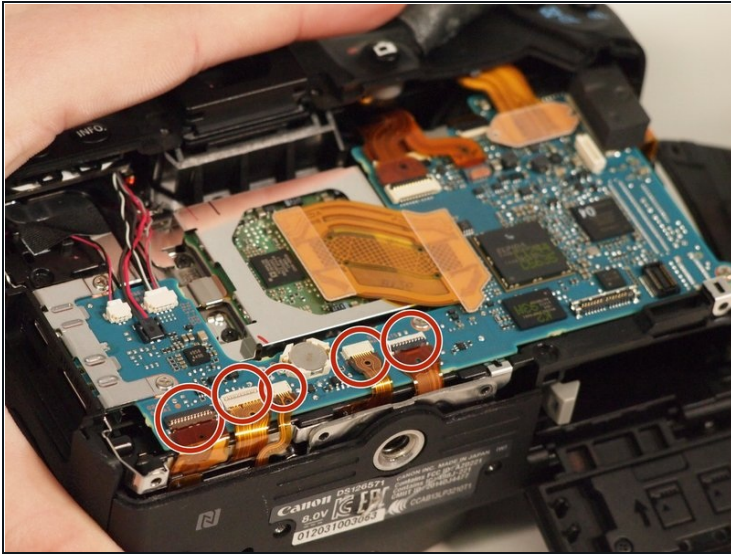
- Remove the five ribbon connectors along the bottom of the assembly using either needle nose [tweezers](#) or a plastic opening tool to flip the small flaps to the "up" position.

- 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
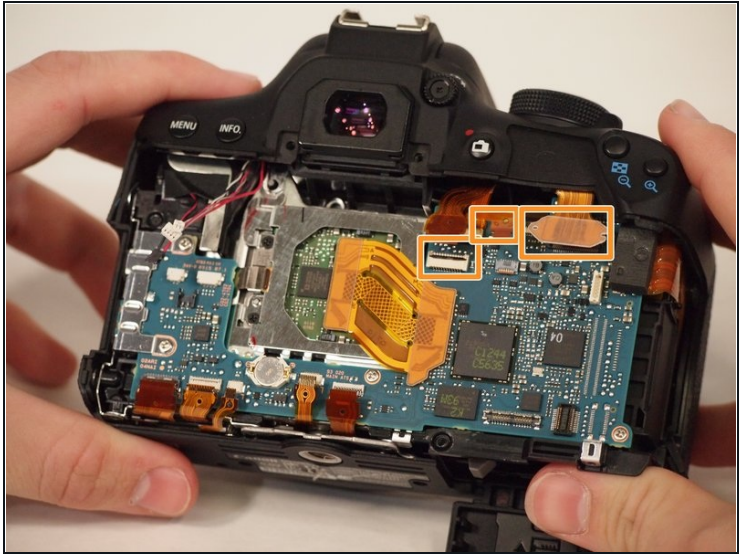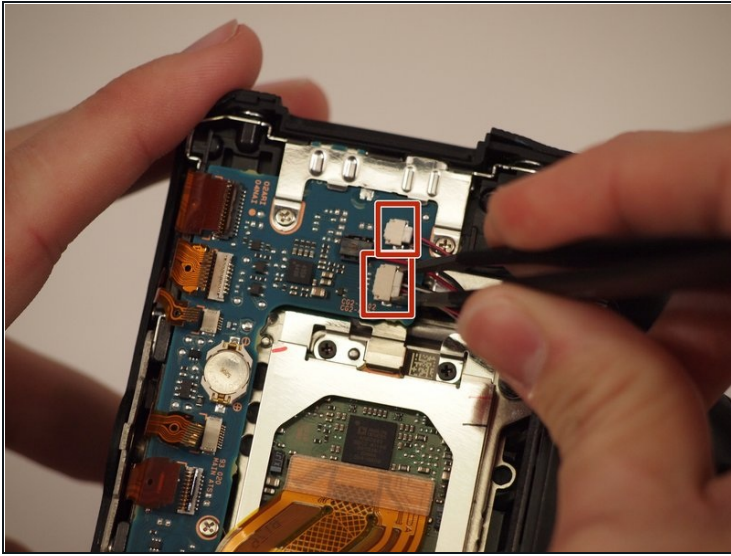
- Disconnect the small plastic connectors on the top left corner of the motherboard by gripping the small plastic portion of the wire and gently pulling out of the connector.

- Disconnect the three ribbon connectors along the top.

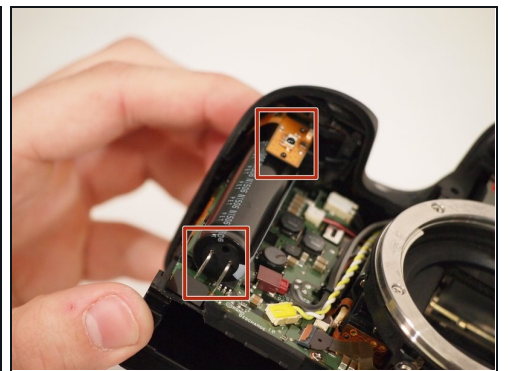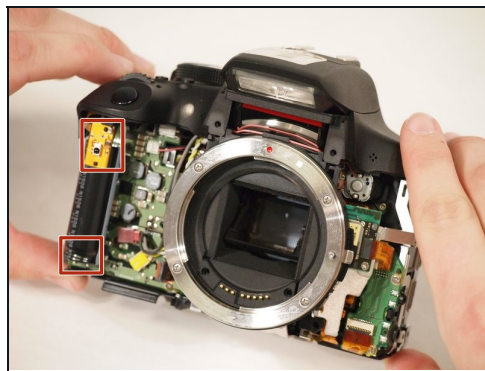ⓘ Don't detach the connectors underneath or the ribbon connectors with the foam block, as these will be removed later.

Step 10
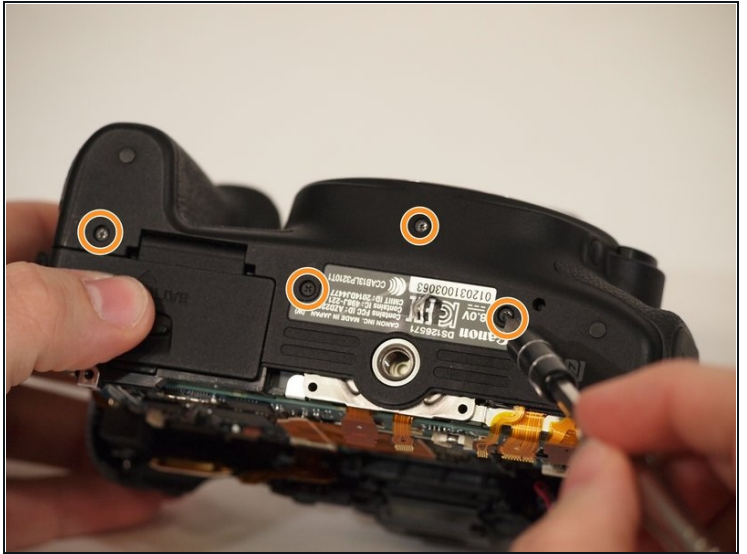
- Remove the four screws from the front of the camera. There are two screws above the lens mount and two screws inside the lens mount.

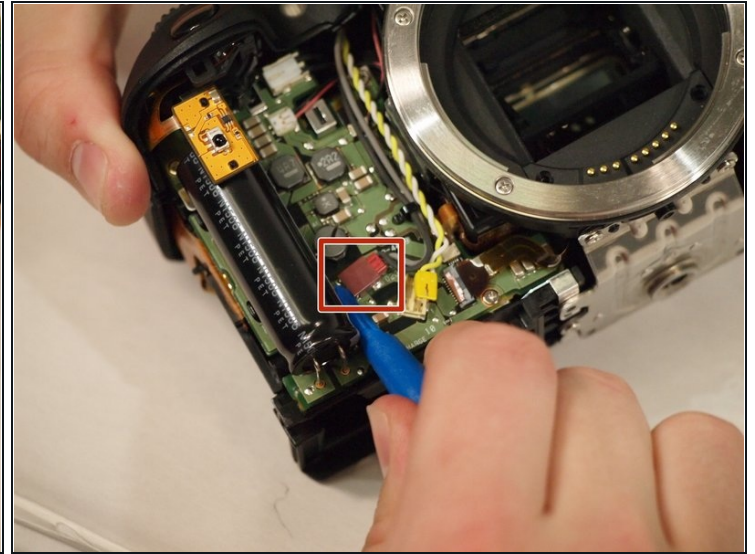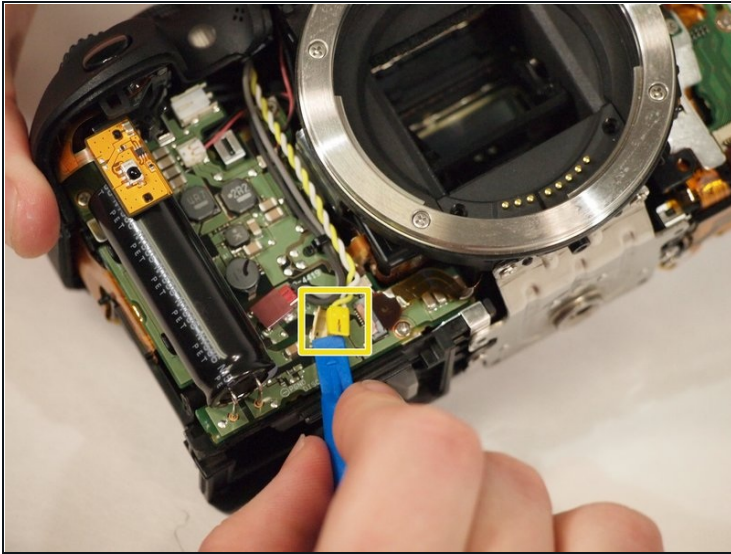- Remove the four screws from the bottom of the camera.

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.
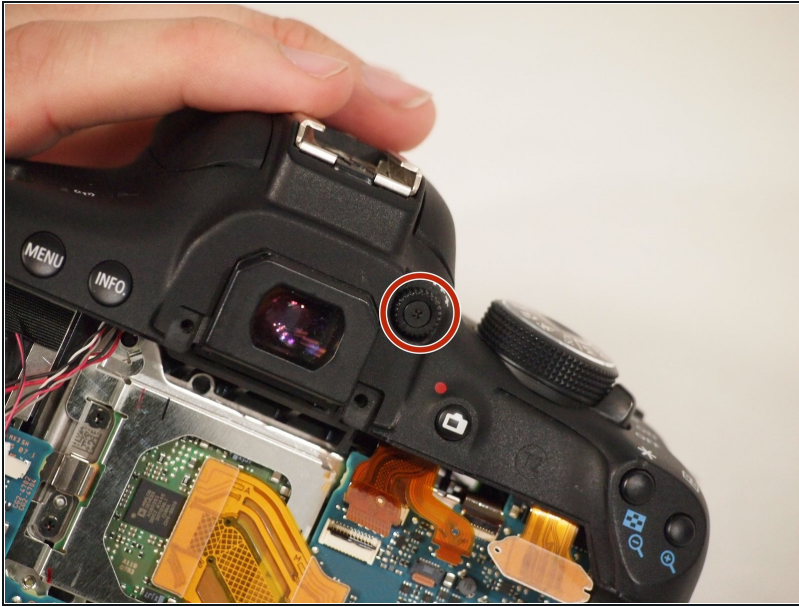
Step 12

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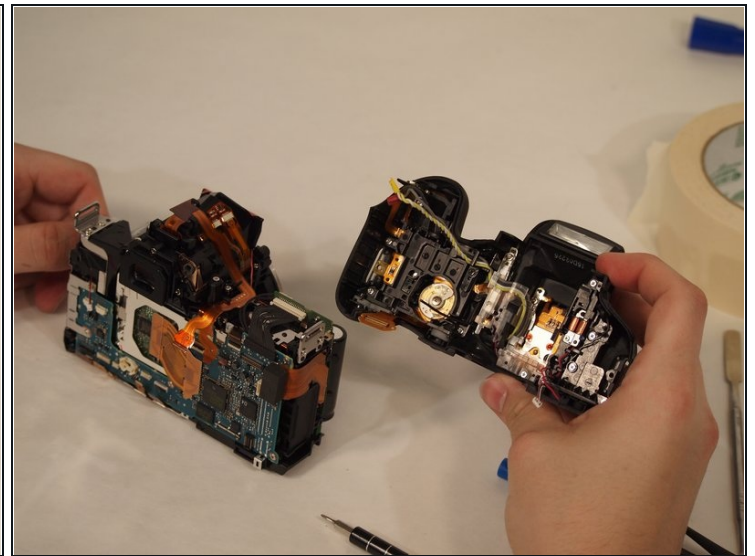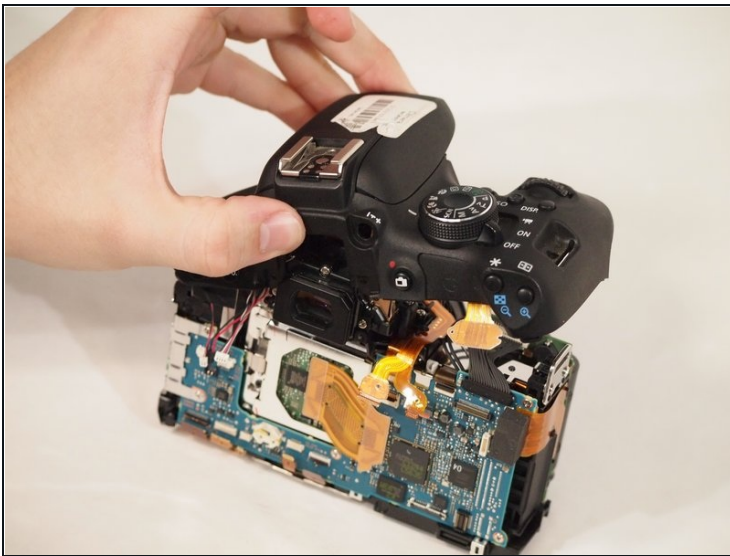
⚠ **Warning: Electric Shock!** Be careful not to touch the terminals of the capacitor (black cylinder). This can cause the capacitor to discharge.

Step 13

- Remove the diopter adjustment knob next to the viewfinder using a JIS #000 screwdriver.
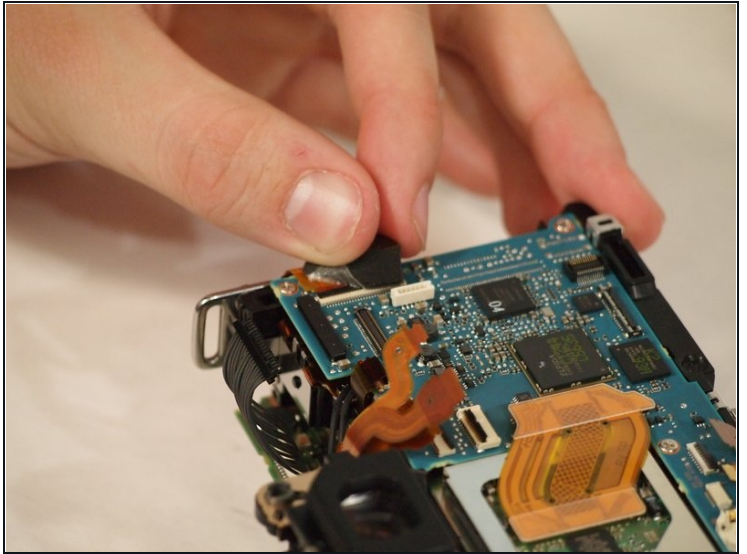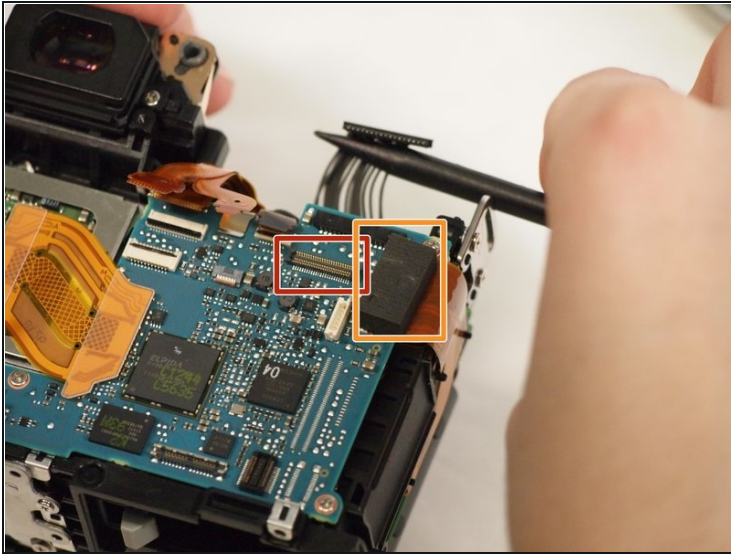
Step 14

- Remove the entire upper flash assembly by gently pulling it up and off the camera.
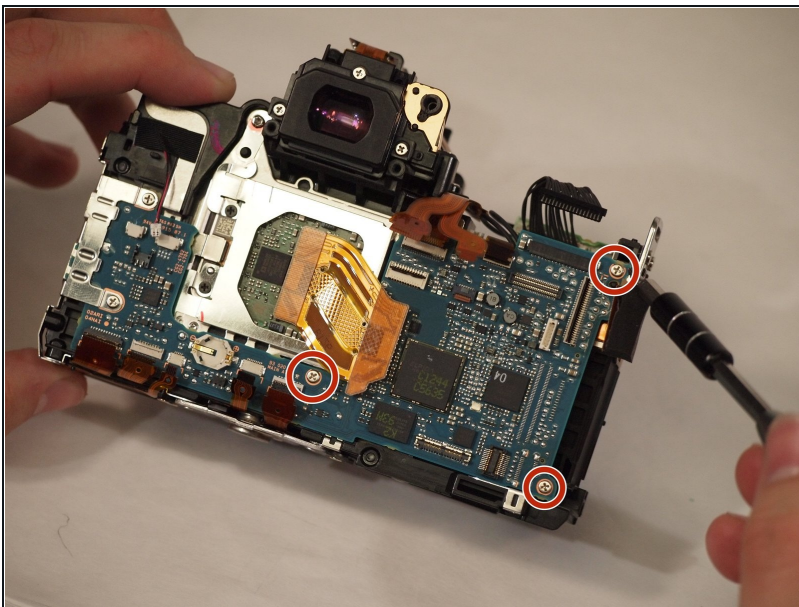
(i) The flash assembly is sold as a single piece.
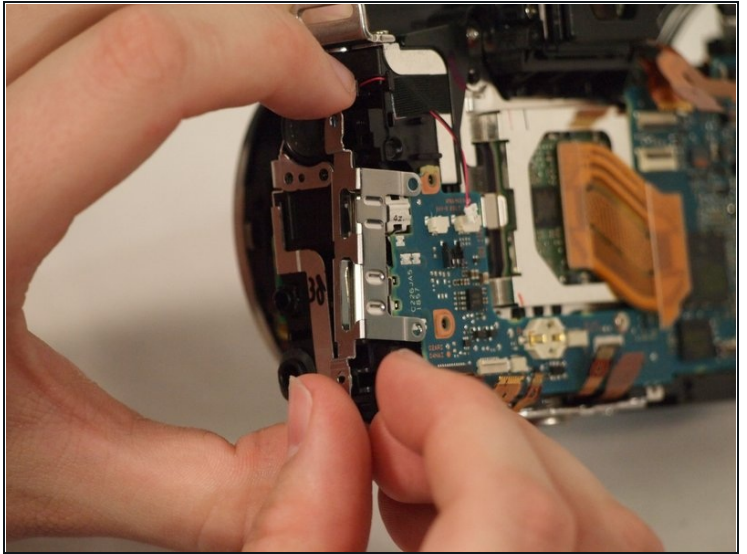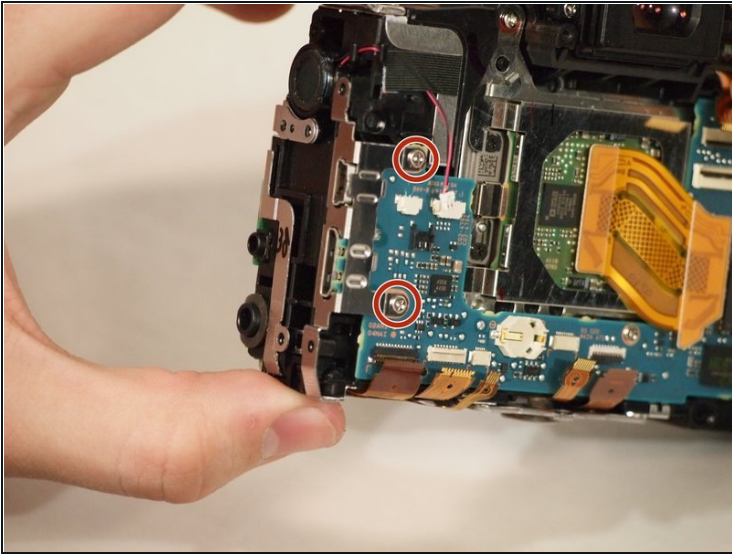
Step 15 — Motherboard

- 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.
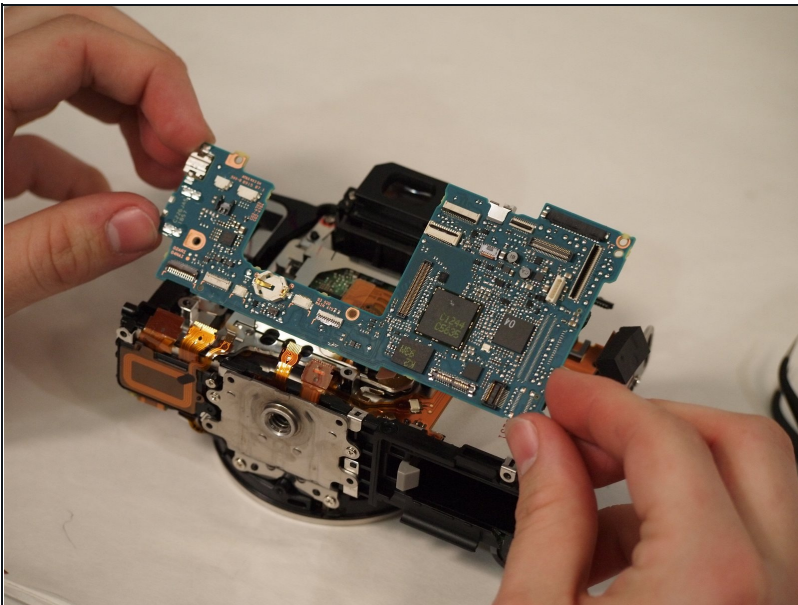
Step 16

- 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.

Step 19 — Capacitor PCB Flash Board

⚠ Caution: Failure to follow these steps may lead to damage or injury from electrical shock. Before removing or touching the PCB board, the capacitor needs to be checked for voltage. This device is the black cylinder on the camera.

- Place a voltmeter in parallel with the capacitor. If a charge is detected, make sure the battery is removed from the device.

ⓘ The positive pin is connected to the positive terminal and negative to the negative terminal. Switch the setting of the multimeter to ADC for direct current amperage.
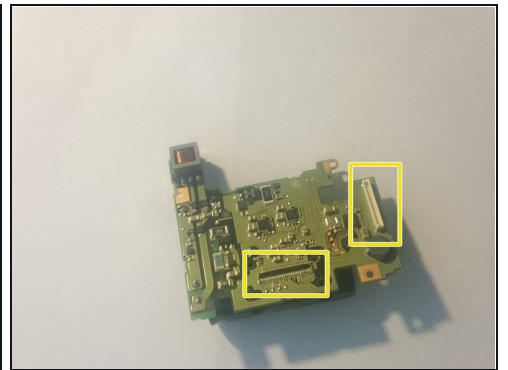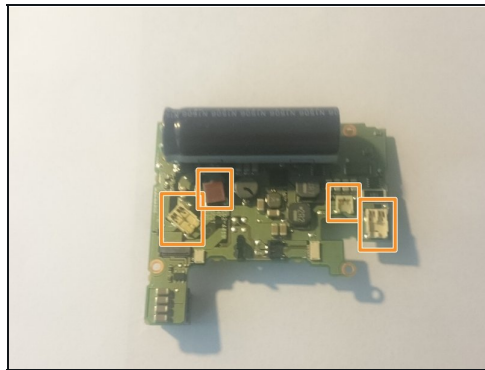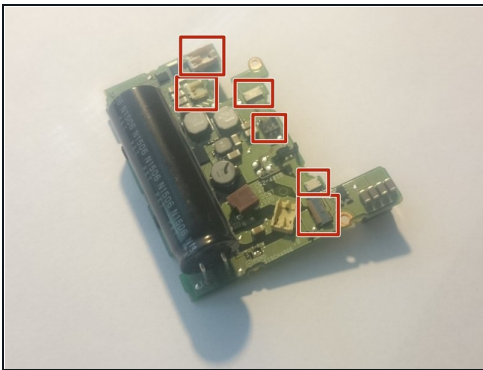
Step 20

ⓘ The meter will fluctuate with a current until reaching zero. This process will discharge any residual charge.

⚠ Caution: Failure to discharge the capacitor may lead to electrical discharge and shock. The meter must reach zero to prevent any further damage to the camera.
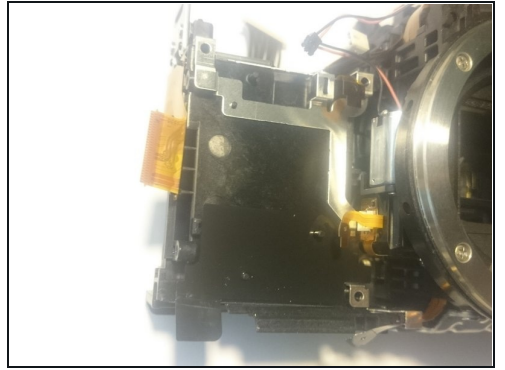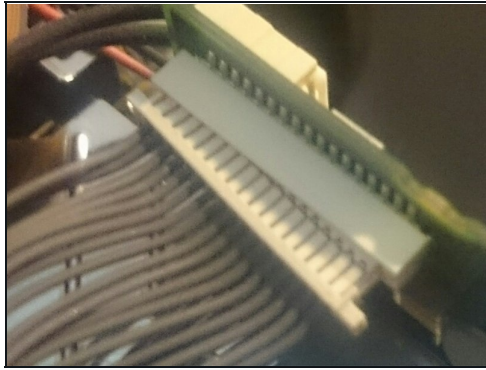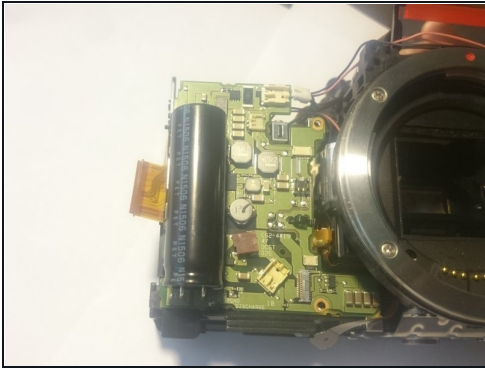
Step 21

⚠ Potential for device damage: Using a magnetic-tipped screw driver may cause damage to the board.

- Remove three screws from the motherboard.

- Disconnect six ribbon connectors from the motherboard.

- Remove the four wire connectors on the front of the motherboard.

- Remove the two wire connectors on the back of the motherboard.

Step 22

- Verify that the power cable has also been removed.

- Remove the PCB flash board from the camera.

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