



Canon EOS Rebel T6i PCB Flashboard Replacement

This guide will show the steps to replace the PCB flashboard assembly

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INTRODUCTION

This guide will show step by step how to replace the PCB flashboard following damage or exposure to the capacitor and/or the circuit itself.

TOOLS:

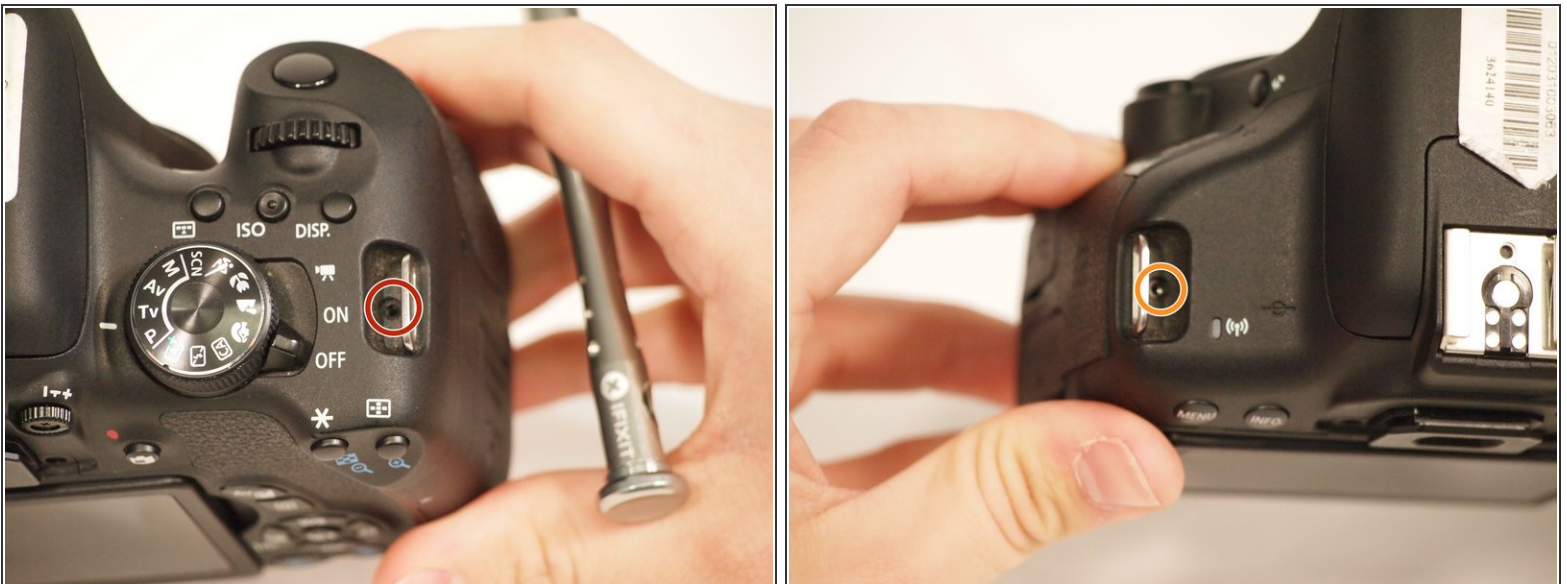
- [iFixit Opening Tools](#) (1)
 - [Spudger](#) (1)
 - [JIS #000 Screwdriver](#) (1)
 - [Metal Spudger](#) (1)
 - [Tweezers](#) (1)
 - [grounding strap](#) (1)
 - [Digital Multimeter](#) (1)
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Step 1 — Flash Assembly



- Remove all visible exterior screws:
 - Two 6.84 mm screws on the right side
 - Six 5.33 mm screws

Step 2



- One 5.91 mm screw on the top right.
- One 3.39 mm screw on the top left.

Step 3



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

⚠ Be careful not to rip the rubber with the metal spudger.

- Remove the five silver screws underneath the grip.
 - One 5.83mm silver DL Flap
 - Four 5.85mm silver under flap

Step 4




- Using the same metal spudger as before, pry the rubber grip located just below the viewfinder. Again, be careful not to rip the rubber.

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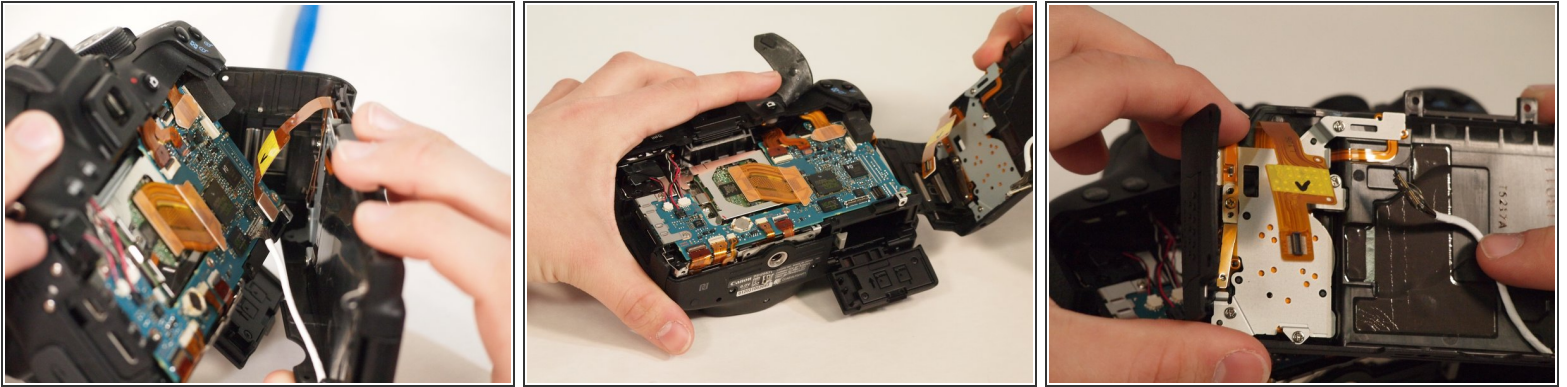
Step 5



- 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.

 Before you move on, make sure you use the grounding strip to remove the chance of discharging static electricity into the internal components.

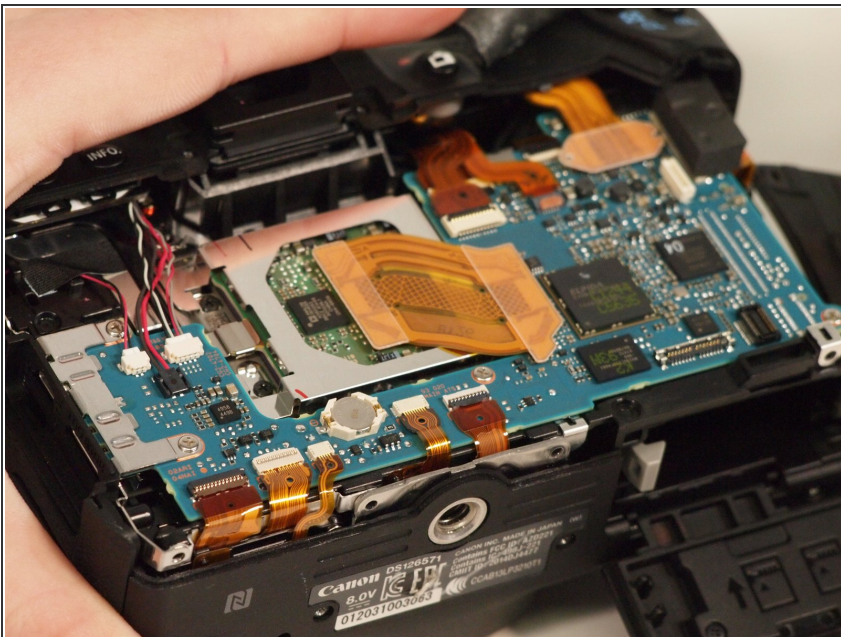
Step 6



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

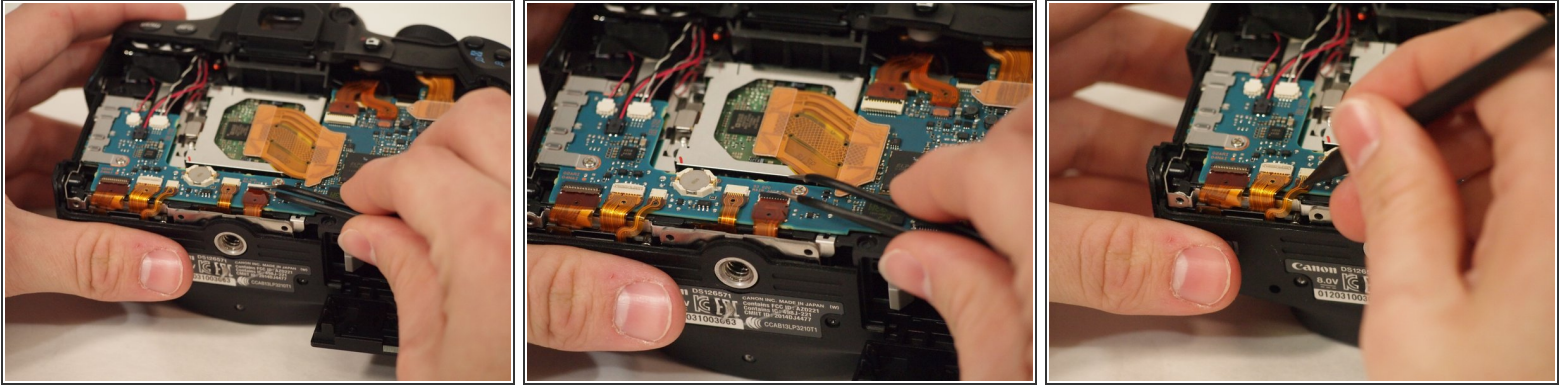
- To disconnect the white wire, pinch the wire casing and pull directly out from the camera. It will take a very small amount of elbow grease. However, do not force or pry it.
- To disconnect the ribbon connector, softly pull the back away from the motherboard. It should come undone with little force.
- Once removed, set the back in a safe place.

Step 7



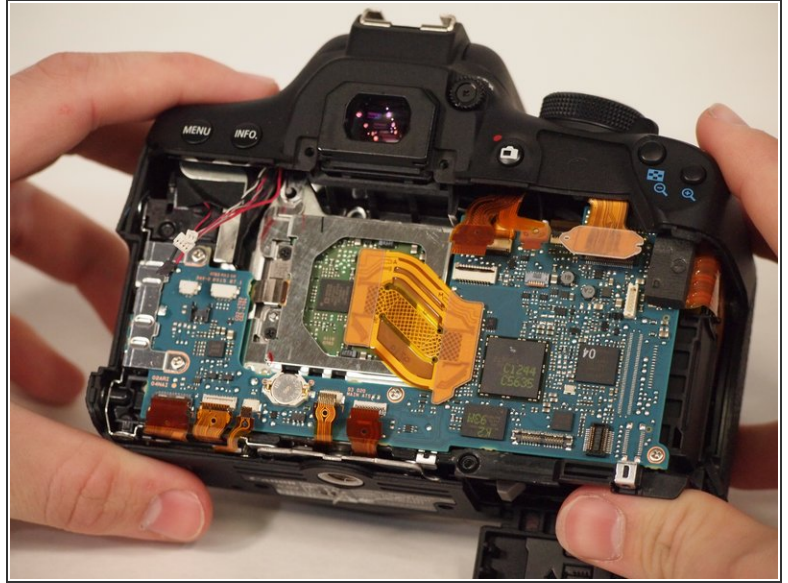
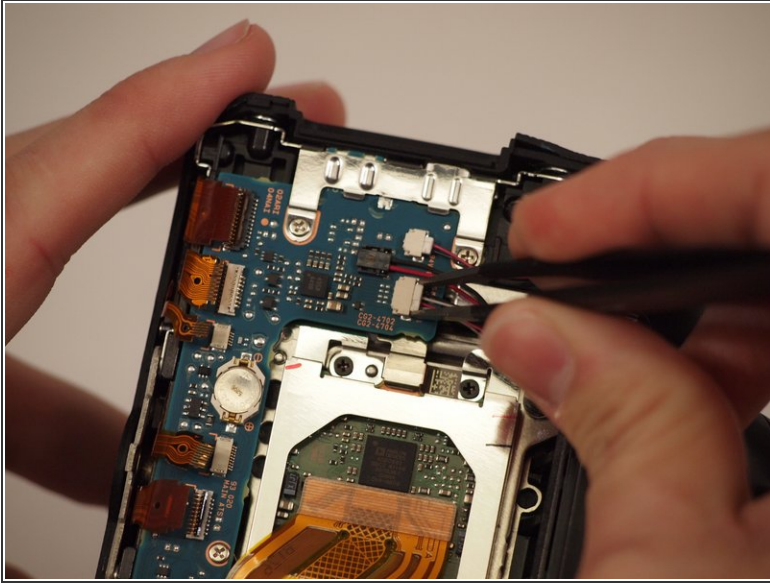
- Now to remove all of the bottom ribbon connectors.

Step 8



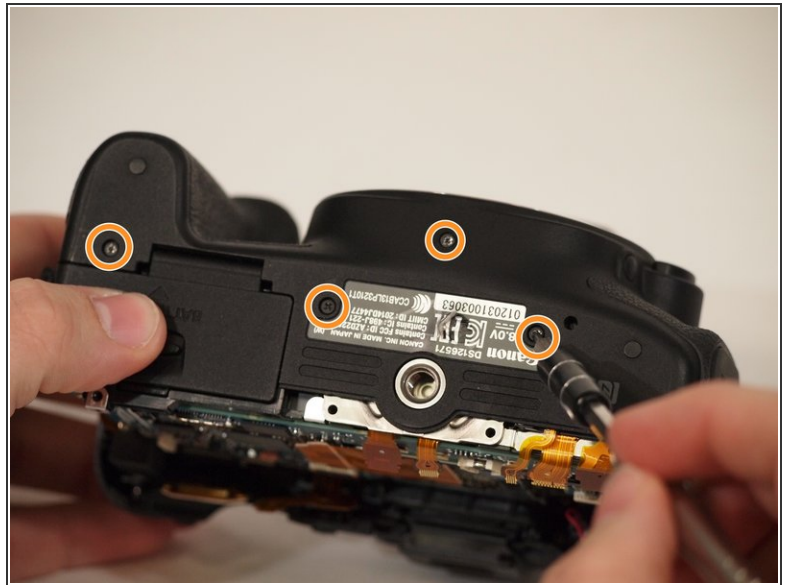
- To remove the Ribbon connectors that have a locking mechanism, identify the flap on the ribbon connector. Use either needle nose tweezers, or a plastic wedge to flip the small flap to the "up" position.
 - Once the flap is up, use the plastic spudger to pull the ribbon connector out of the connection using the hole in the center of the ribbon.
- i** Now is a good time to remove the small backup battery from the motherboard.

Step 9



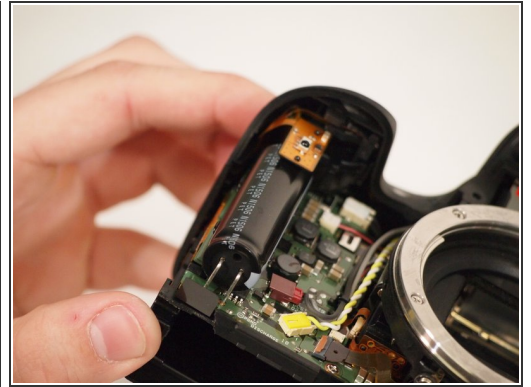
- Disconnect the small plastic connectors on the top left corner of the motherboard by gripping the small plastic portion of the wire and gently pulling out of the connector.
- Go ahead and disconnect all of the ribbon connectors along the top that you can get to. Don't worry about the connectors underneath or the ribbon connectors with the foam block, as these will be removed later.

Step 10



- Now its time to remove the rest of the casing.
- Remove the four crews 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 left on the bottom.
- Now the front is ready to be removed.

Step 11

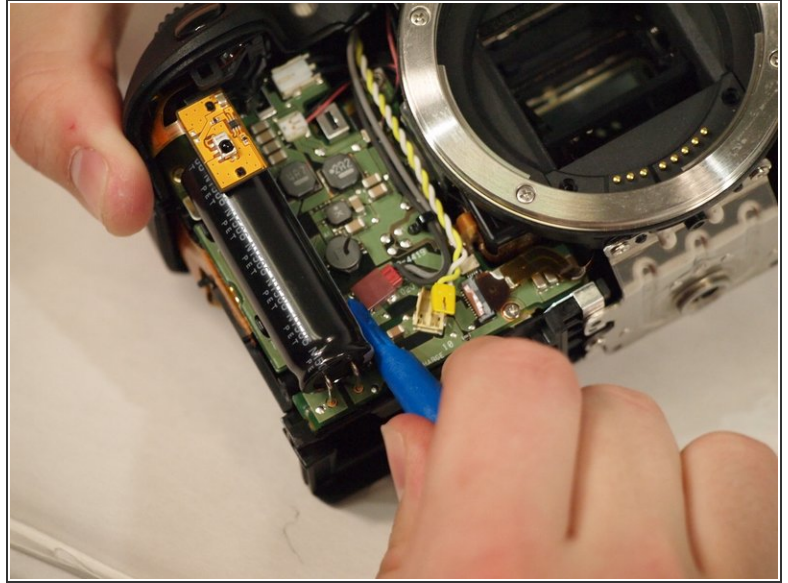
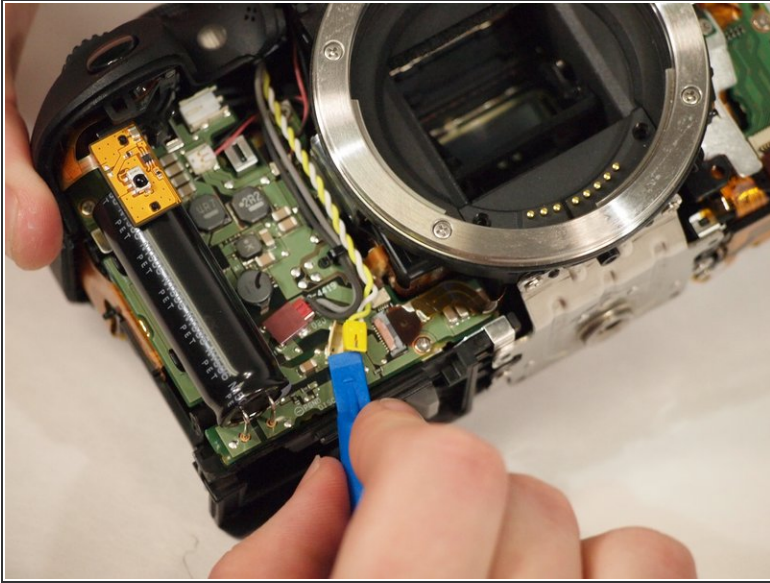


- Using the plastic wedge, pry the front of the casing off the camera.

⚠ Electric shock Warning!! Be careful not to touch the terminals of the capacitor, as this can cause the capacitor to discharge.

- Set the front aside, preferably in a safe place.

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 wedge.
- The red connector will pull out of the casing with either a plastic wedge or a thin set of tweezers.

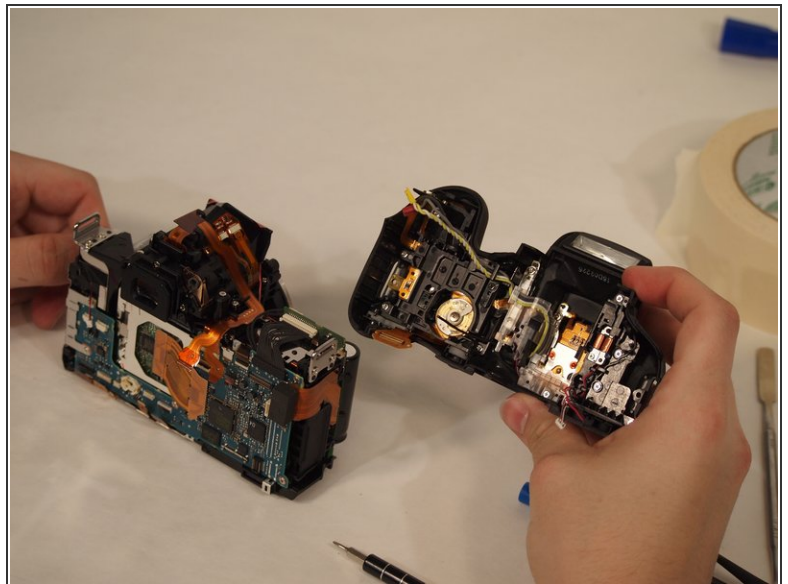
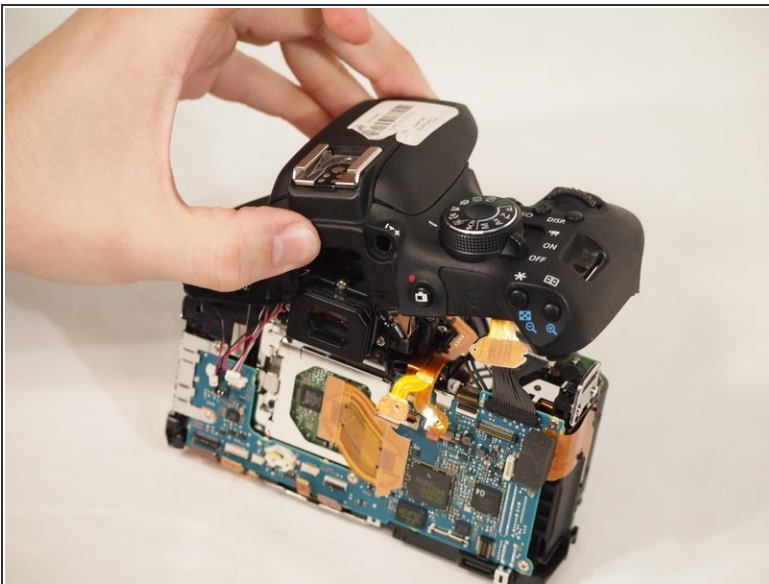
⚠ Electric shock Warning!! be careful not to touch the terminals of the capacitor, as this can cause the capacitor to discharge.

Step 13



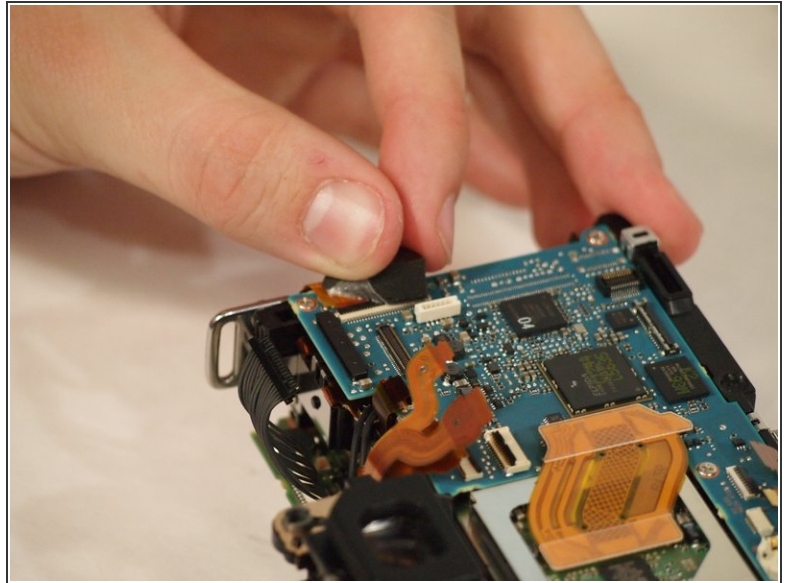
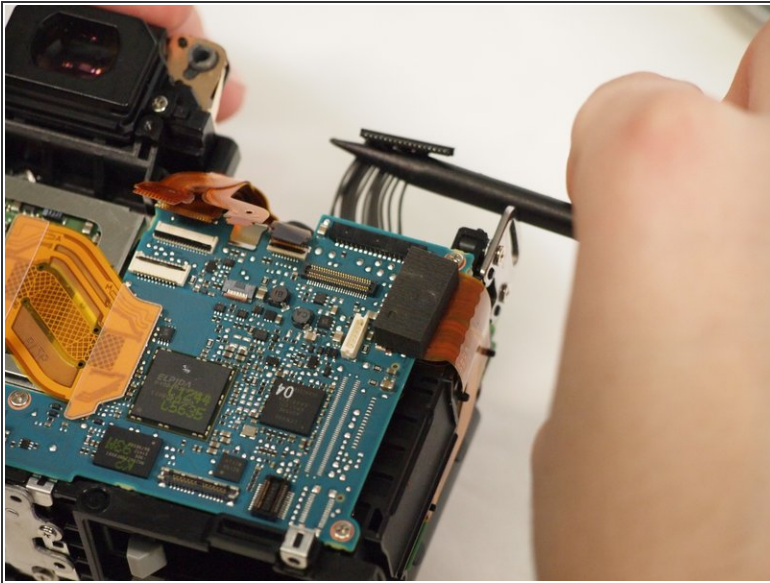
- Remove the viewfinder adjustment knob with a screwdriver. Once this screw is out, the entire flash assembly is ready to be removed.

Step 14



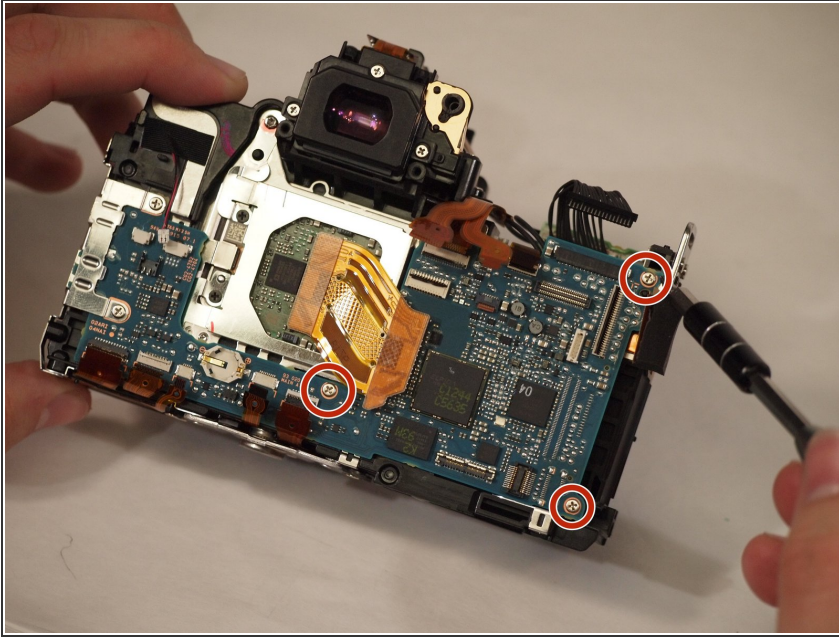
- Remove the entire upper piece of the casing. This is the flash assembly and is sold as a single piece. This piece should easily pull up and off the camera casing.

Step 15 — Motherboard



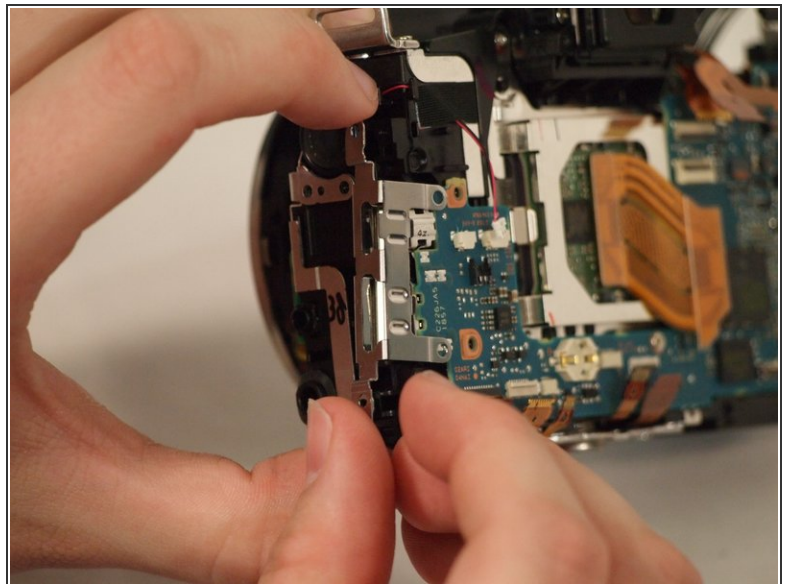
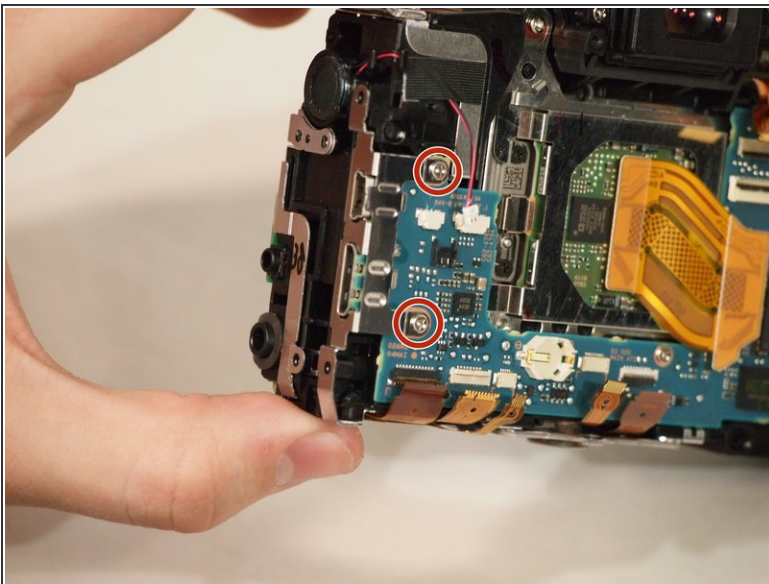
- Now that you have removed the flash assembly, it is time to remove the motherboard.
- First, the three remaining ribbon connectors should be gently disconnected. They are both located on the upper right side of the motherboard.
- The foam on second ribbon connector must be pulled back to remove it. Do this gently as to not damage the connector or the foam. There is a small switch under the foam that must be flipped up before the connector can be removed.

Step 16



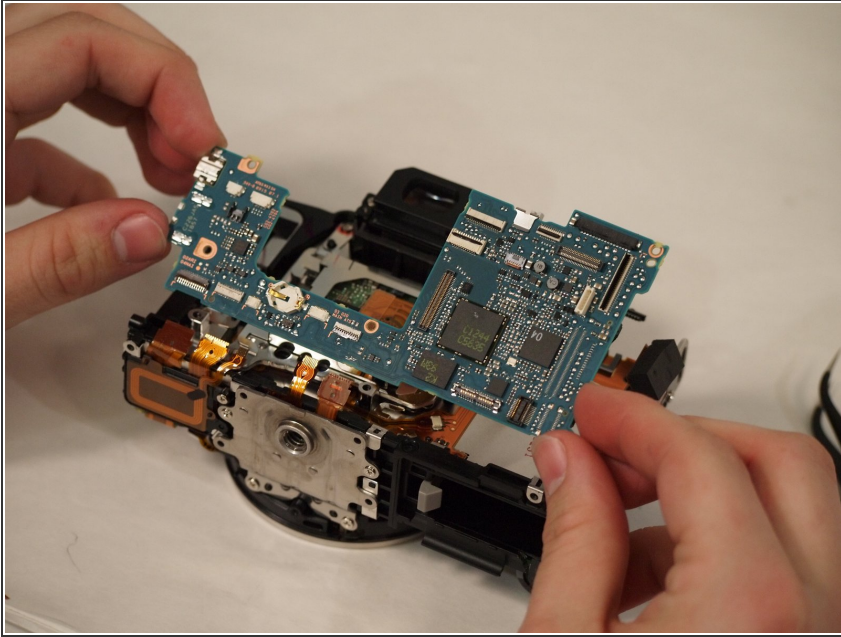
- Remove the two screws on the right side of the motherboard as well as the screw in the center.

Step 17



- Remove the two screws connecting the metal port connector to the motherboard. After the screws are removed, slide the metal piece out of place.

Step 18



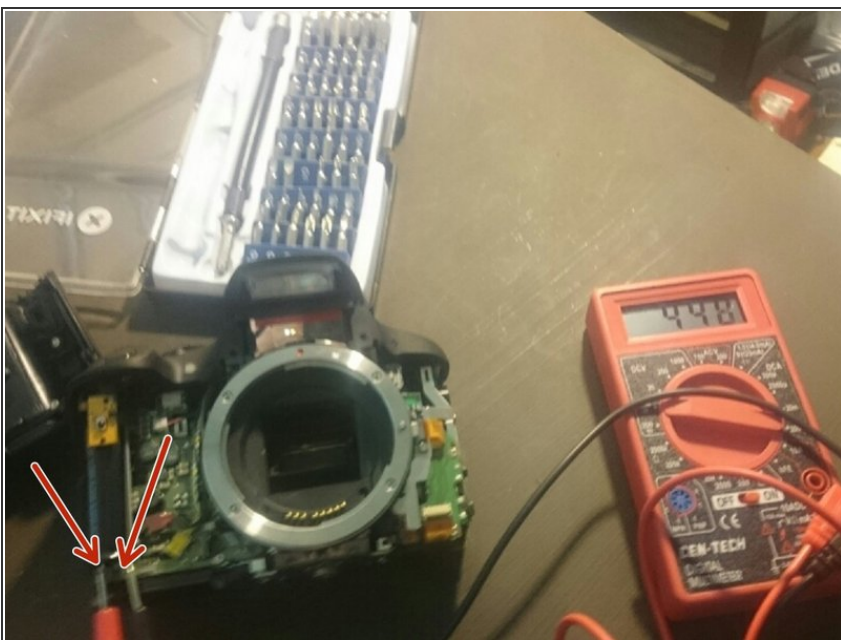
- With all the connectors and screws removed, Remove the motherboard from the device.

Step 19 — Capacitor PCB Flash Board



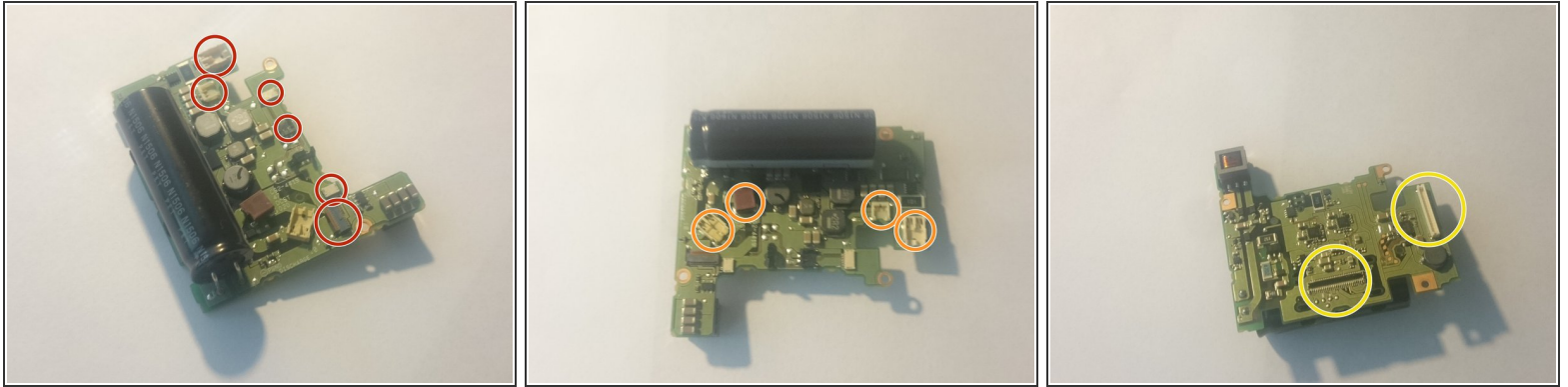
- Warning - Failure to follow steps may lead in damage or injury from electrical shock. Before removing or touching the PCB board, the Capacitor needs to be checked for voltage. This device is the black cylinder on the camera. Place a voltmeter in parallel with the capacitor. If a charge is detected, make sure battery is removed from the device.
- Furthermore, The positive pin is connected to the positive terminal and negative to the negative terminal. Then switch the setting of the multi meter to ADC for direct current amperage. .

Step 20



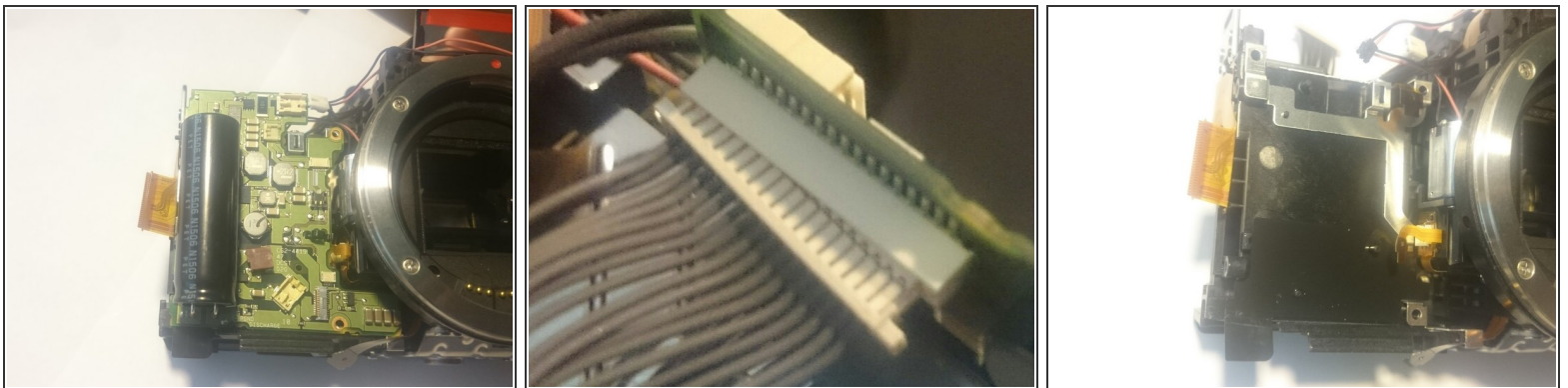
- The meter will fluctuate with a current until reaching zero. This process will discharge any residual charge.
- Warning - Failure to discharge the capacitor may lead to electrical discharge and shock. The meter must reach zero to prevent any further damage to the camera.

Step 21



- Caution - Using a magnetic tipped screw driver may cause damage to the board. ordinary bits are preferred. There are 3 screws that must be removed in order to disconnect the board.
- Furthermore, there are several ribbon connectors that need to be removed. Marked in red.
- Remove the four wire connectors on the front.
- Remove the two wire connectors on the back.

Step 22



- After all the ribbons and wires have ben disconnected, verify that the power cable has also been removed.
- The PCB flash board is now save to remove from the camera.

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

