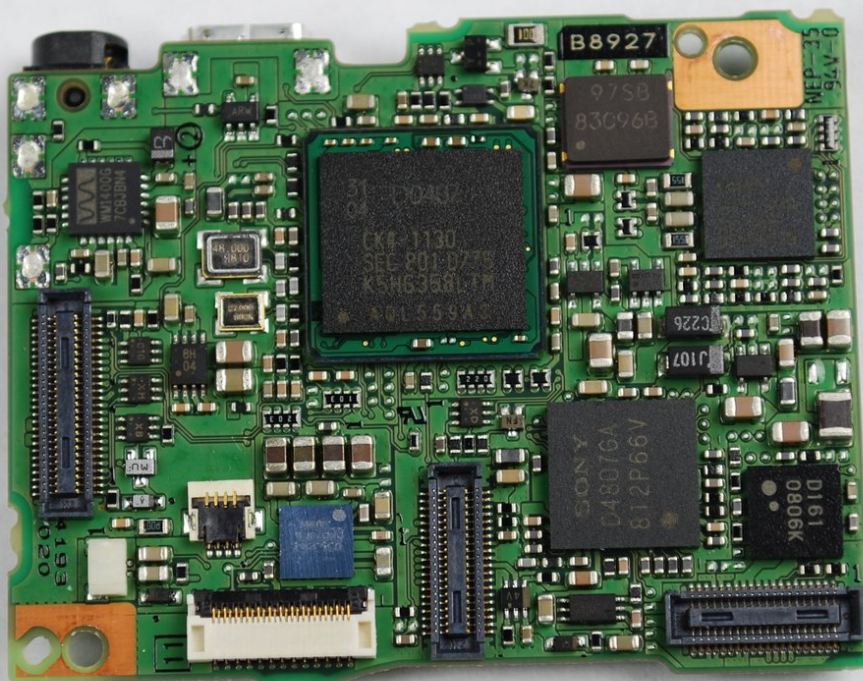




# Canon PowerShot SD870 IS Motherboard Replacement

Replace the motherboard.

Written By: Sam



# INTRODUCTION

Use this guide to remove and replace a faulty motherboard in your Canon PowerShot SD870 IS.



## TOOLS:

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



## PARTS:

- [Replacement Logic Board](#) (1)

## Step 1 — Outer Case



- Remove the wrist strap, if present.
- Remove the lithium-ion battery.

## Step 2



- Remove the two 4 mm Phillips #00 screws on the bottom of the camera.
- Remove the screw next to the wrist strap attachment.
- Pull up the “A/V OUT DIGITAL” cover and remove the screw above the USB port.

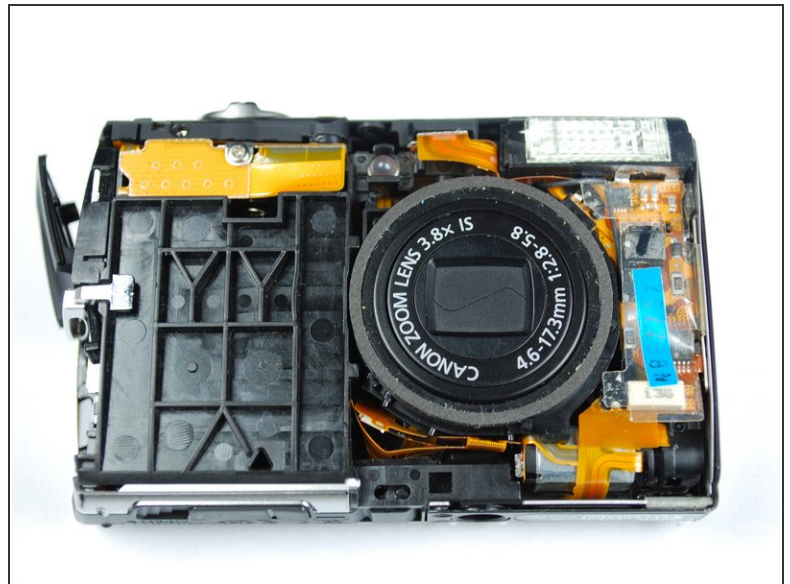
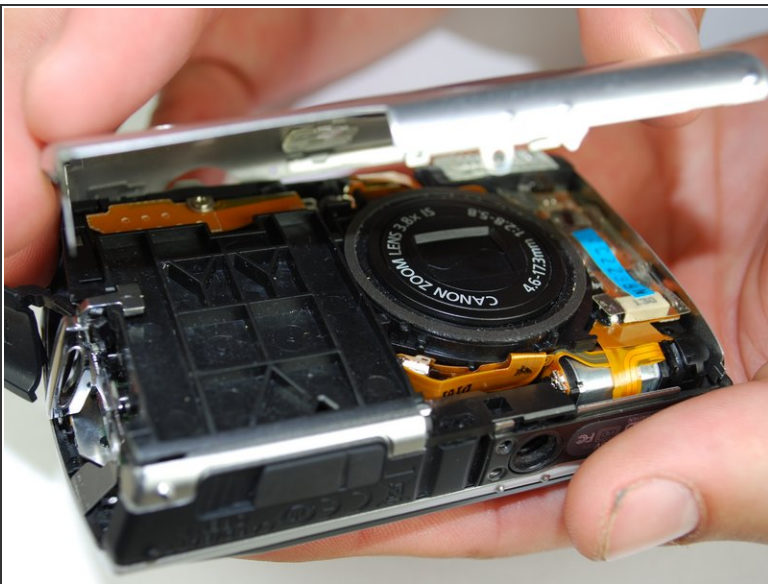


### Step 3



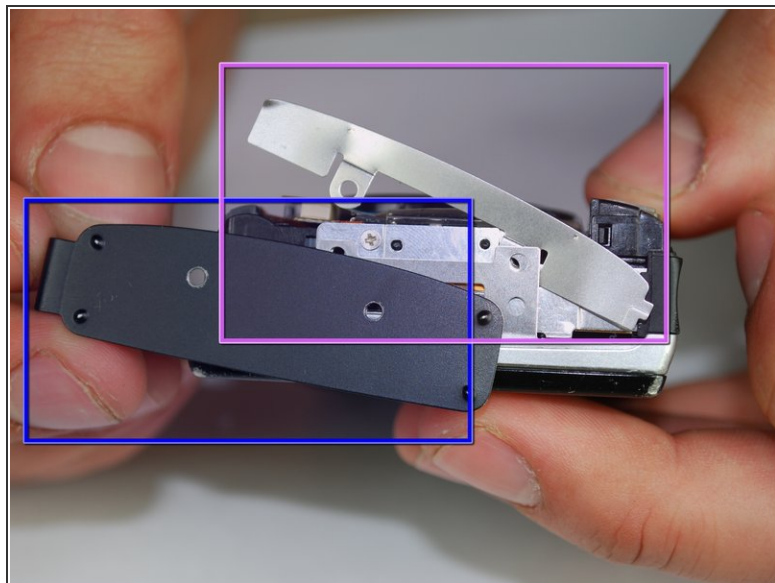
- Carefully unhook the “A/V OUT DIGITAL” cover from the hinge.

### Step 4



- Pull the front cover from the camera by using gentle upward pressure.

## Step 5



- Remove the two Phillips #00 screws from the flat end of the camera.
- Remove the black L-shaped side cover plate.
- Remove the silver u-shaped retainer plate.

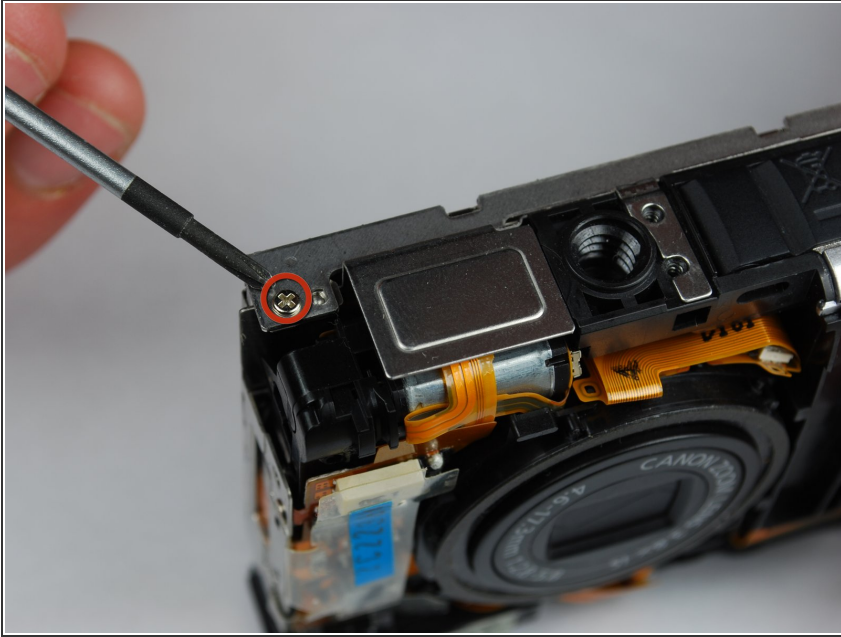
## Step 6



- Slide the back casing off.

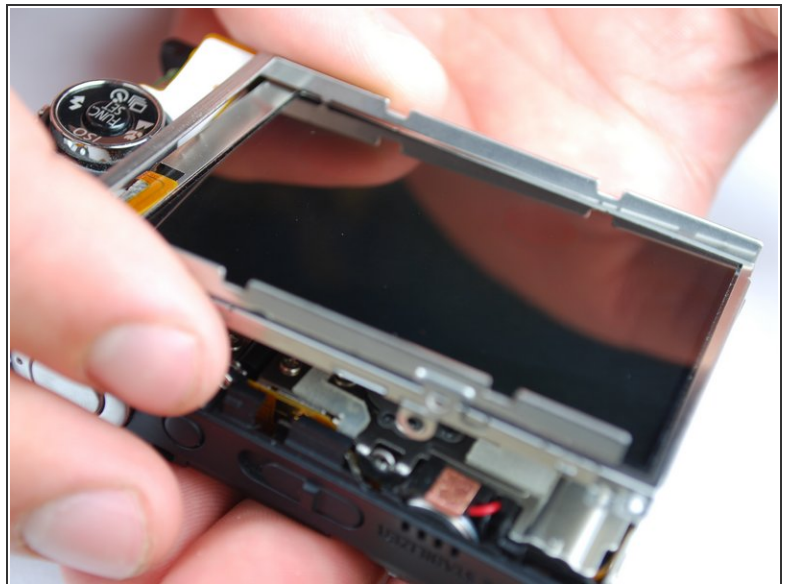
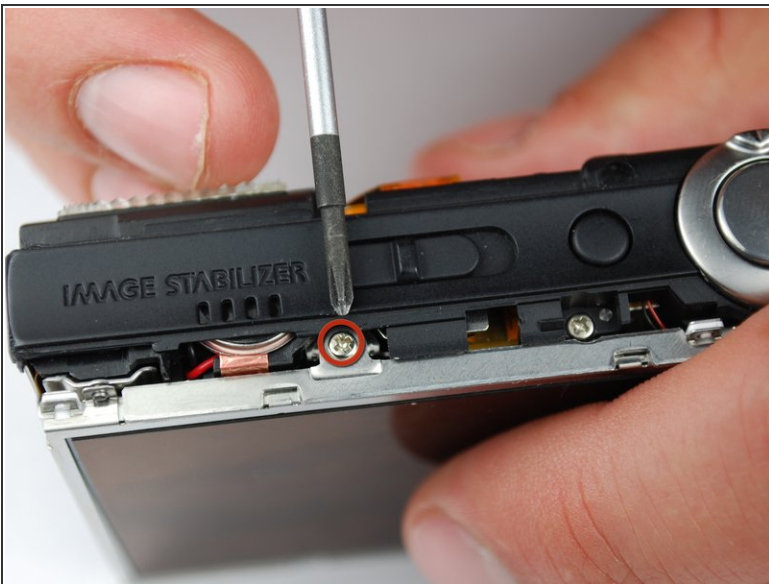


## Step 7 — LCD



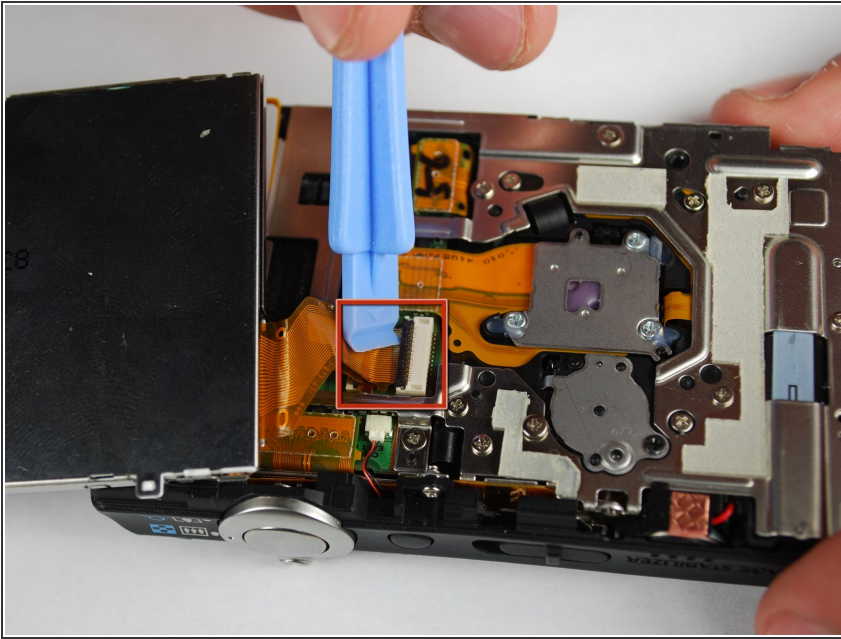
- The first screw that needs to be removed is located on the bottom of the camera, on the left hand side.
- Using a Phillips #00 screwdriver remove the 0.133in silver screw on the bottom left-hand side.

## Step 8



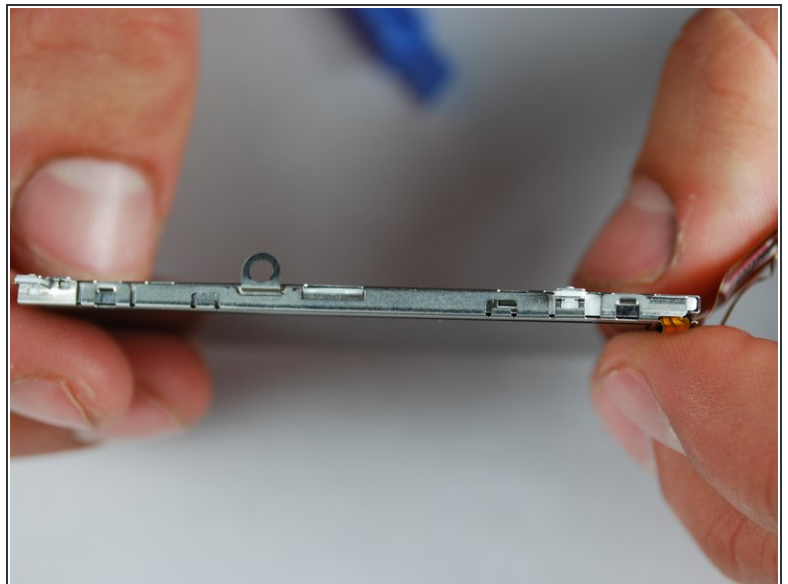
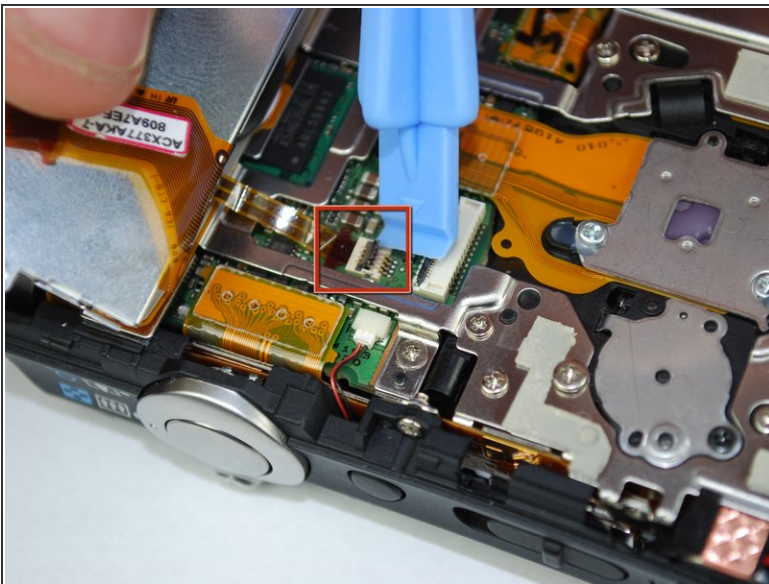
- The second screw that needs to be removed is located on the top of the camera.
- Using the same Phillips head screwdriver, remove the last 0.133in silver screw.
- This will detach a silver U-shaped piece that was holding LCD screen on. Remove the piece and put it to the side.

## Step 9



- The LCD screen should now only be attached by the LCD data cable.
- Lift the screen from the right side and use a small screwdriver or other small opening device to flip the black portion of the connector upward to unlock it.
- Carefully slide the data cable out of the connector.
- The LCD should still be connected by the backlight cable.

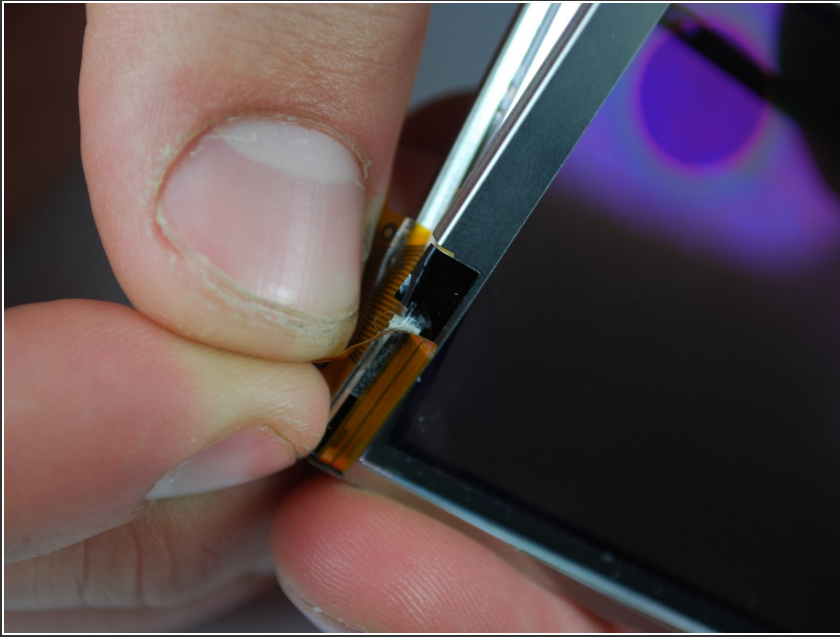
## Step 10



- To remove the backlight cable, use another small opening device to unlock the backlight cable.
- Carefully slide out the backlight cable.
- The LCD screen should now be fully detached from the camera body.

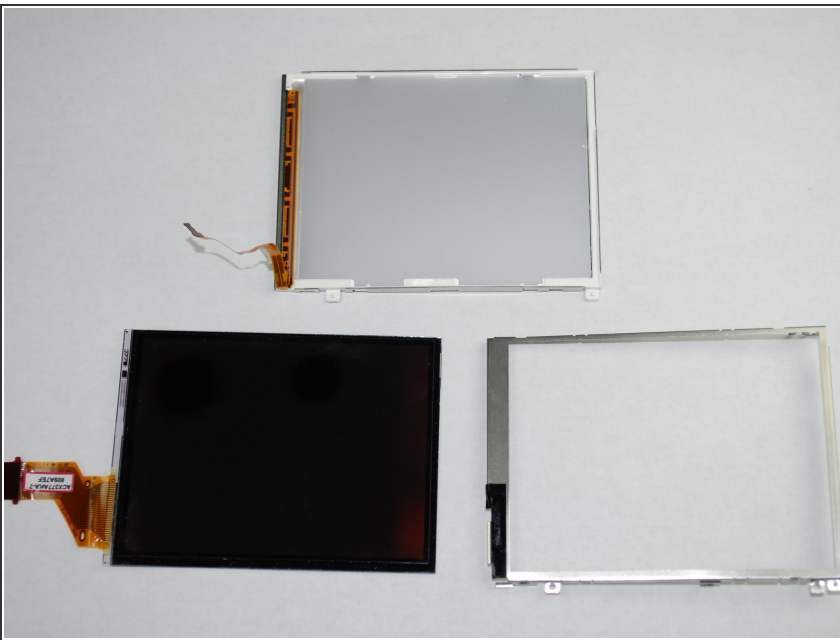


## Step 11



- The LCD screen casing is connected by 4 claws located on the top and bottom on the left and right hand side.
- Carefully disengage the claws by gently prying them off one by one.
  - Once the claws are disengaged, the back of the casing will still be connected to the front casing by the backlight cable.
- Carefully peel the backlight cable off of the casing.

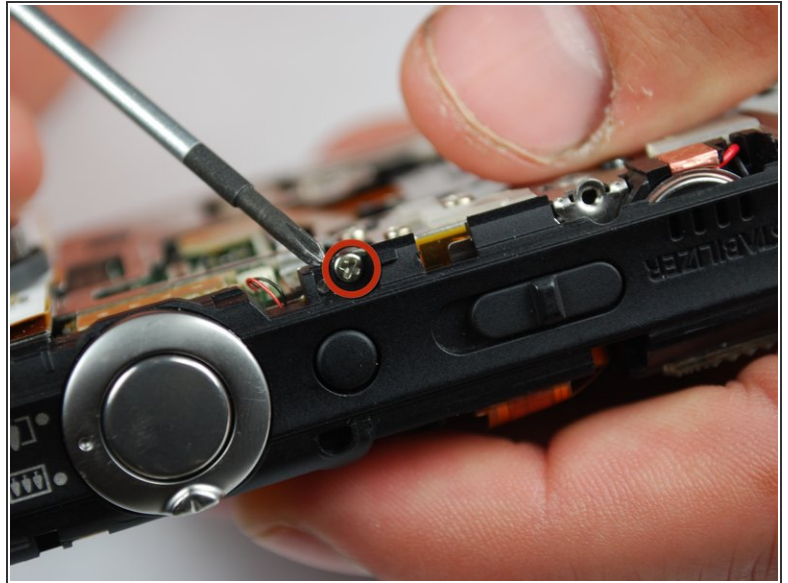
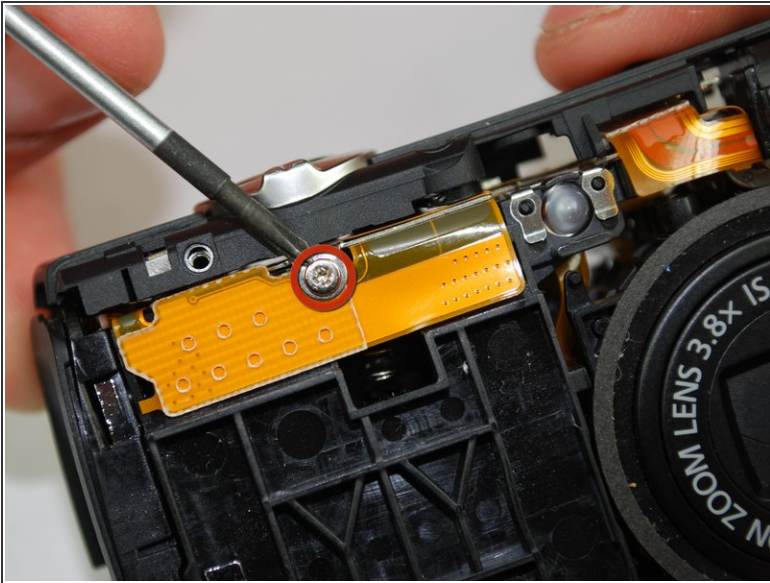
## Step 12



- The LCD screen and housing should now be in three pieces:
  - LCD screen
  - LCD screen frame
  - LCD screen back housing
- The LCD screen itself can now be removed and fixed/replaced.

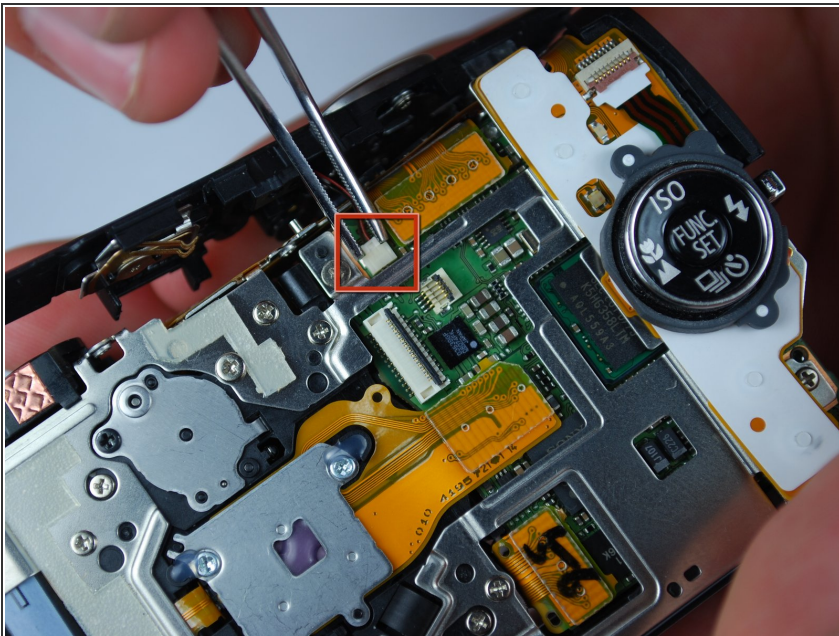


## Step 13 — Shutter Release Button



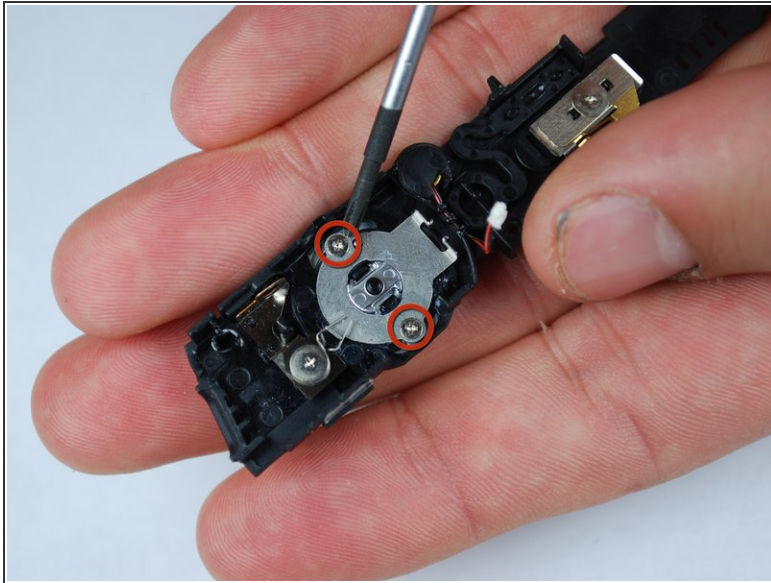
- With the case and LCD screen removed, you are ready to remove the release button.
- Begin by using the Philips #00 screwdriver to remove two silver 0.159in screws on the top and front of the camera.

## Step 14



- The top plastic piece holding the release button should be held on only by a red-and-black wire connector to the logic board.
- Remove the connector from the logic board and detach the release button housing from the camera.

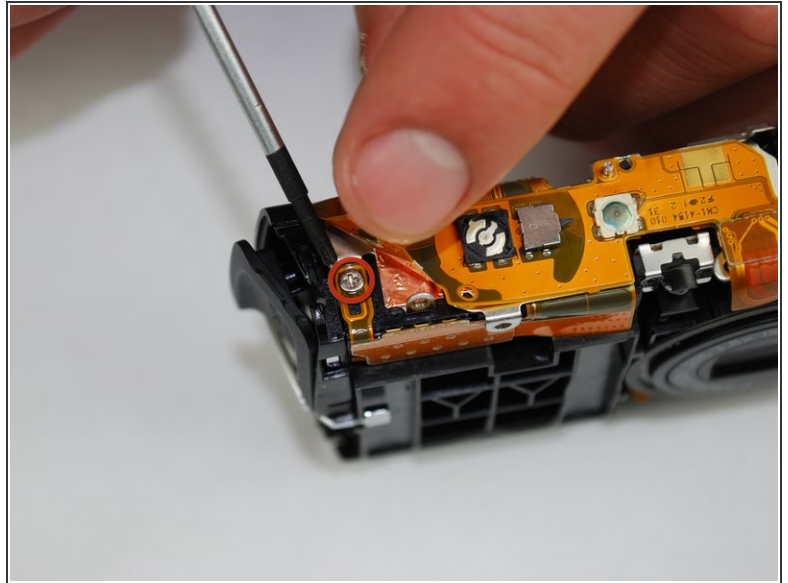
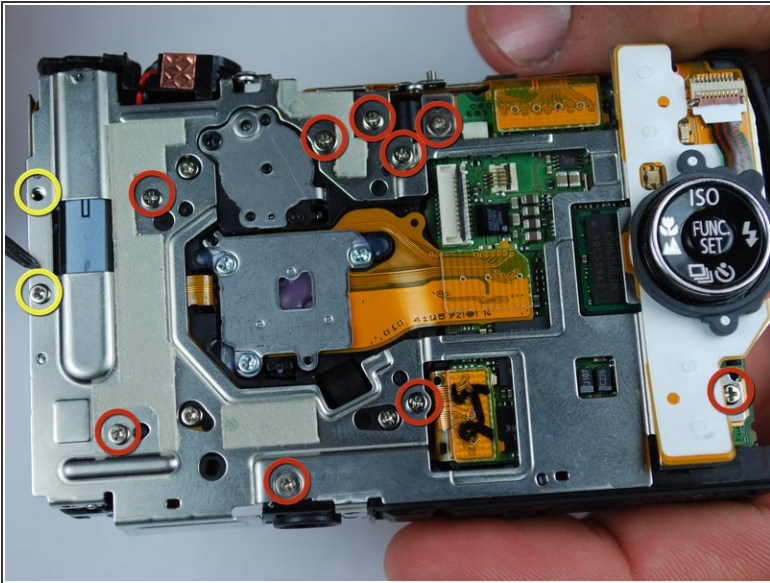
## Step 15



- With the plastic housing for the release button removed from the camera, use the Philips #00 screwdriver to remove two silver 0.090in screws.
- The release button can now be removed and fixed or replaced.



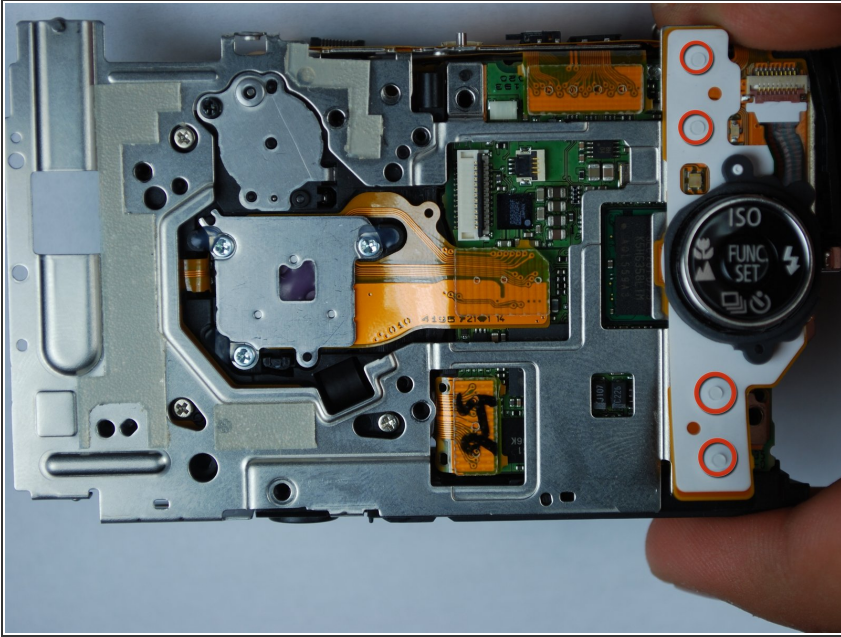
## Step 16 — Motherboard



- With the case, LCD screen, and release button housing removed, the logic board can be accessed and removed for replacement or repair.
- Begin by using the Philips #00 screwdriver to remove two silver 0.080in screws on the left side of the metal housing plate (yellow circles).
- Use the Philips #00 screwdriver to remove nine silver screws from the back and top of the camera (red circles).
- ⓘ You will have to lift the Function button and its wiring up from the pins holding it in place to access some of the screws.

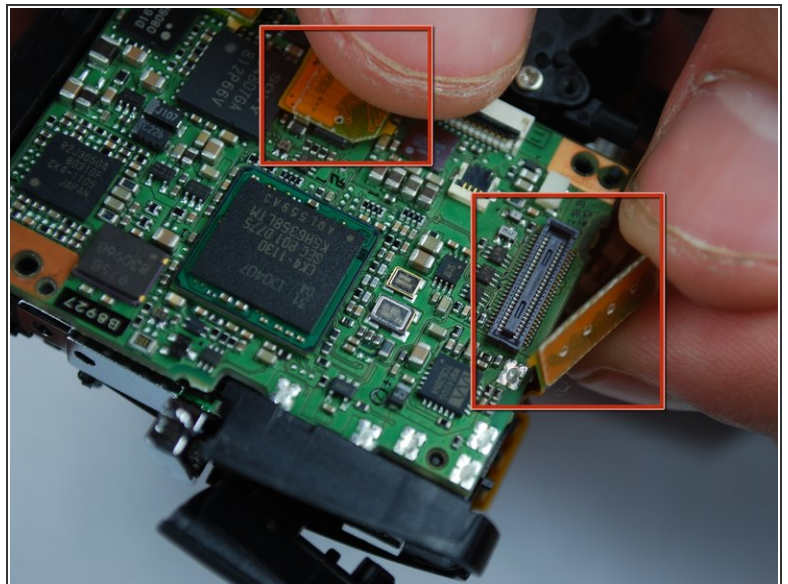
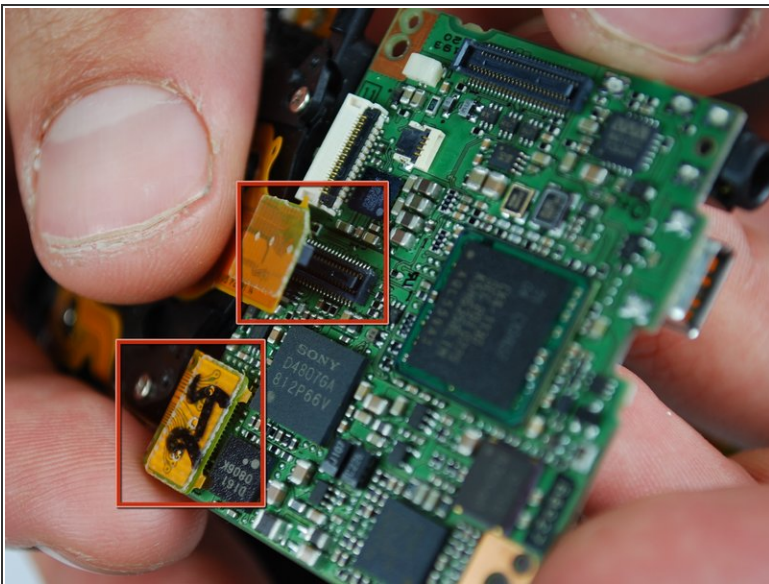


## Step 17



- The metal back plate can now be removed. All that is holding it on at this point are pins and wires connected to the logic board.

## Step 18



- Now, the wires connected to the logic board must be removed. Gently pull them out of their holders on the logic board.
- Once the connectors are disconnected, the logic board can be removed for repair or replacement.

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