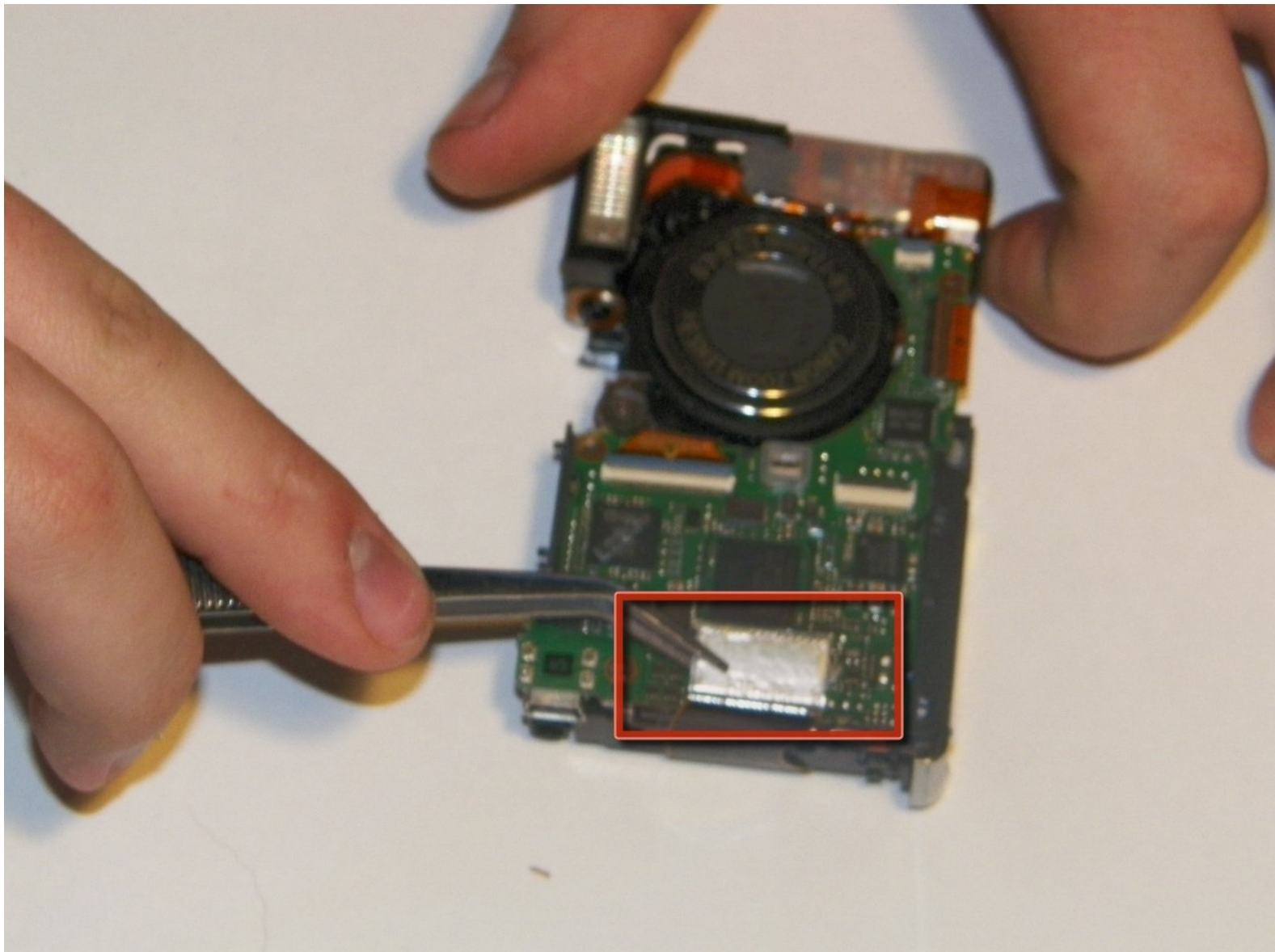




# Canon PowerShot SD 600 Motherboard Replacement

The motherboard is the main circuit board of the camera. It is located at the front of the camera and can be removed at roughly the same time as lens assembly and flash assembly.

Written By: Greg H

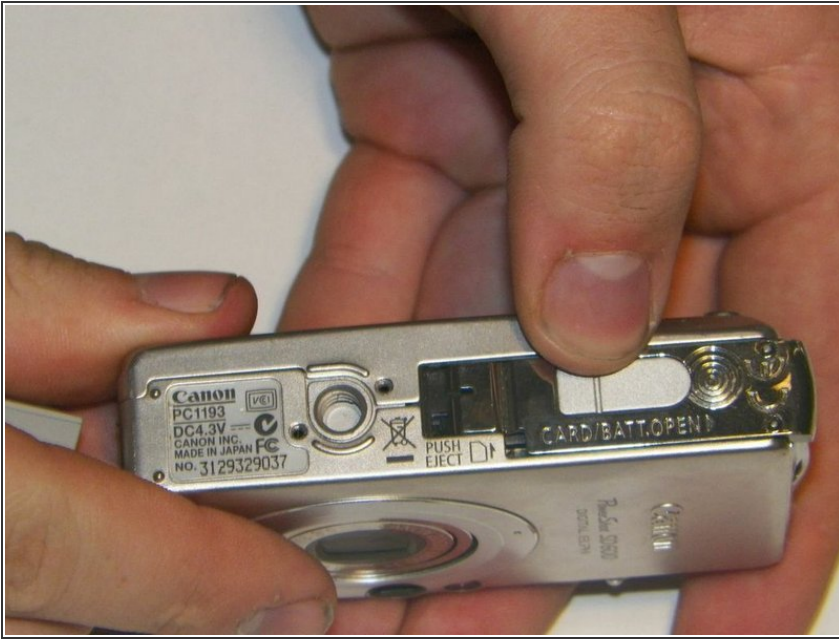




## TOOLS:

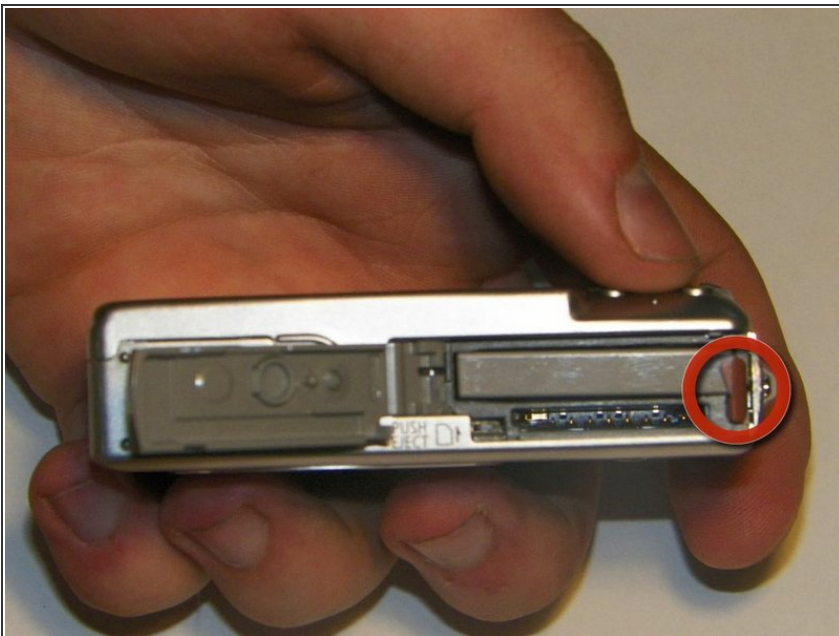
- [Phillips #00 Screwdriver](#) (1)
  - [Spudger](#) (1)
  - [Tweezers](#) (1)
-

## Step 1 — Battery/SD Card



- Turn the camera over so that the battery compartment is visible. The compartment should read "Card/Batt. Open".
- Open the compartment.
  - Lightly push the compartment lid down and outward. The arrow next to "Card/Batt. Open" indicates the direction you should be pushing.

## Step 2



- Once the lid is open, the battery and SD card compartments become visible.
- Notice the red tab on the right side of the battery.
  - Slide this tab off the battery.
  - The battery is now free to slide out of the compartment.
- ⓘ The battery will not pop out of the compartment. The camera needs to be tilted in order to slide the battery out.

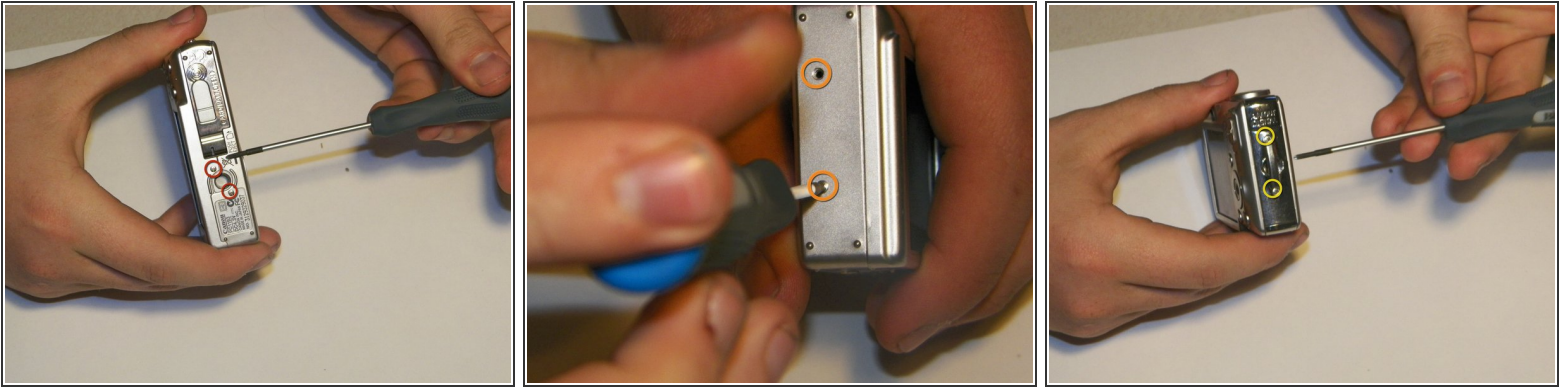
## Step 3



- To remove the SD card push it down and it will eject out. (SD card not shown)
- ★ Be sure the new or recharged battery is facing the correct direction. An arrow on the battery indicates which end should be inserted into the compartment first.
- ⓘ If you plan on disassembling the camera further, you should leave the battery and SD card removed. Make sure to close the battery compartment once the battery and the SD card are removed.

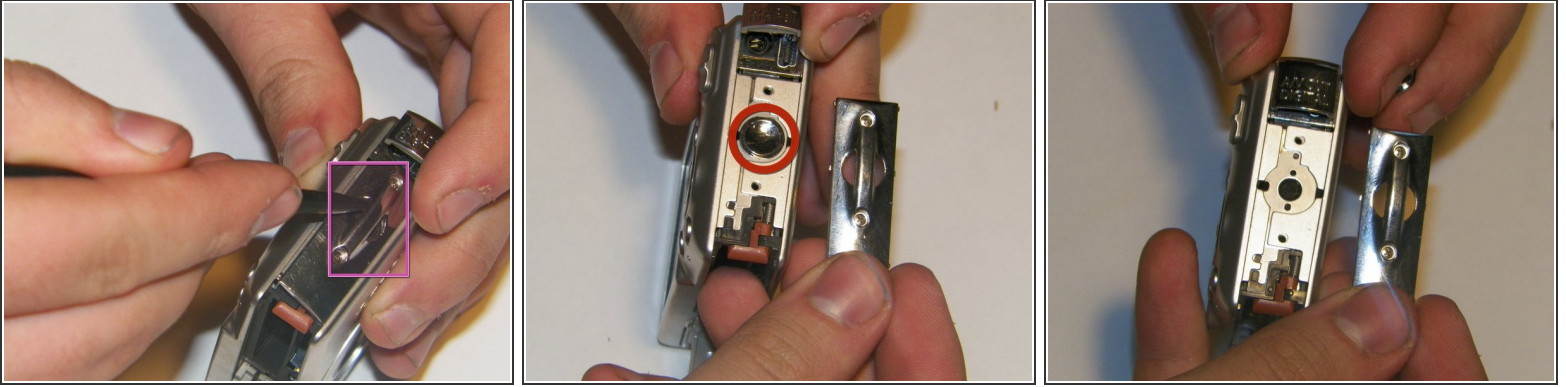


## Step 4 — Exterior Frame



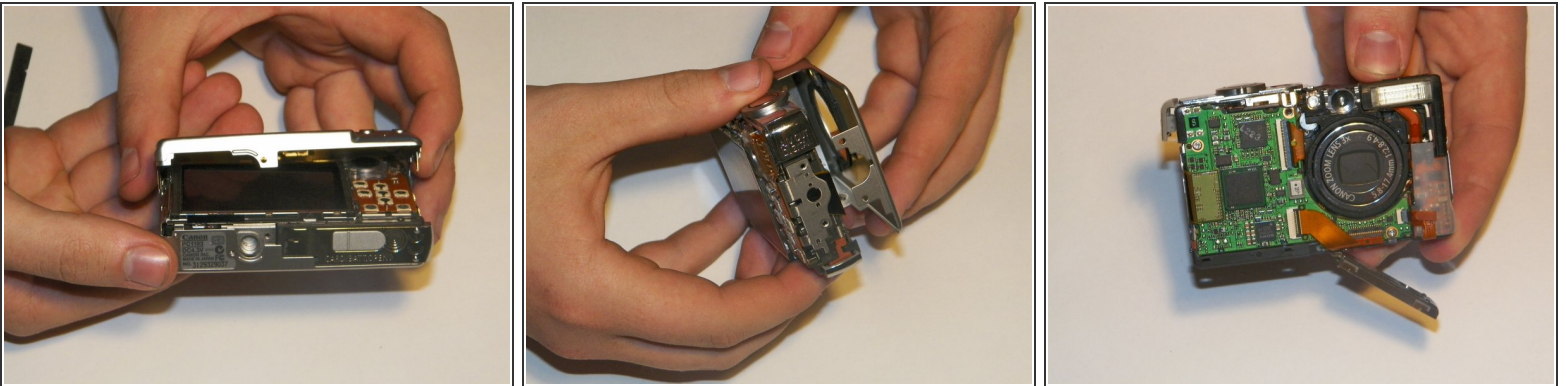
- There are six 3mm exterior screws that will need to be removed in order to remove the exterior frame.
    - Two screws near the tripod mount on the underside of the camera.
    - Two screws on the camera left hand side (the face with nothing but screws on it).
    - Two screws on the camera right hand side, by the wrist strap attachment.
  - Remove the screws using the screwdriver.
- i** It is important to note that the camera has been rotated from the previous orientation in order to show the screws properly.

## Step 5



- Remove the wrist strap attachment.
  - Use the spudger to pry it open.
- Remove the small circular cover underneath the wrist strap attachment.

## Step 6



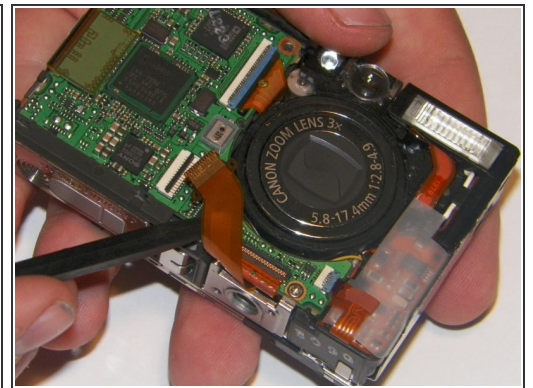
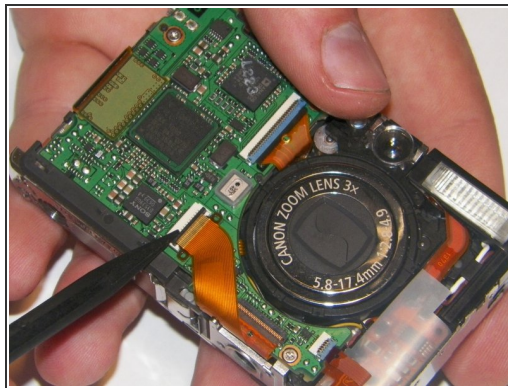
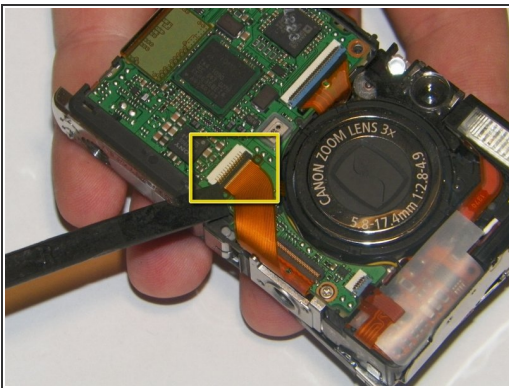
- Carefully pull apart the two parts of the exterior frame.
  - Use the spudger to pry apart the two frame components.
  - Once disconnected, the two parts of the frame can be easily separated by using your fingers.
  - The rear frame should be removed first.
- There should be an O-ring on the front face of the camera. Ensure to keep the O-ring with the front part of the frame.
- i** The orientation for the pictures is changed in order to properly show which piece is being removed.

## Step 7 — Power/Shutter Buttons



- The power and shutter buttons are located on the top of the camera and are removed as a single unit.
- Use the spudger to lift the power/shutter buttons from the camera.

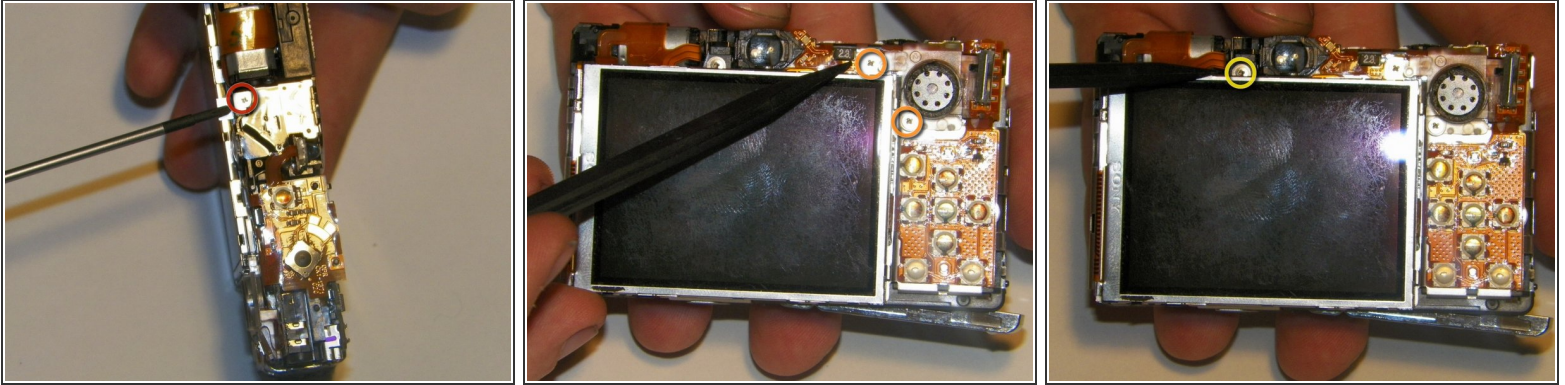
## Step 8 — LCD Screen



- Disconnect the cable that connects the screen to the front motherboard.
- Using a spudger, unsnap the jawbone connector that holds the cable in
- Gently pull the cable out using the spudger.

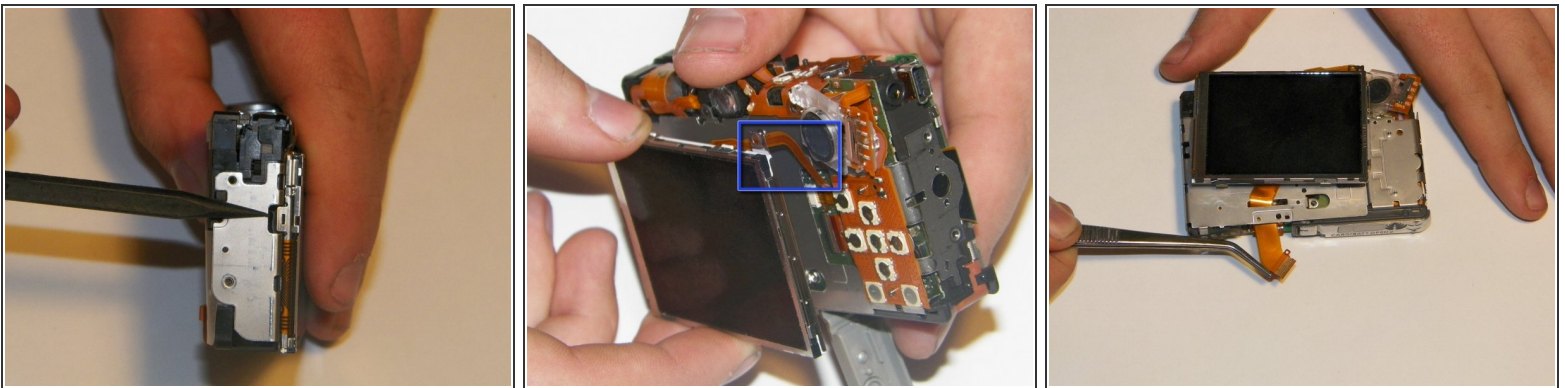


## Step 9



- At the back of the camera, there are four 2.5mm screws that will need to be removed in order for the screen to pull off.
  - One at the top of the camera that is connected to a bracket that secures the screen.
  - Two on the back of the camera, near the speaker.
  - One hidden behind the bracket.

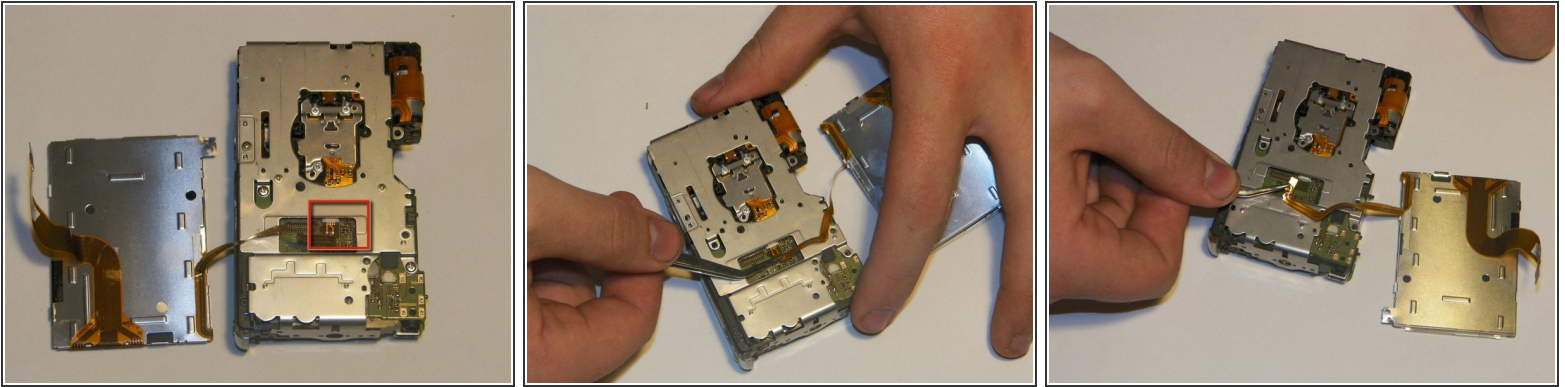
## Step 10



- Gently lift the screen and pull it apart from the camera, taking care to unslot the screen brackets from the tabs on the bottom and left side of the camera.
  - Do not pull too hard on the screen as there is still another delicate cable running from the screen to the rear board of the camera.
- Gently pull the wide ribbon (shown in an earlier step) cable from the front of the camera to the back using tweezers.

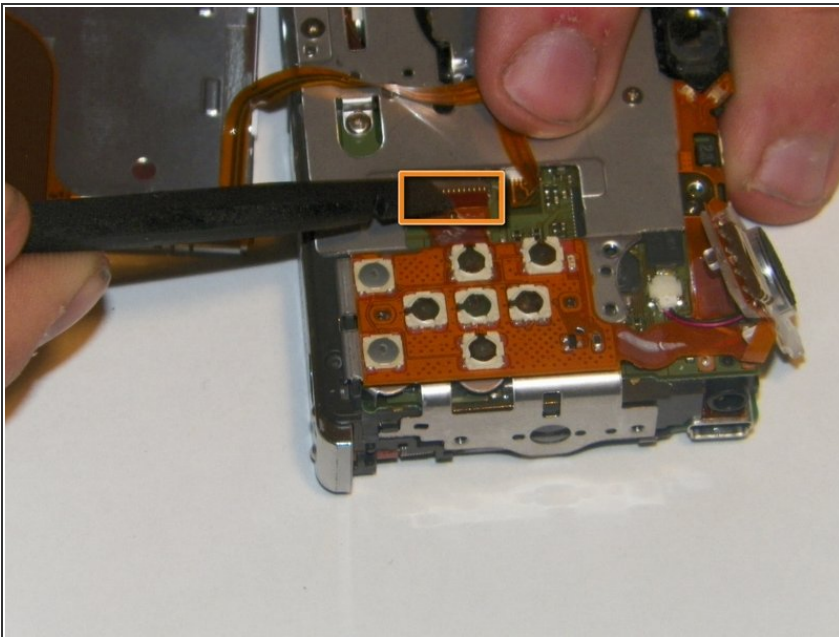


## Step 11



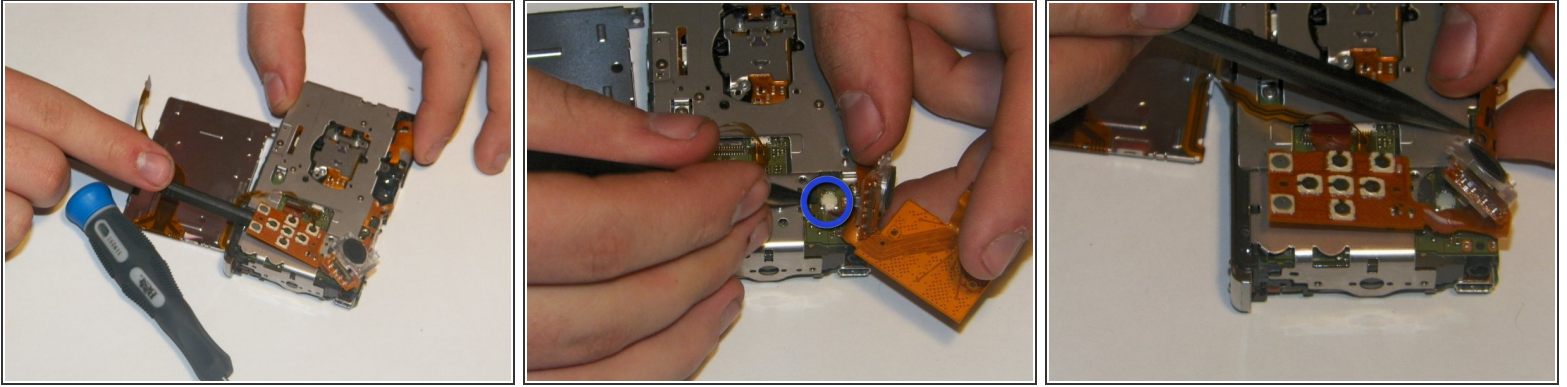
- The screen is now connected only by a small cable that runs to the rear board of the camera. Using tweezers, slowly pull the cable out of the connector.
- For best results, grip the cable as close to the connector as possible.
- The screen should now be separate from the camera body. Be careful not to harm the connectors on the lens so it will reconnect successfully.

## Step 12 — Rear Control Board



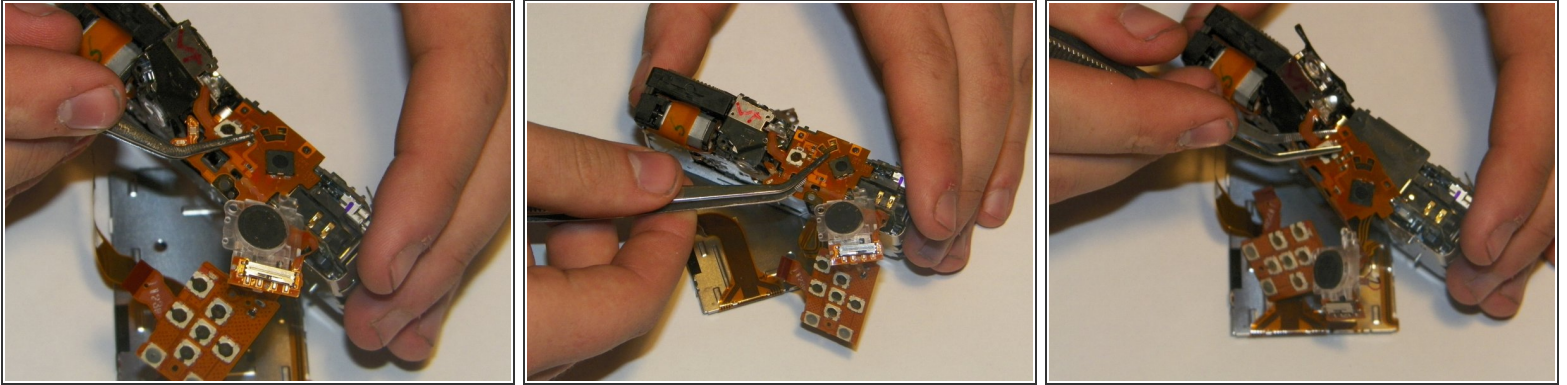
- First it is necessary to remove the ribbon cable connecting the control board to the [green] rear accessory board on the camera.
- This is done by unsnapping the jawbone connector and gently pulling the cable out with tweezers or the spudger.

## Step 13



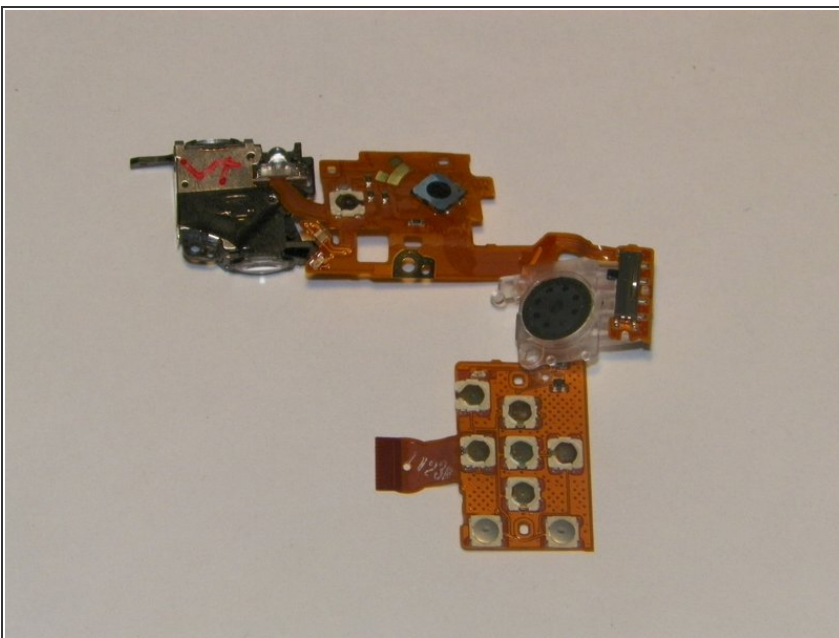
- Using the spudger, gently push up the board from the pins underneath it.
  - Follow the board up and around the camera, gently unseating the board and cables.
  - The speaker will still be connected to the board via two small power wires. Use the tweezers to pull and unplug the power connector from the main rear accessory board.
- i** For best results, grip the tweezers as close to the plug as possible.

## Step 14



- Grip the top control board with the tweezers and gently pull up to unseat it from the placement pins it sits on.
- ⓘ Be aware that the optical viewfinder is connected to the top control board and should come out with it.
- If need be, use the spudger to gently pry out the optical viewfinder.
- ⓘ Note that the orientation of the camera has been changed in this step in order to properly show the top face of the camera.

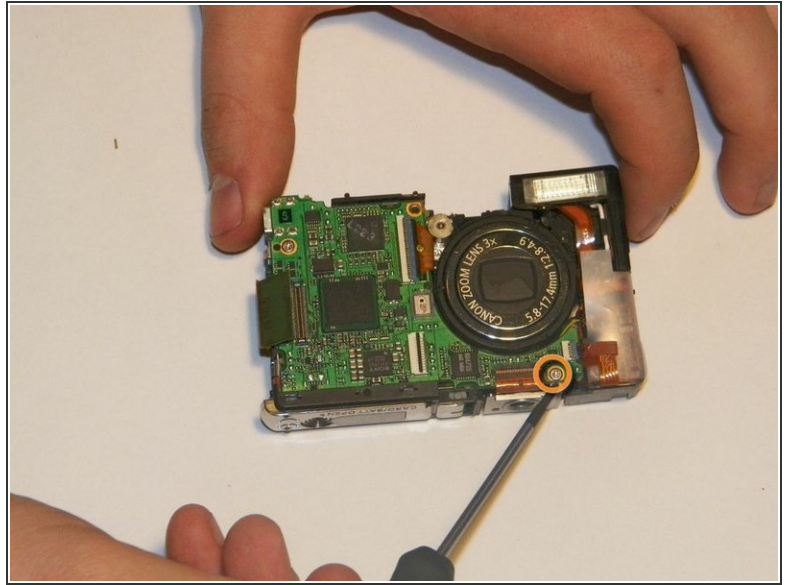
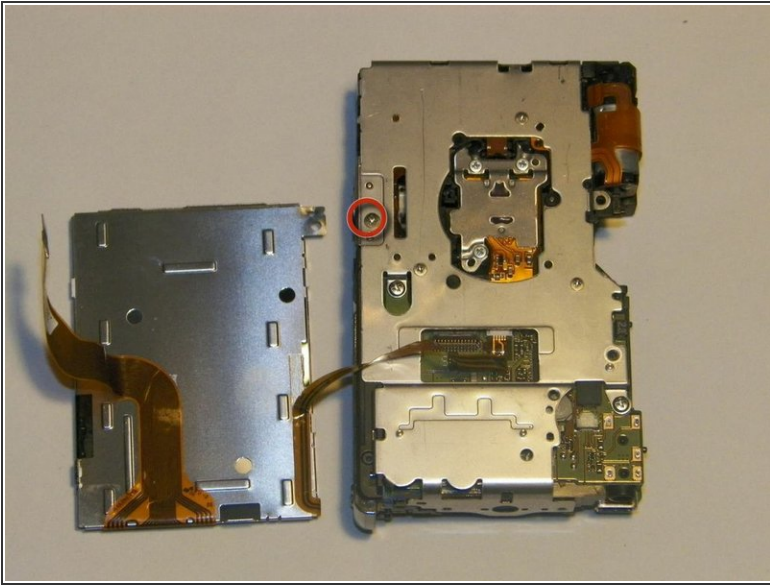
## Step 15



- The rear control board should now be completely separate from the camera.

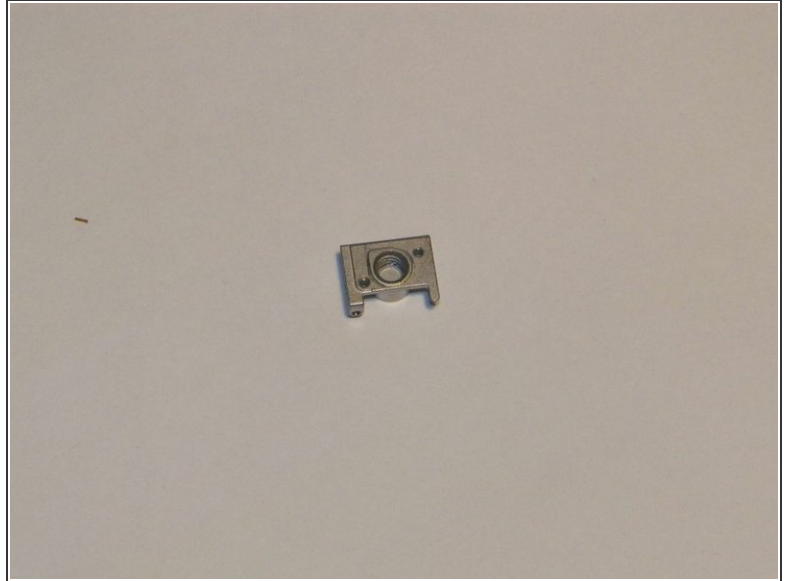
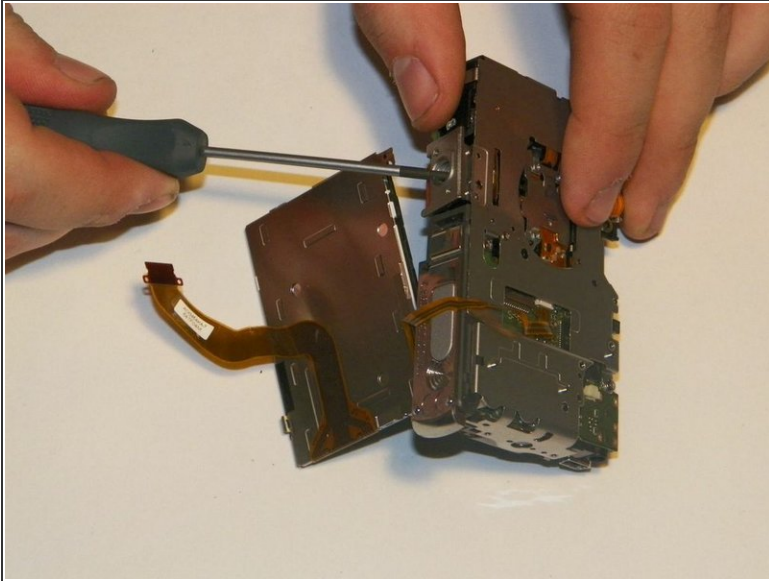


## Step 16 — Tripod Mount



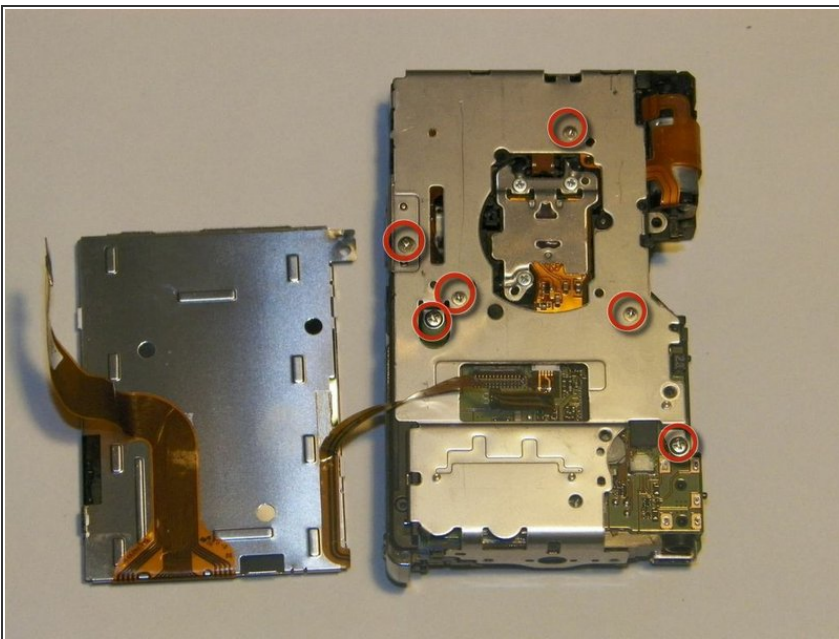
- There are two 3.25mm screws that hold the tripod mount in the camera.
  - The first screw is located on the back of the camera above the tripod mount.
  - The second screw is located on the lens side of the camera above the tripod mount.
- Remove the second screw using the Phillips 00 Screwdriver.

## Step 17



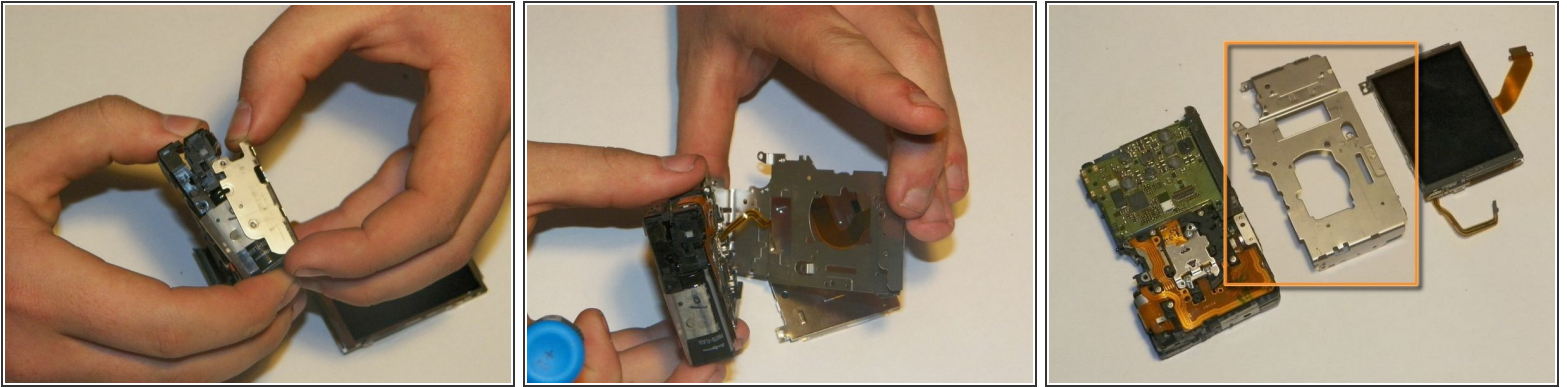
- Use the screwdriver to pry the tripod mount from the camera.

## Step 18 — Interior Rear Frame



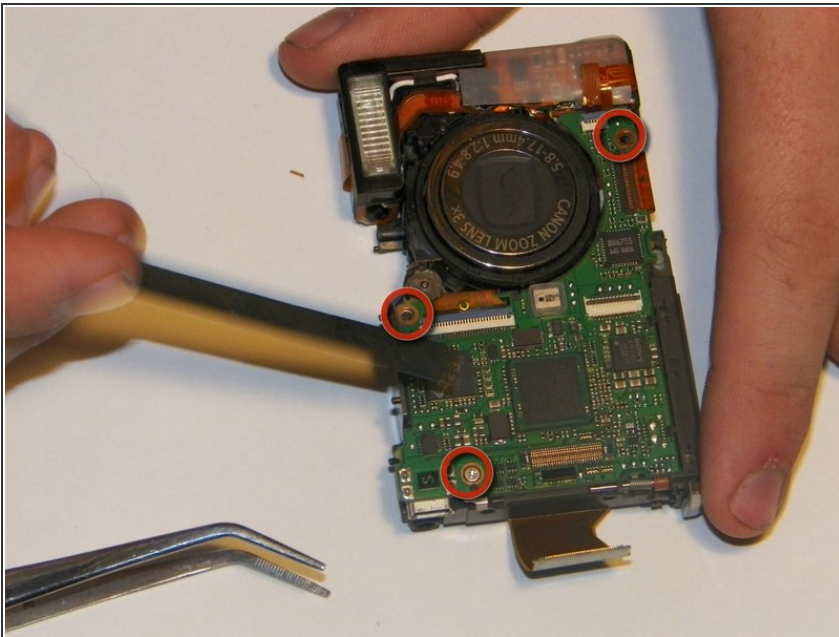
- There are six 3mm screws located on the interior frame.
- Remove the screws with the screwdriver.

## Step 19



- After the screws are removed gently pull the frame away from the rest of the camera.
- The interior frame should now be disconnected.

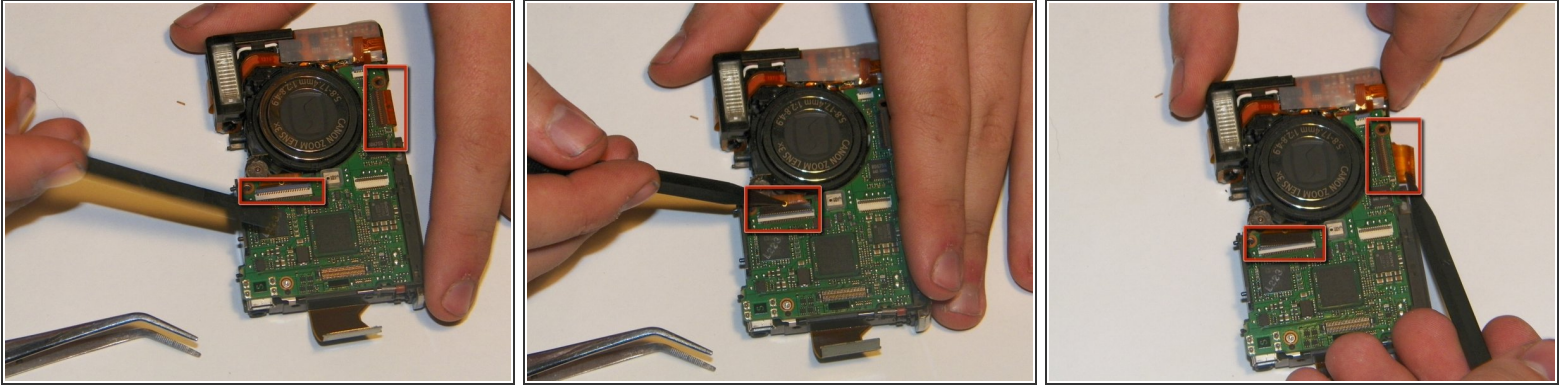
## Step 20 — Lens and Motor Assmebly



- There are three screws that will need to be removed if they have not done so already.

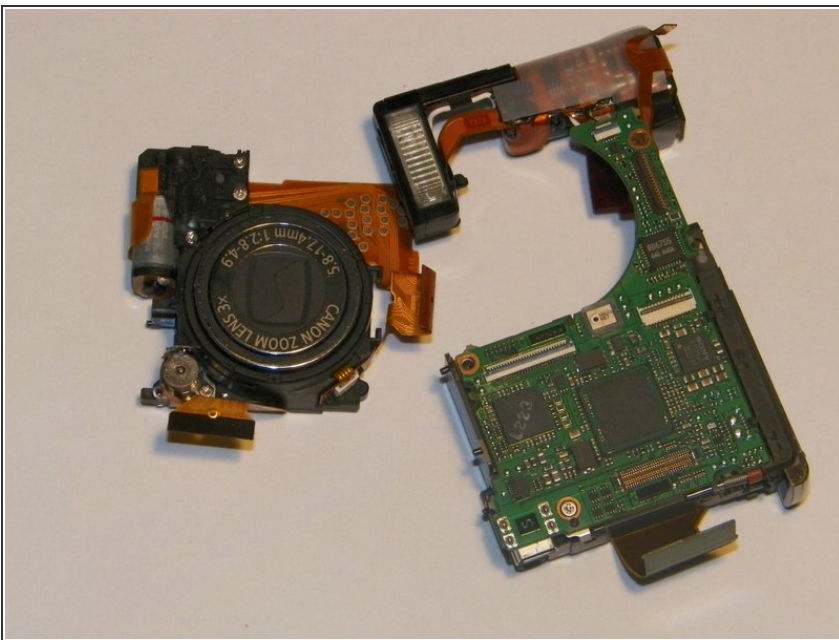


## Step 21



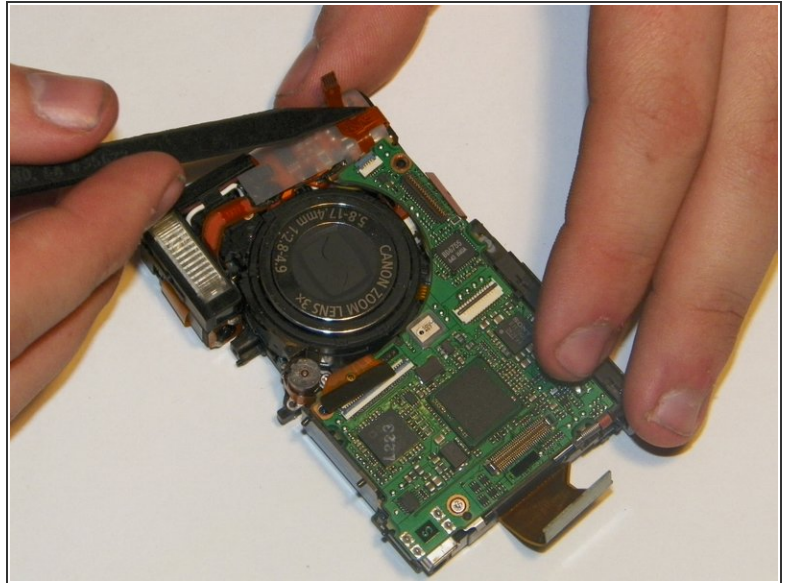
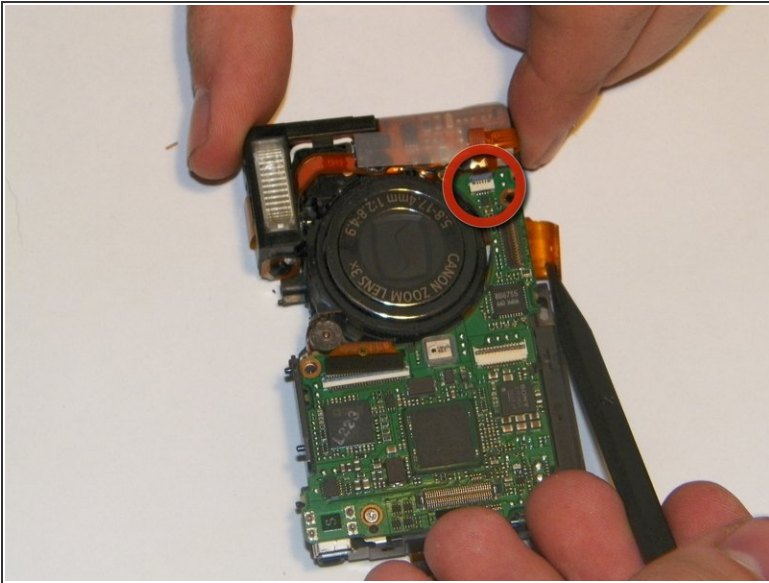
- There are two ribbon cables that must be unplugged before removing the assembly. To remove them, simply unsnap the jawbone connectors and then gently pull them out with either the tweezers or the spudger.

## Step 22



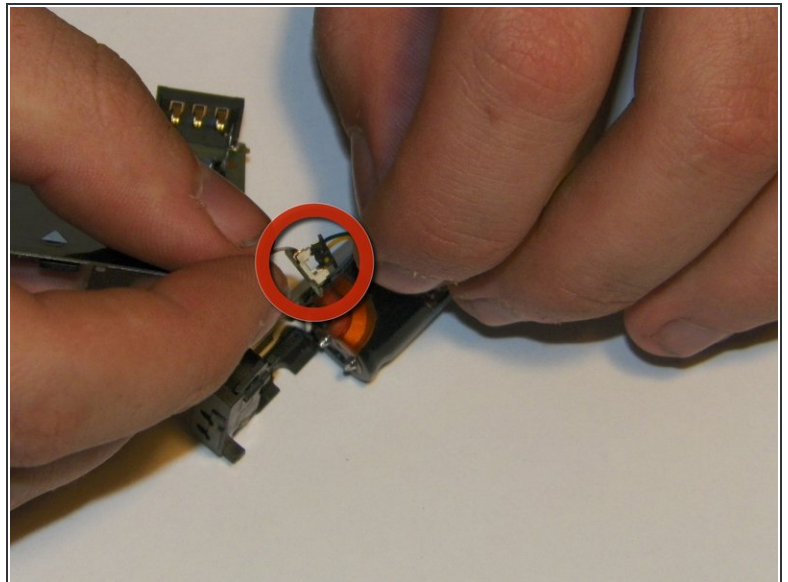
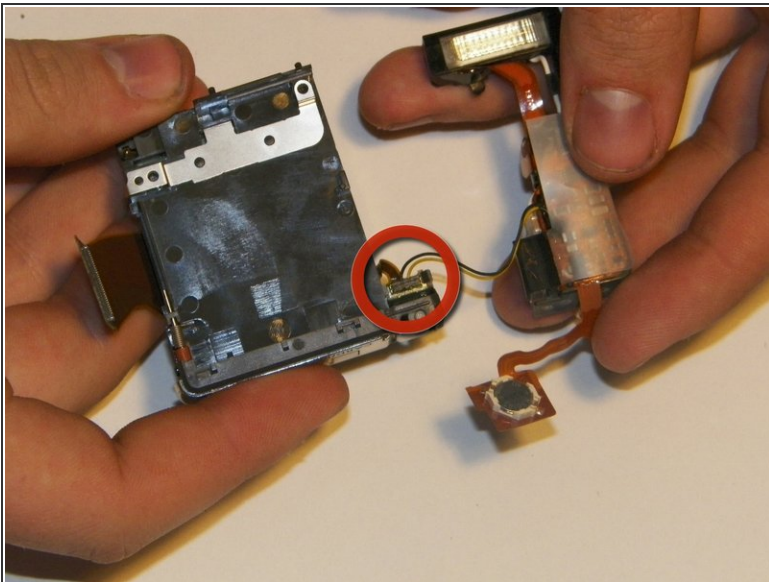
- Firmly gripping the front and rear of lens, gently remove the assembly from between the motherboard and the flash assembly.

## Step 23 — Flash Assembly



- There is one main ribbon cable that needs to be disconnected from the motherboard using the pudger and tweezers.
- It is best to remove the flash assembly at the same time as the lens and motor assembly.

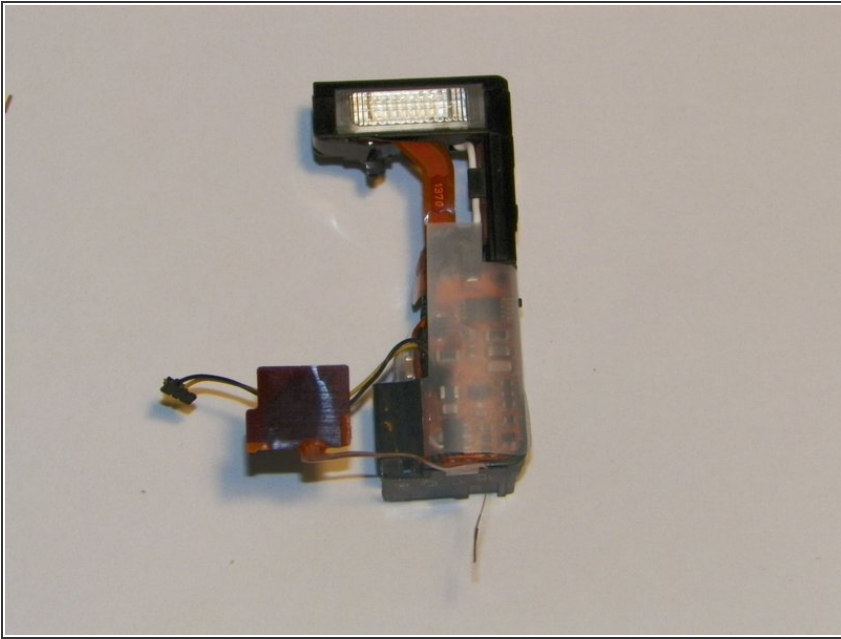
## Step 24



- There is a small connector that mounts in the battery compartment that will need to be unplugged for the flash assembly to be fully removed.

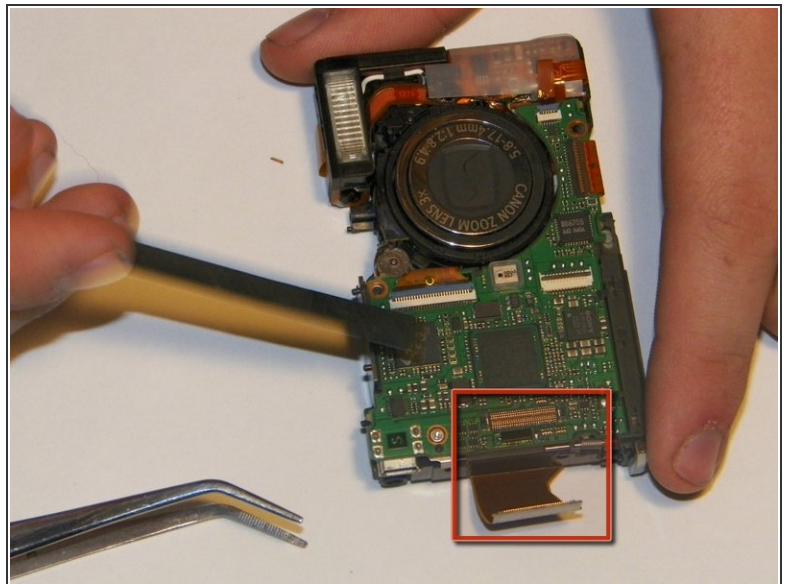
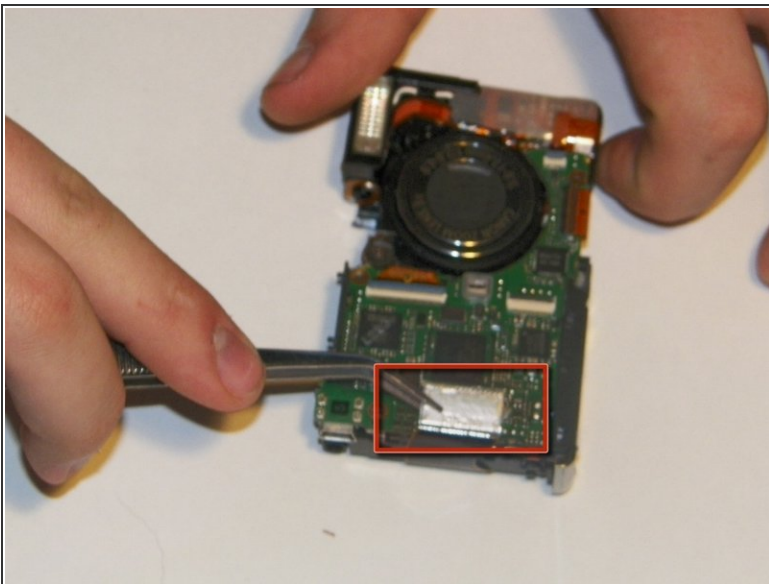


## Step 25



- The Flash assembly should now be separate from the rest of the camera.

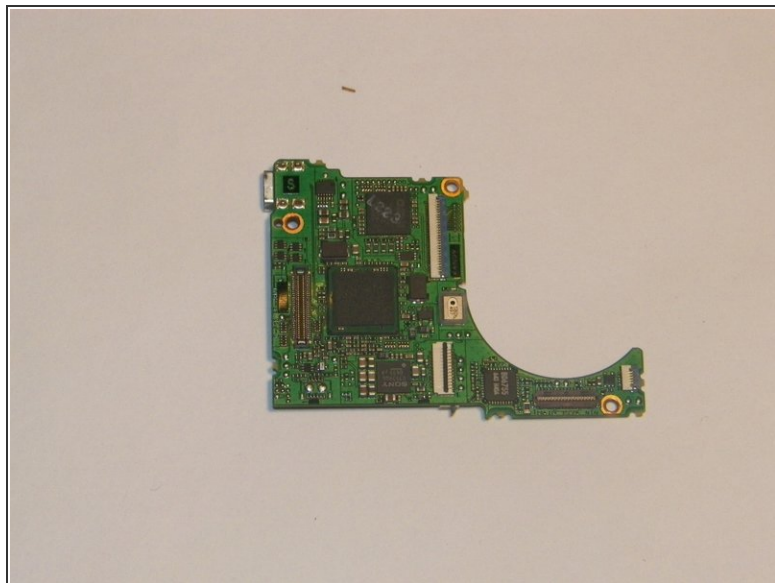
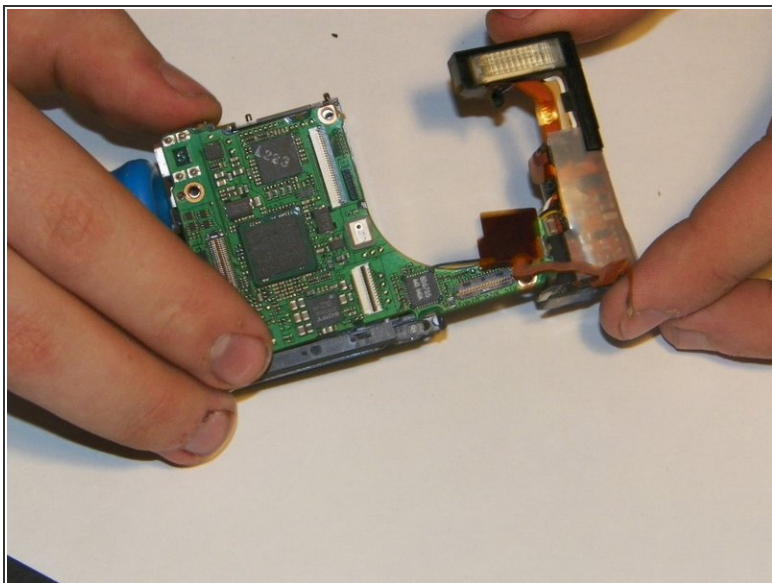
## Step 26 — Motherboard



- Unsnap the connector that runs from the rear accessory board to the front of the camera.
- The motherboard can be removed at roughly the same time as the lens assembly and the flash assembly. The cables that run to each of these components should also be disconnected if they have not been.



## Step 27



- The motherboard can now be lifted out and separated from the rest of the camera.

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