Nikon 1 J5 Teardown (repair purpose)

Written By: Terrance

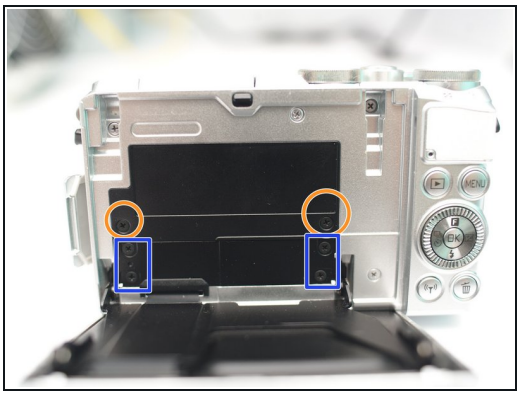
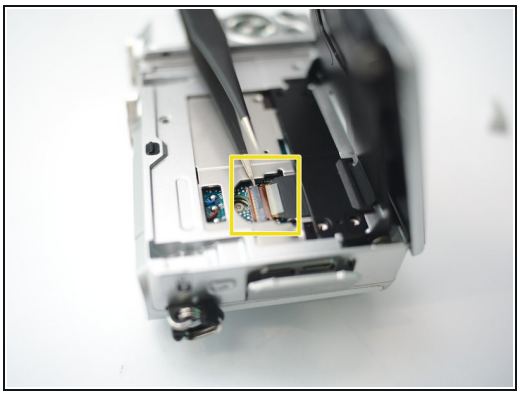
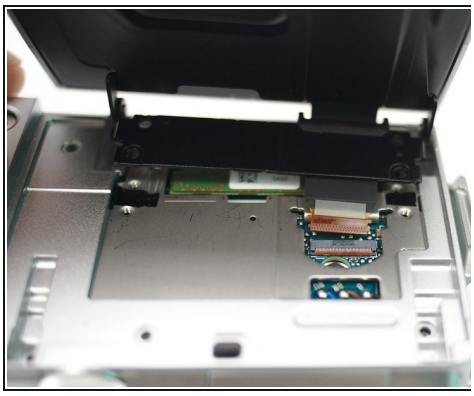
TOOLS:

Pro Tech Toolkit (1)

Step 1 — Nikon 1 J5 Teardown (repair purpose)

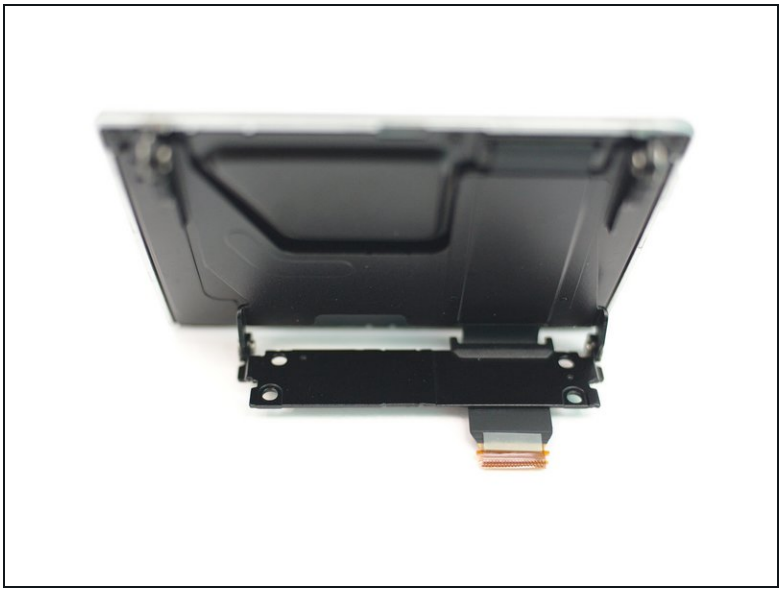
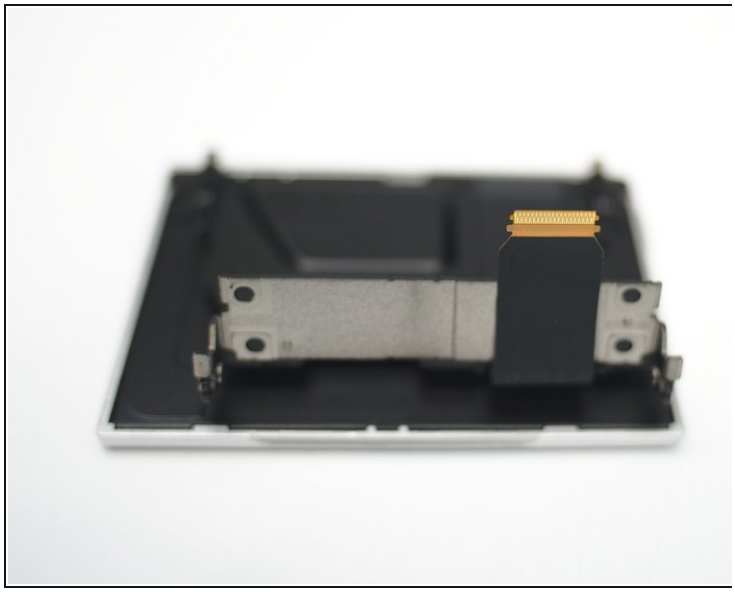
- Remove Lens, MicroSD Card and Battery

Step 2 — Remove/Replace LCD/Touchscreen

- Remove 2 screws first
- Lift the cover
- Disconnect LCD FPC
- Then remove 4 screws
- Remove LCD assembly

Step 3 — The LCD assembly and FPC connector

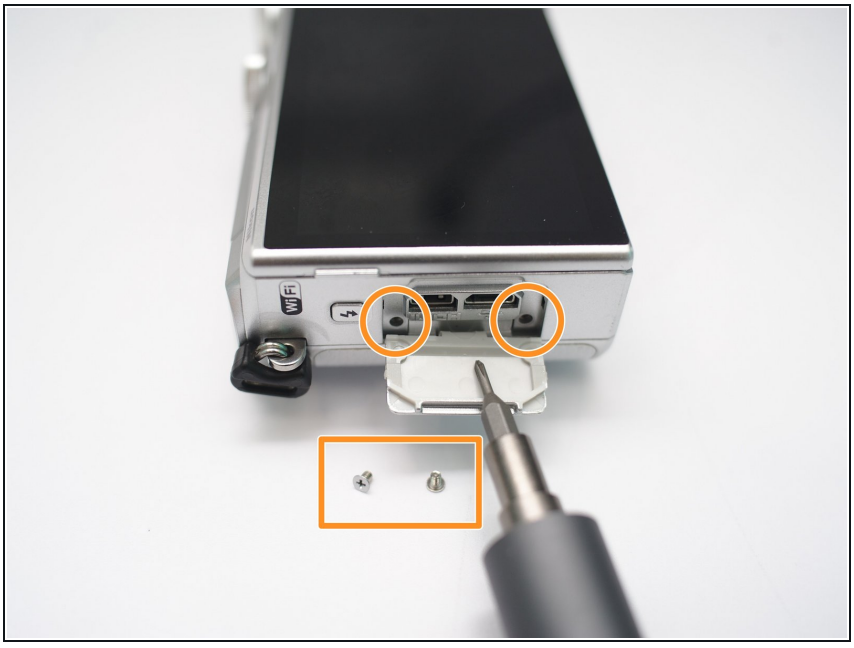



- Insert wisdom here.

Step 4 — Bottom side

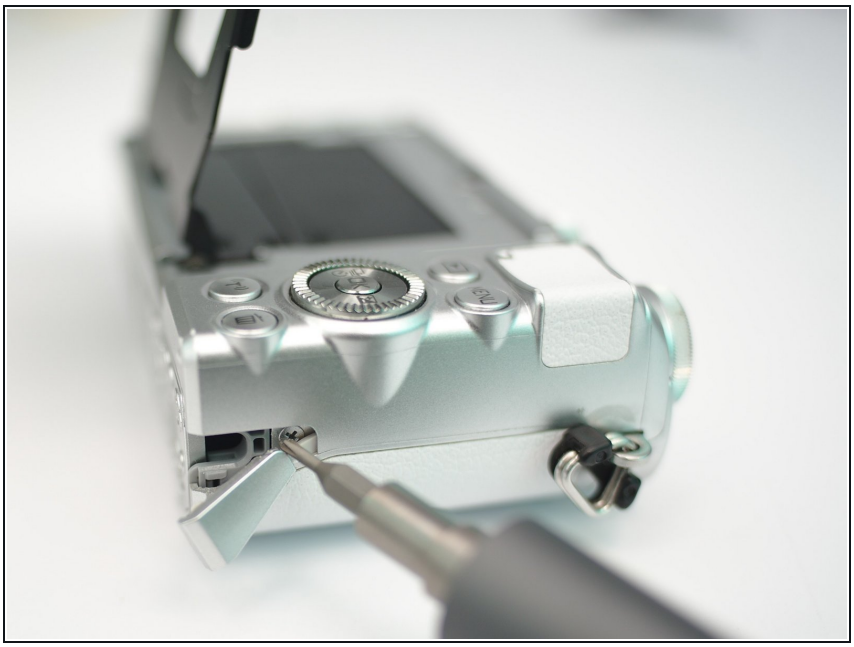
- Remove 2 screws

Step 5 — Left Side(The LEFT when you holding it the right way)



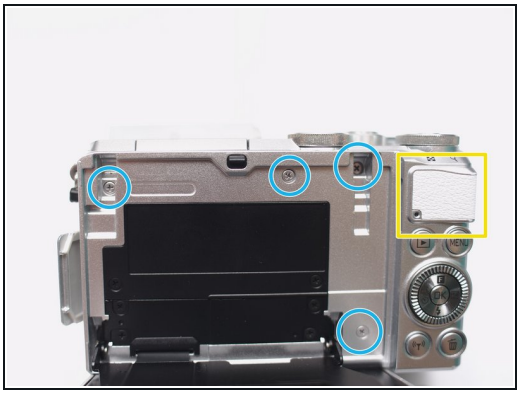
- Open connection bay
- Remove 2 screws

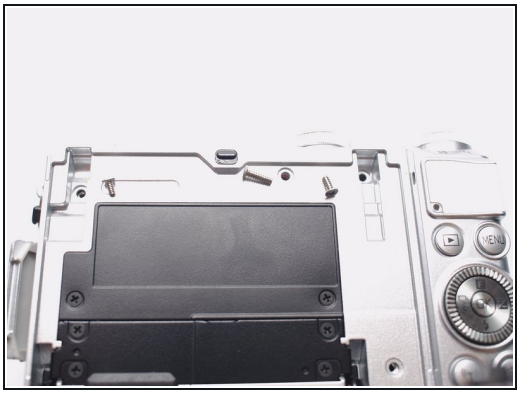
Step 6 — Right side(the RIGHT when you holding it the right way)



- Remove 1 screw under the DC power cable notch cover

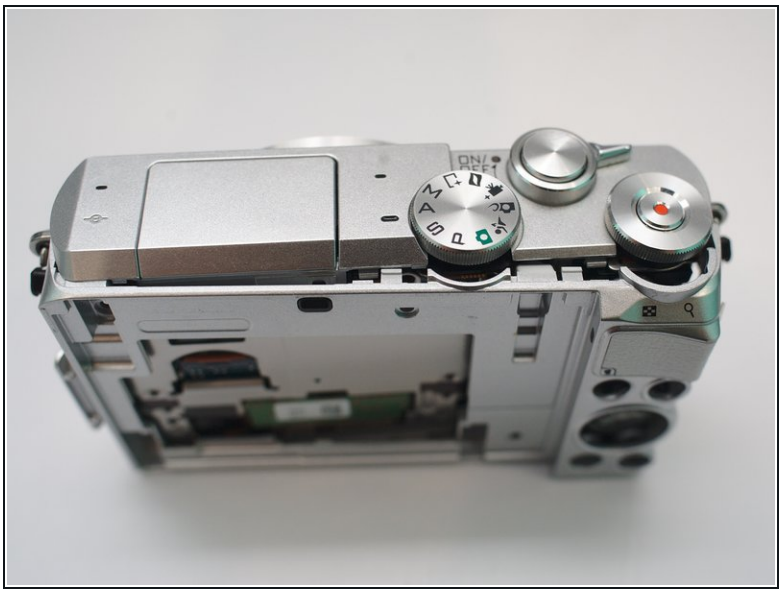
Step 7 — Back side(again)

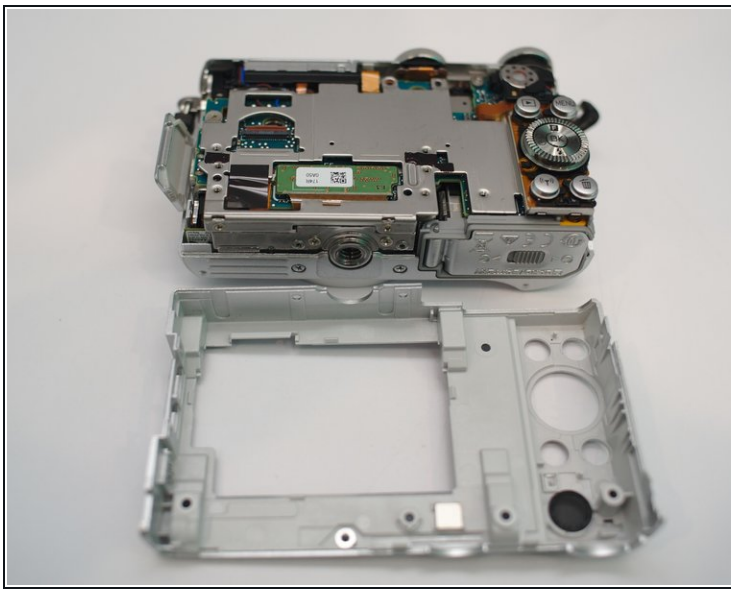




- Remove 4 screws and be ware the length difference
- Peel the rubber open from right hand side
- Remove 1 screw

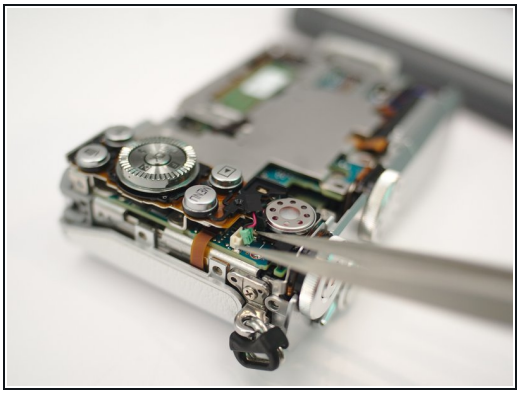
Step 8 — Back case

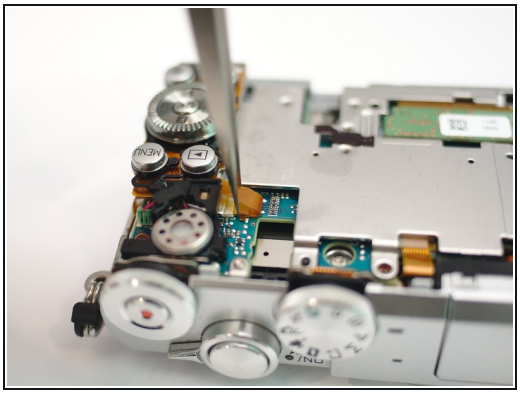


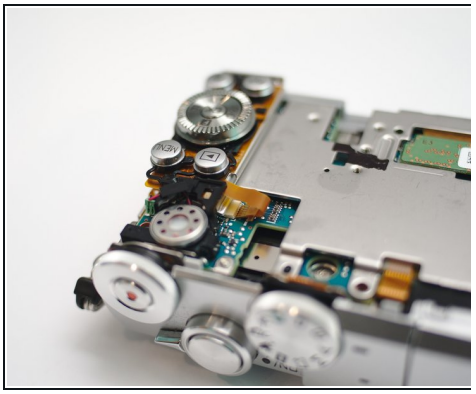


- Now the back case can be removed.
- There's no fragile FPC or cables in this step. Just be patient.

Step 9 — Keypad

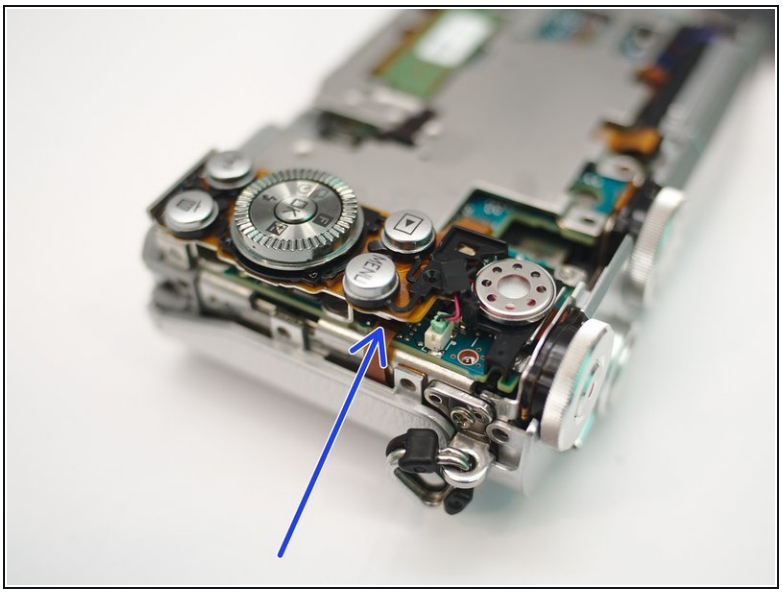


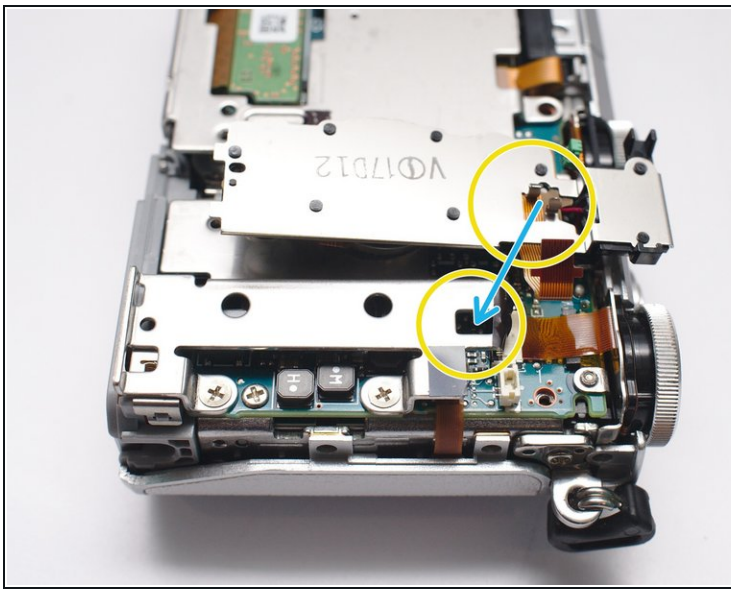




- Disconnect speaker cable
- Pull out keypad cable

Step 10

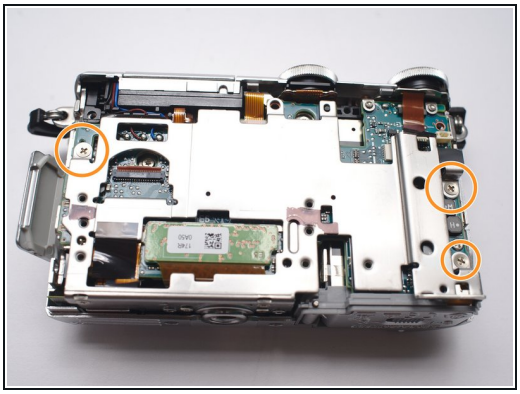


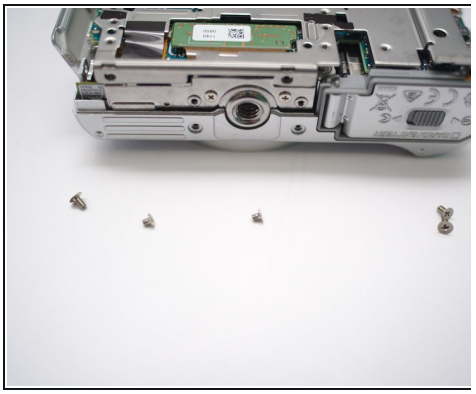


- Insert small crowbar or flat head screw driver here to lift the keypad up.

⚠ Those clips are very tight.

Step 11 — Shielding cover

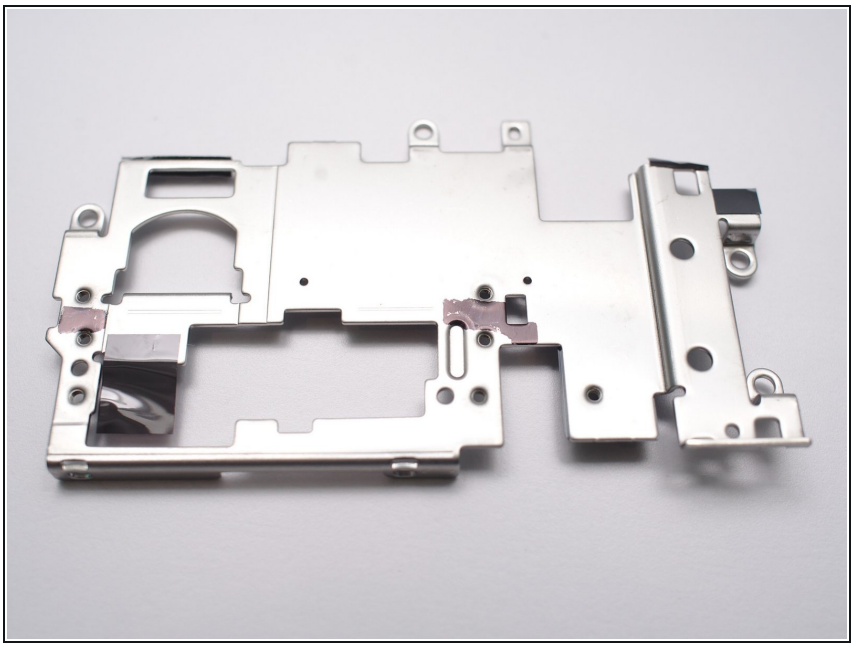




- Remove 3 screws
- Remove 2 screws

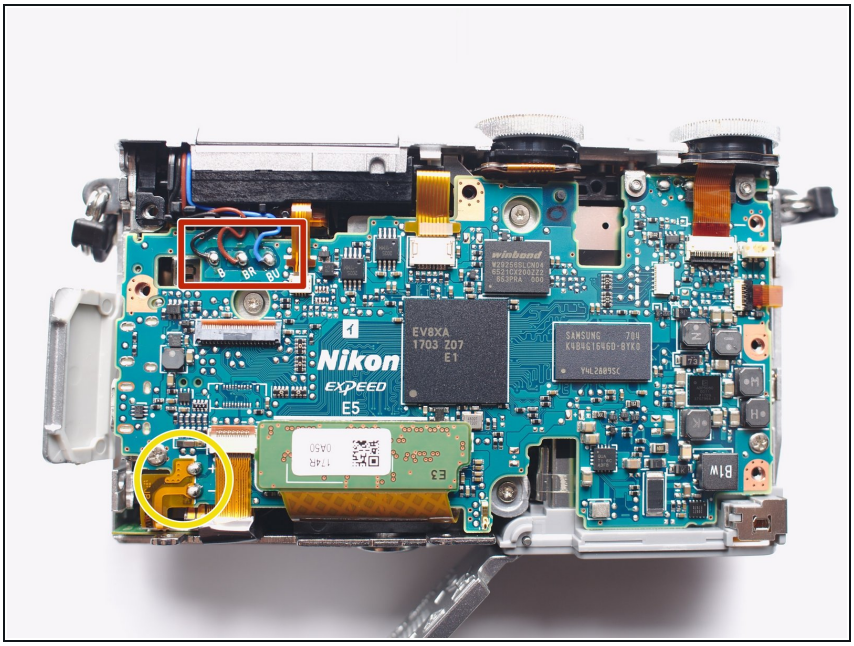
ⓘ Notice the sizes of screws

Step 12 — Shielding cover



- Need some tape peeling

Step 13 — Discharge flash reservoir capacitor



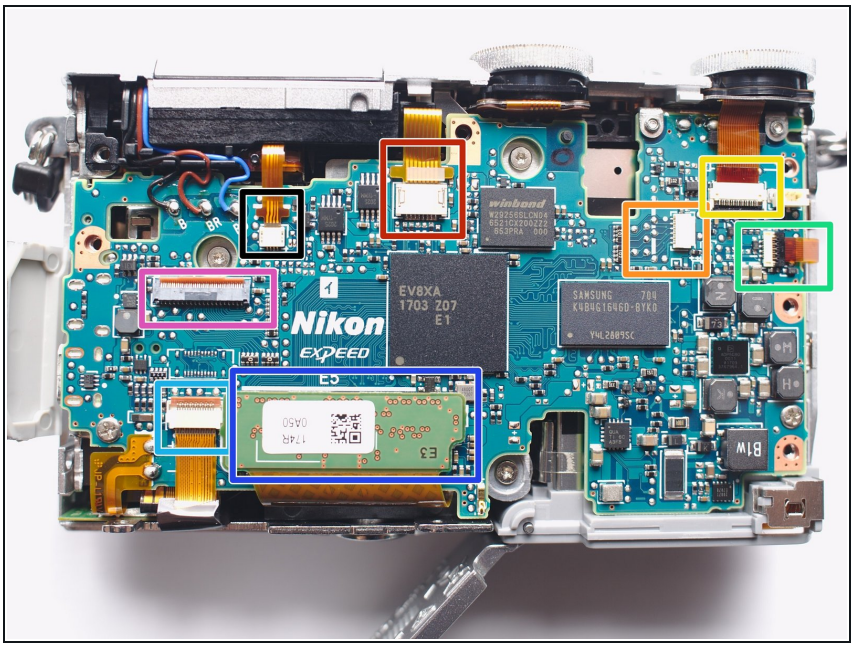
⚠ Dangerous DC Voltage > 200V, stored in a 330V 80uF capacitor set.

- Flash xenon tube terminals, positive connected to capacitor, negative controlled by circuit, and a trigger signal.
- Use 10kohm, >2W resistor, connect 2 solder joints for more than 5sec. These are flash condenser/capacitor terminals. DO NOT discharge by SHORT them. (Note 2020-10-13)

ⓘ DMM's Low-Z voltage works even better, also safer.

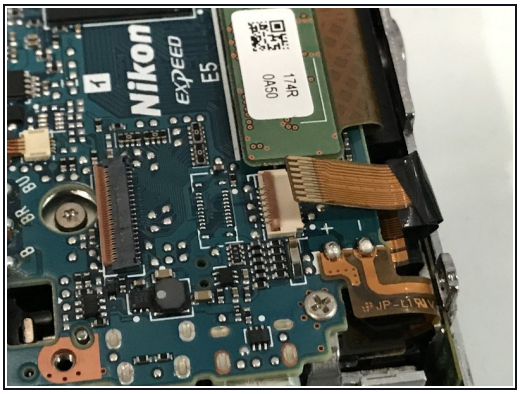
⚠ Measure voltage between 2 solder joints to ensure voltage <10V

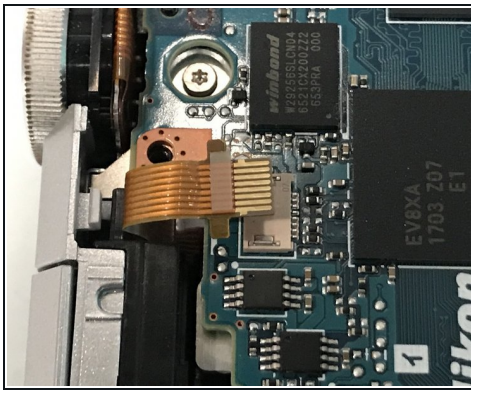
Step 14 — FPC connectors



- Flash solenoid and detecter
- Microphones and AF assistant LED
- Keypad
- Switches
- NFC
- WiFi and Bluetooth, Lens(back)
- CMOS sensor
- LCD

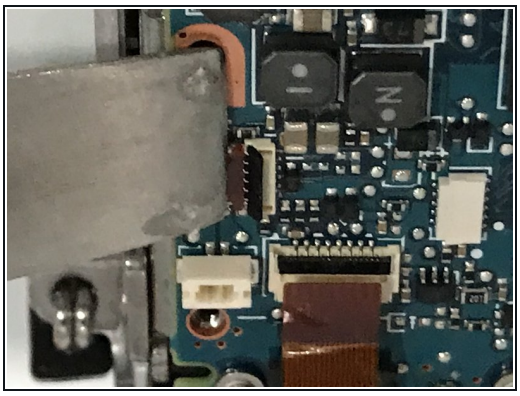
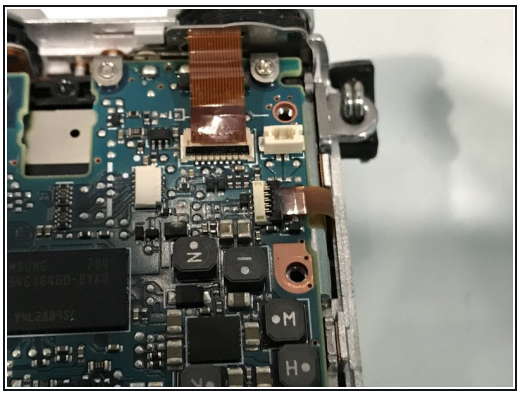
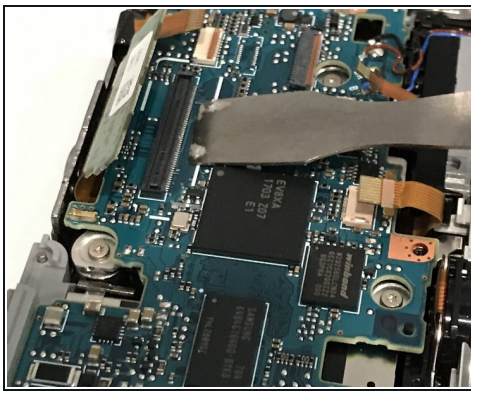
Step 15 — Main PCB 1





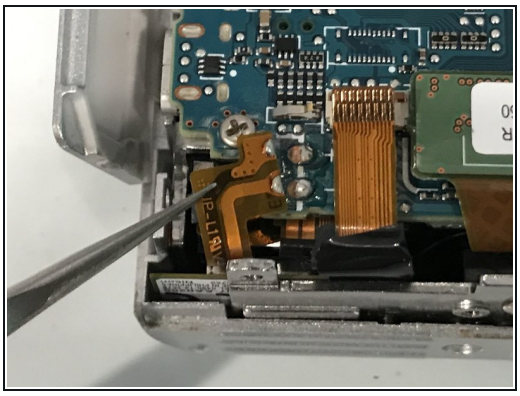
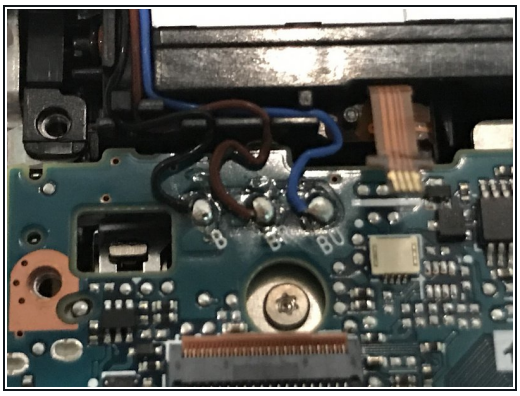
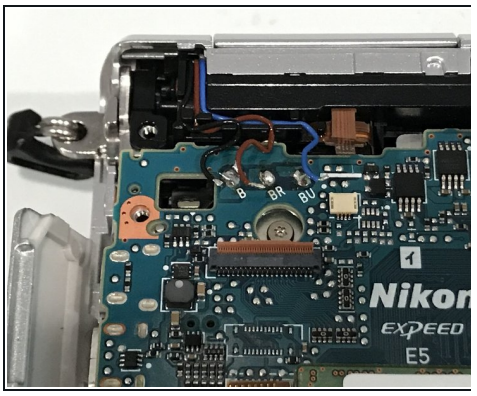
- Detach every FPC you can find

Step 16 — Main PCB 2

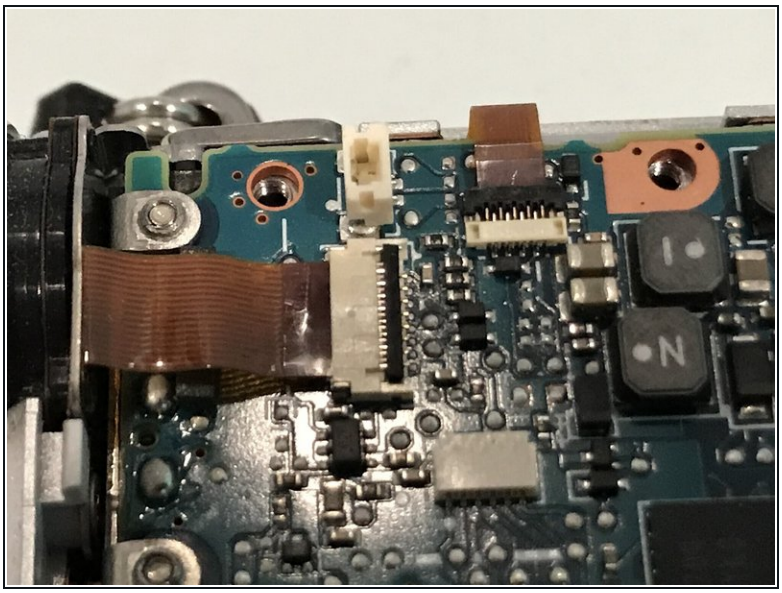
- Detach every FPC you can find

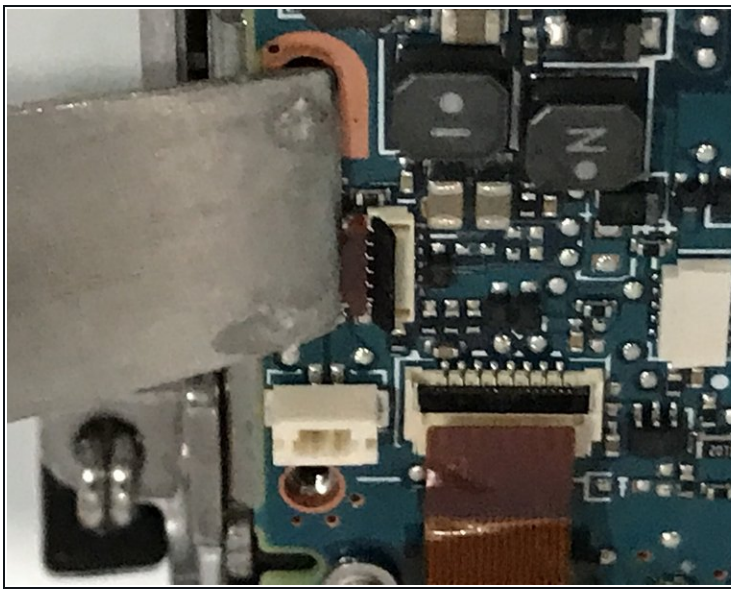
Step 17 — Main PCB 3

- Desolder flash condenser FPC and Flash cables (remember to discharge first)

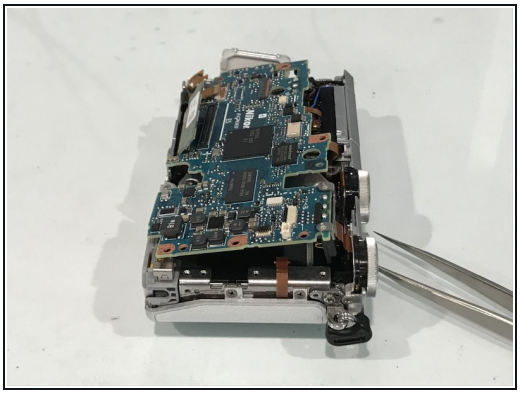
Step 18 — Main PCB 4

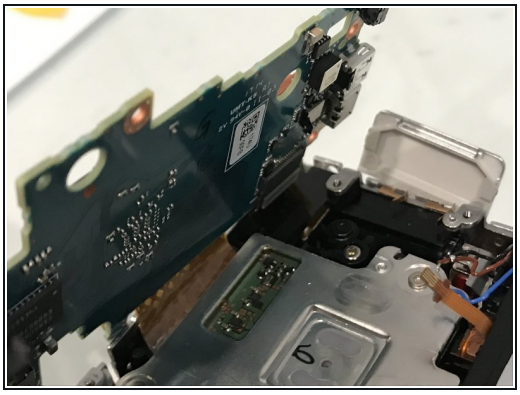


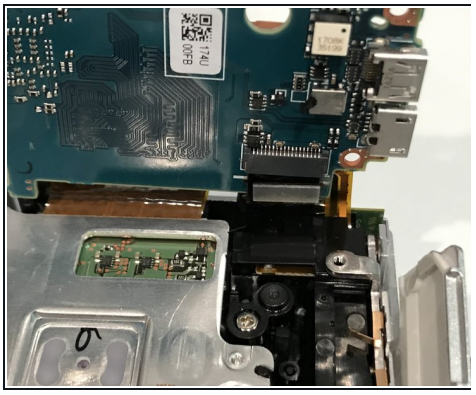


- More FPC

Step 19 — Main PCB 5

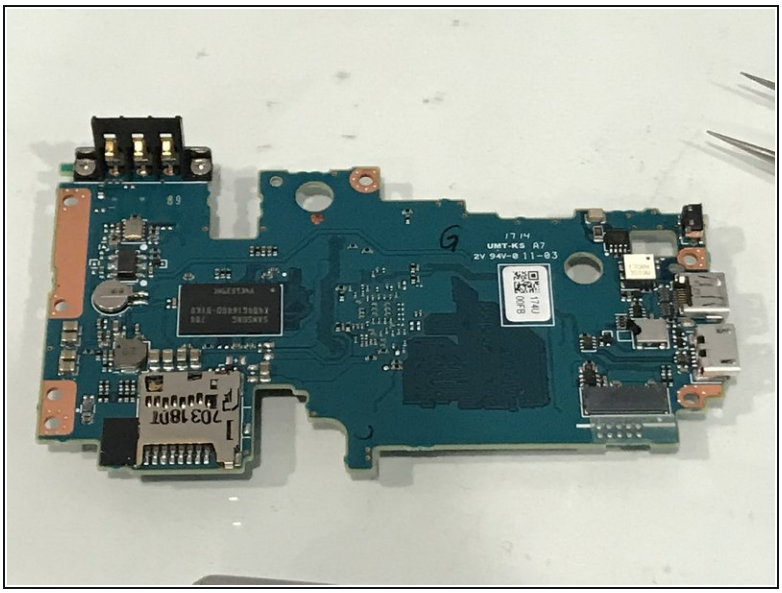


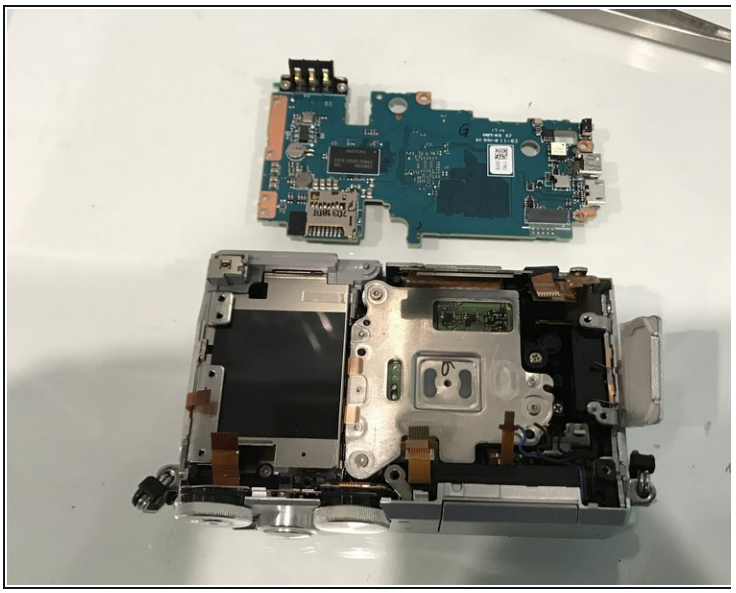




- Lift Main PCB, SLOWLY and GENTLY
- One more FPC at the back side.

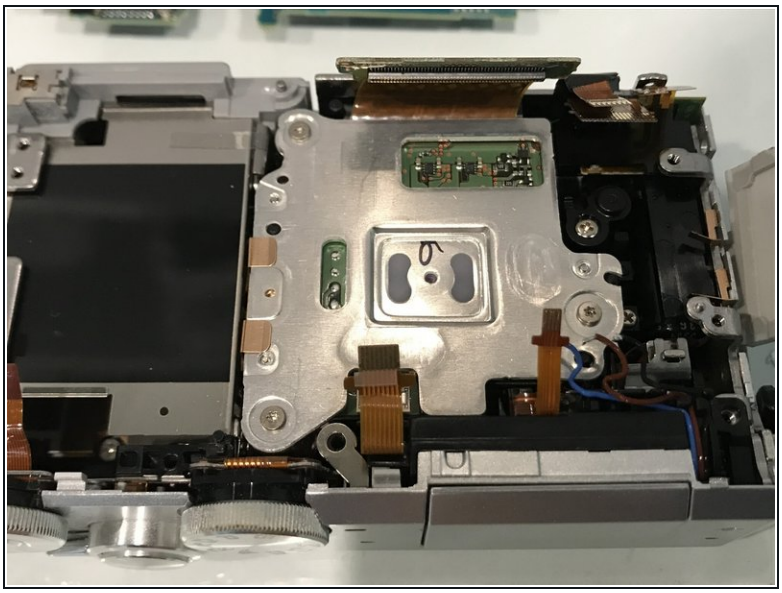
Step 20 — Behold, The Main PCB

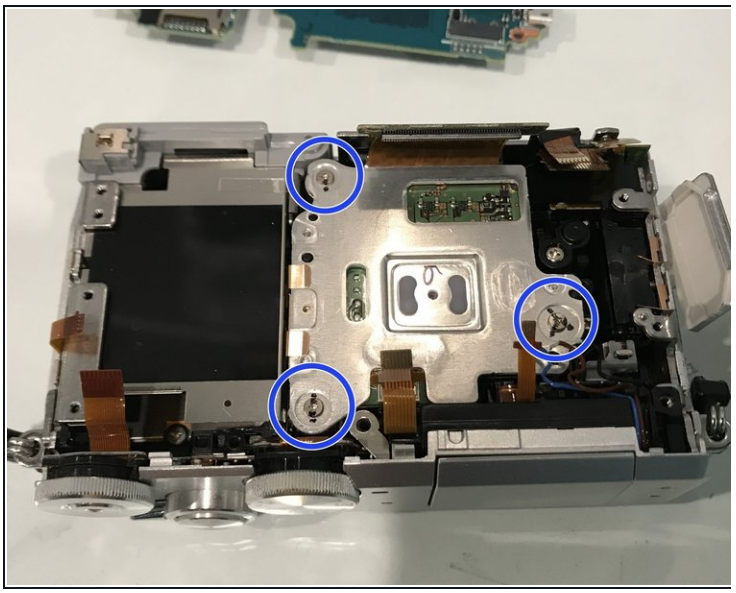




- Insert wisdom here.

Step 21

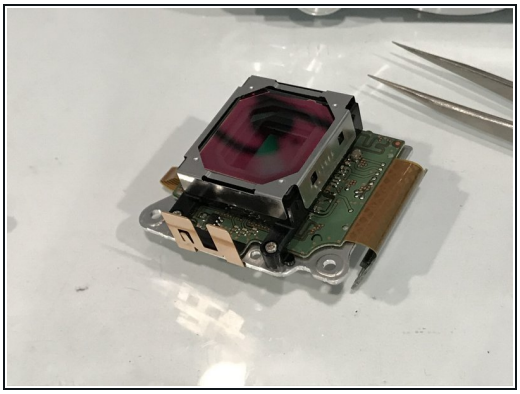


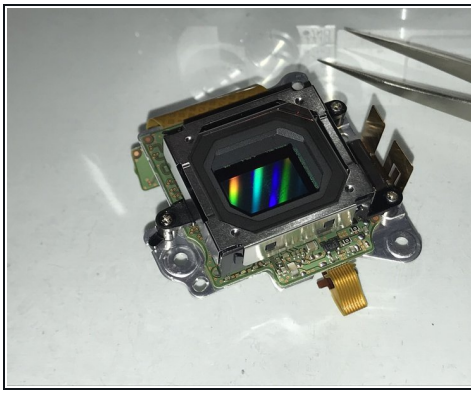


- Mark 3 screws for their ID and position.
- Also record how many turns to the limit.
- Measure and record distance to front flange if possible.

⚠ These screws will affect focus focal plain.

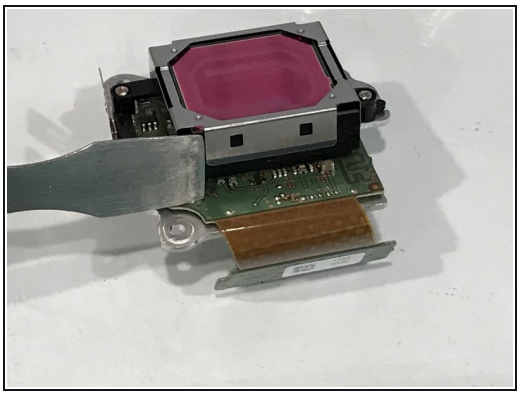
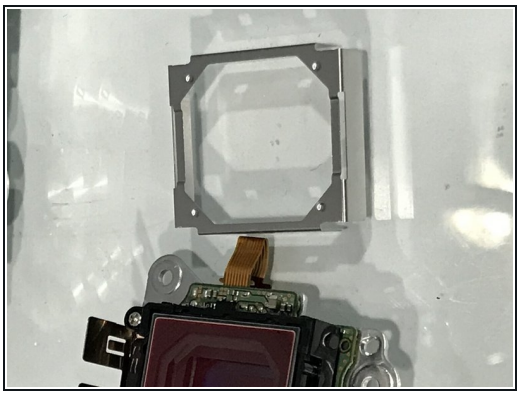
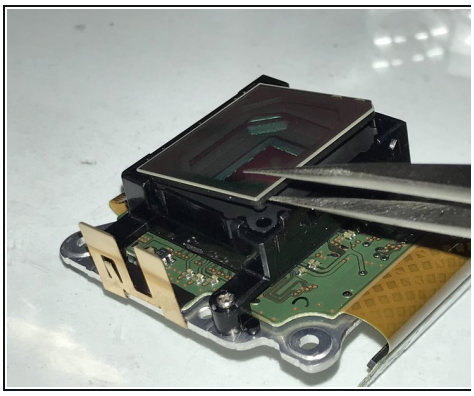
Step 22 — Behold, the sensor





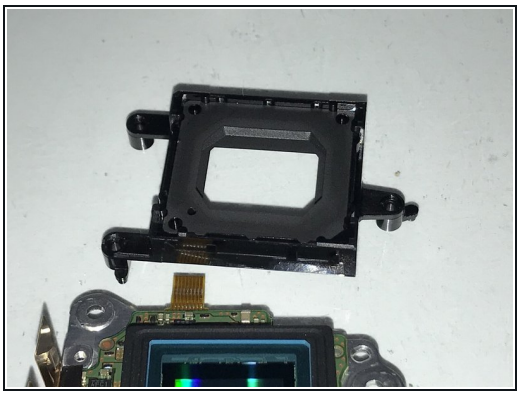
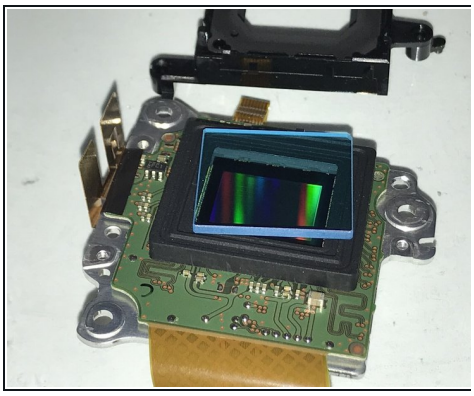
- Sensor module and IR-cut filter

Step 23 — Remove IR-cut

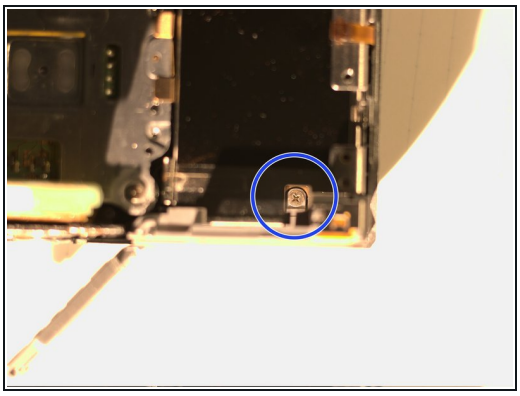
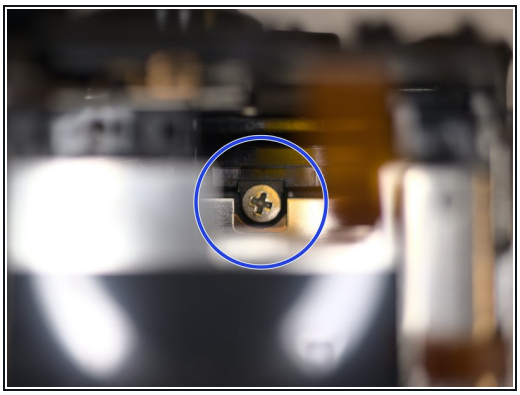
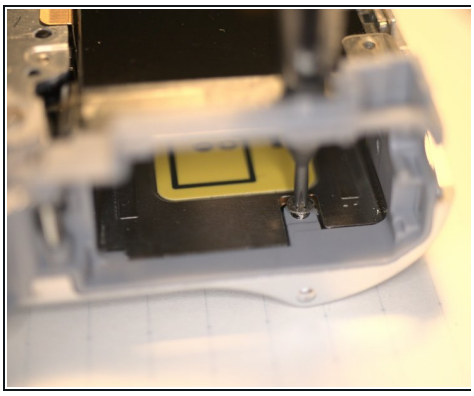
- Hold the IR-cut filter by its edge, to avoid scratches and contamination.
- Use plastic tweezers can avoid scratches.

Step 24 — The sensor itself

- And I don't quite remember what is this filter/window.

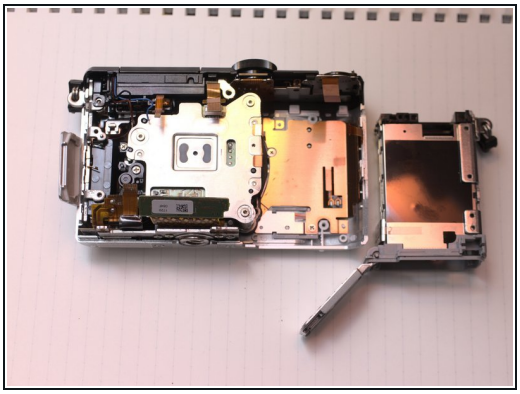
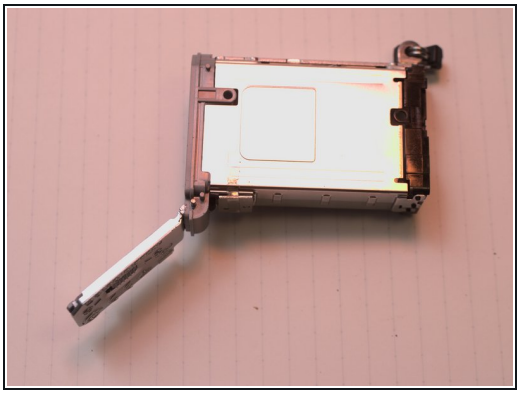
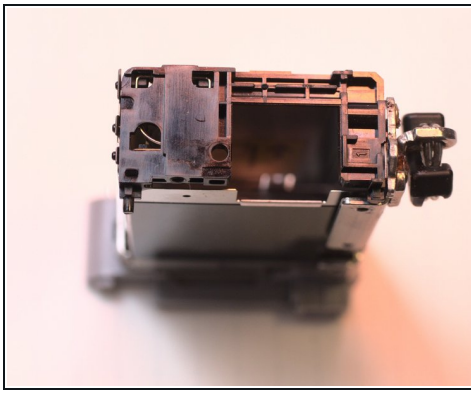
Step 25 — Battery bay

- remove 2 self tap screws (upper and lower)

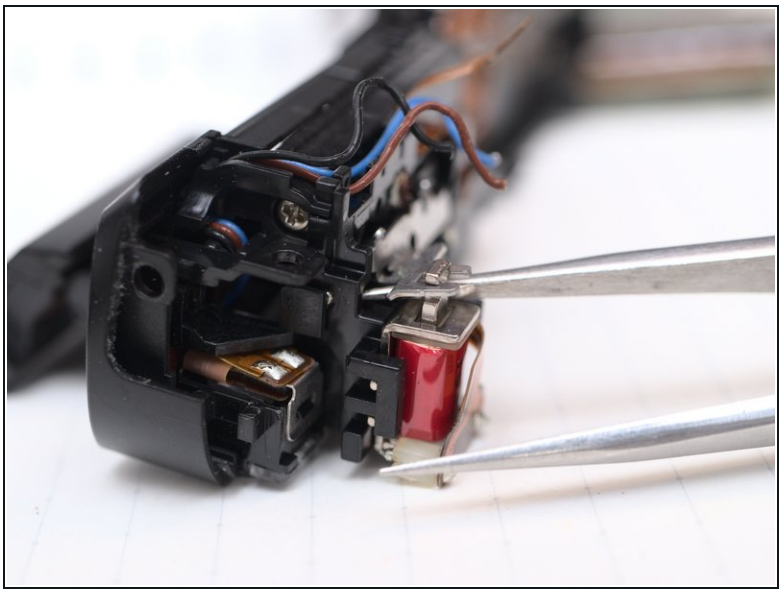
ⓘ Sorry for the magical color change of victim camera and chaotic white balance on of my desk(mixed warm LED and flash).

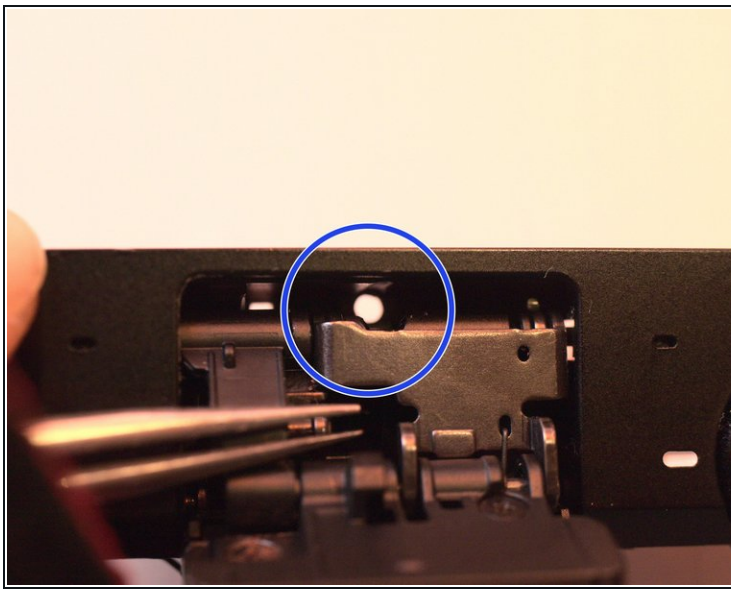
Step 26 — The battery bay

- Insert wisdom here.

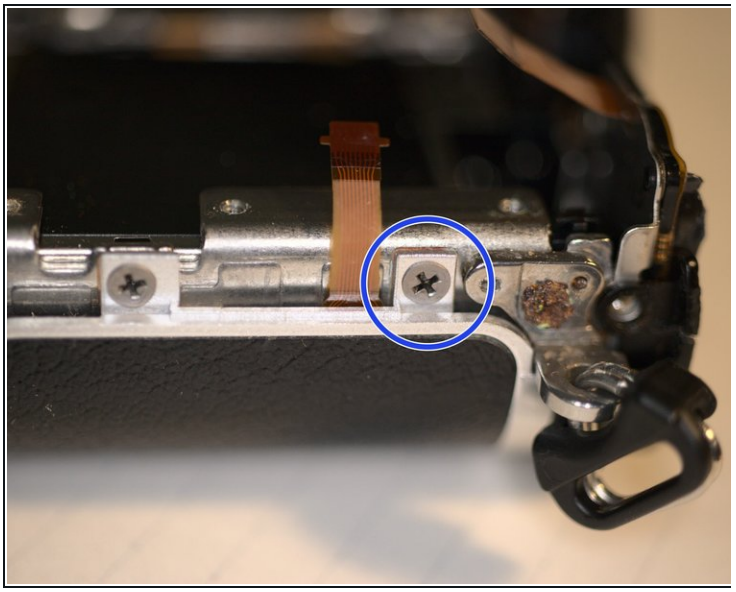
Step 27 — Top Case 1





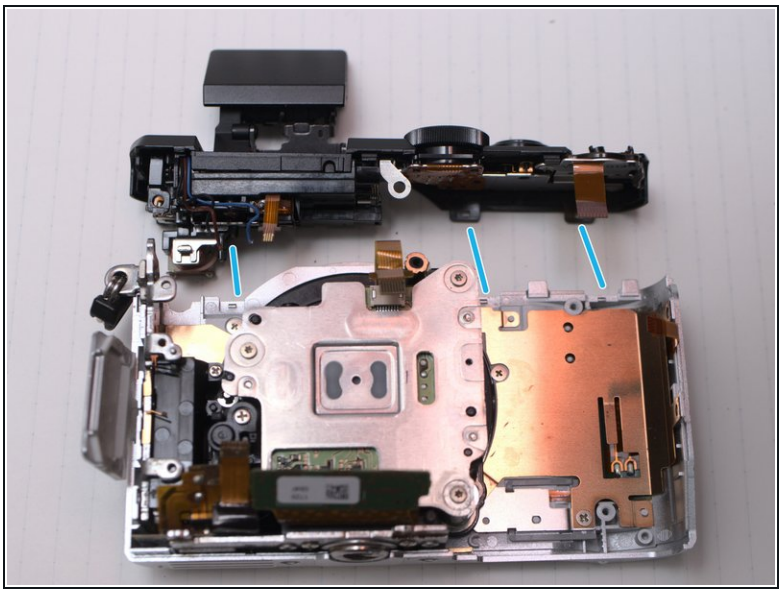
- Pop up flash by pulling up the solenoid
- Remove screw in flash bay

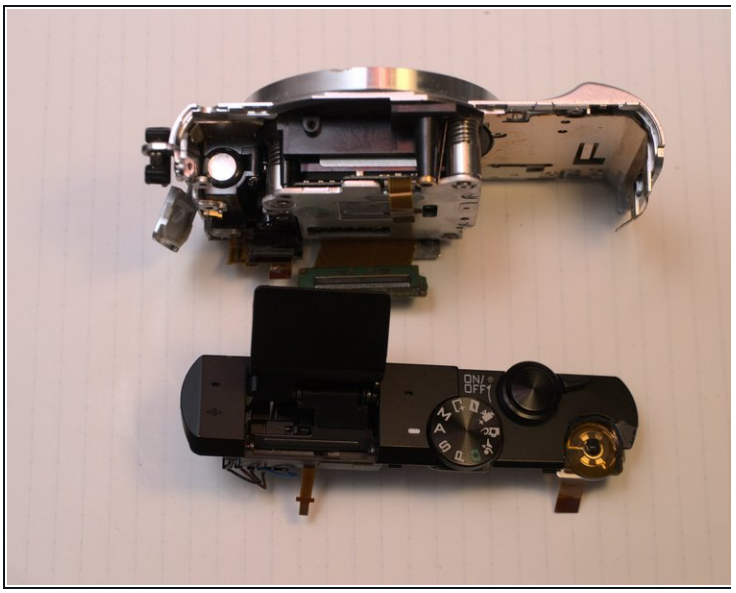
Step 28 — Top case 2



- Remove 2 self tap screws

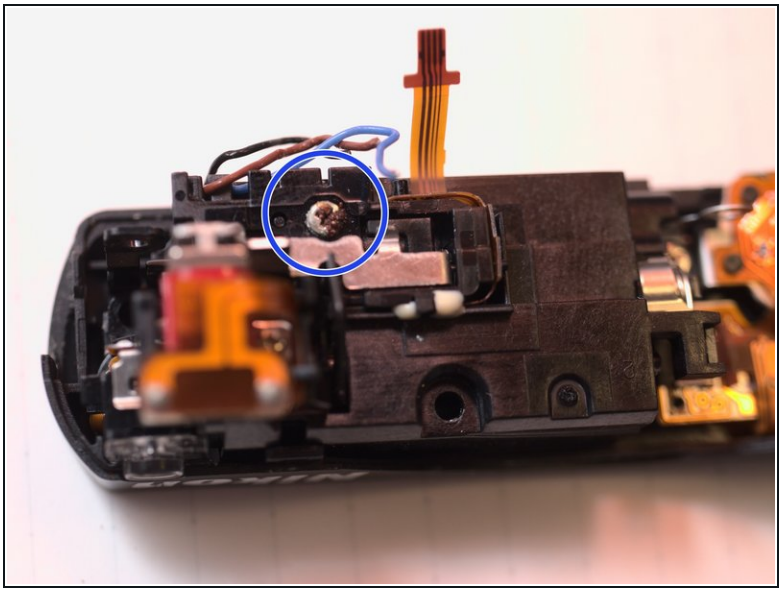
Step 29 — Top Case 3

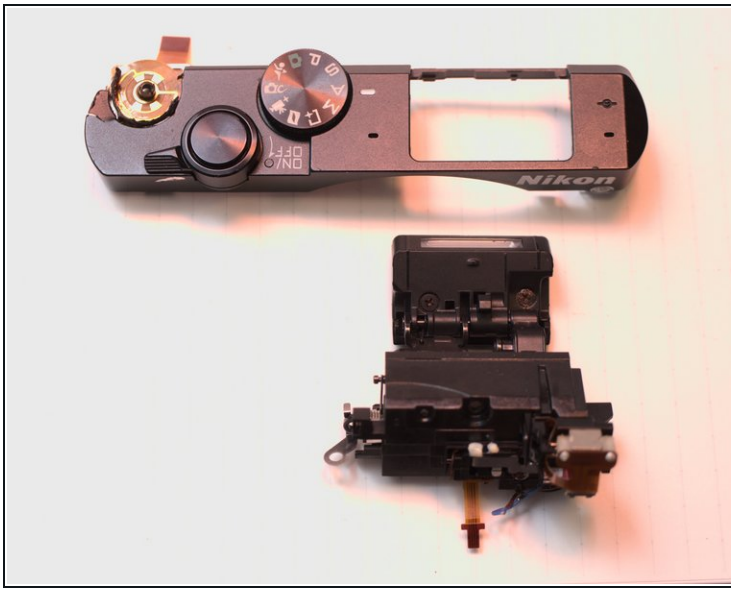




- Now you can wiggle off top case.
- Only 3 small clips

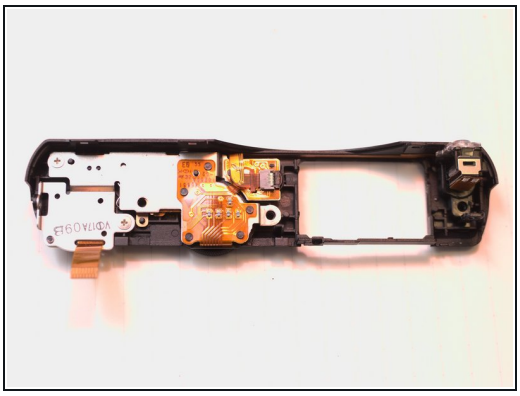
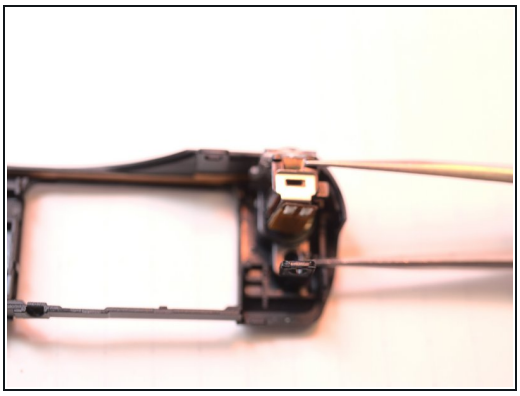
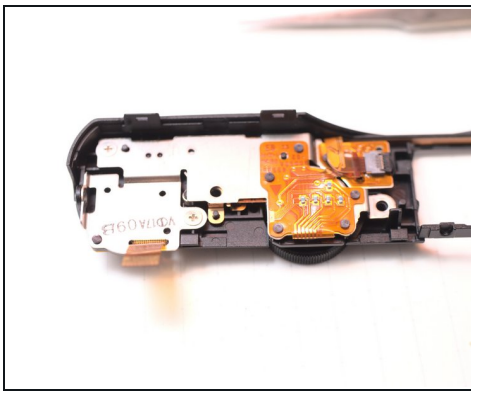
Step 30 — Flash head





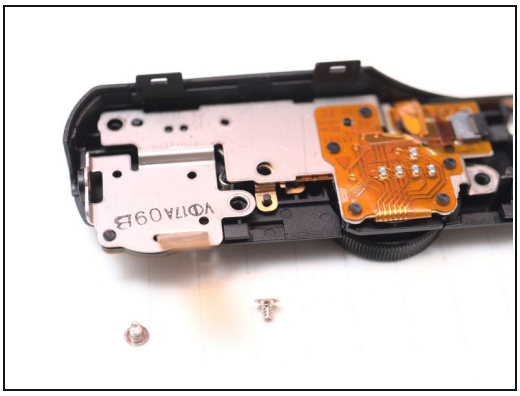
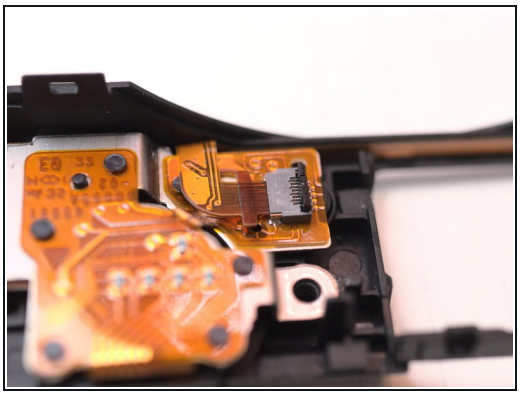
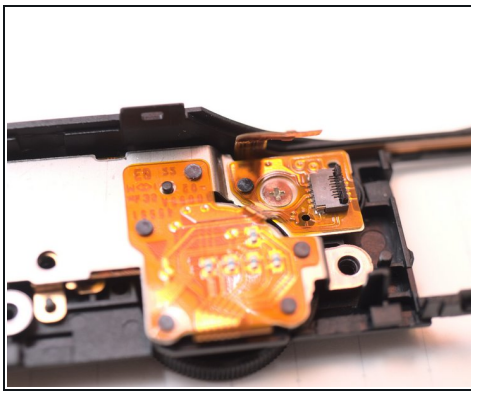
- Remove this screw
- Remove flash head

Step 31 — Top case 4

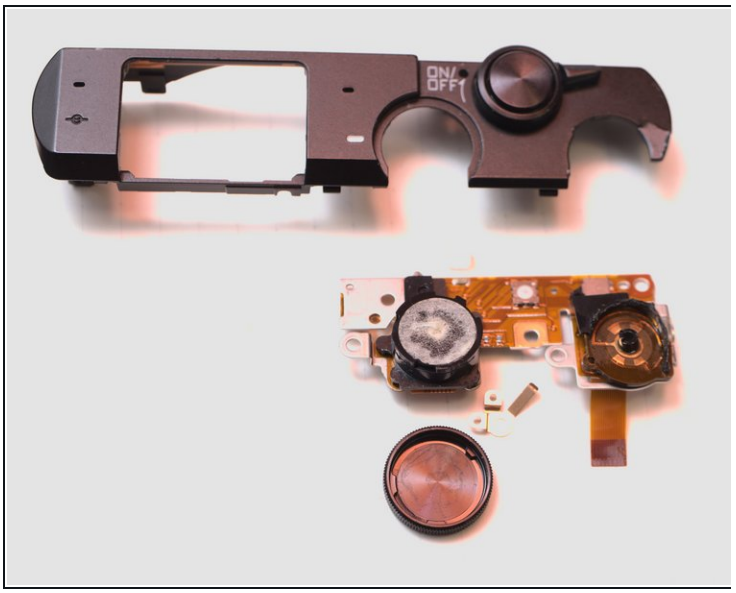
- Top Case
- AF assistant LED and left Microphone
- Switch board. Right microphone, power switch, shutter button, mode dial, main command dial.

Step 32

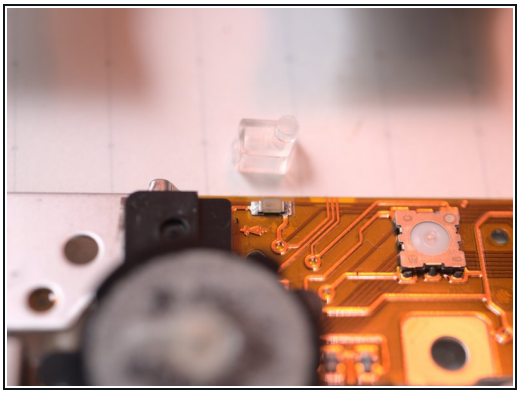
- screws
- FPC
- Sneaky screw

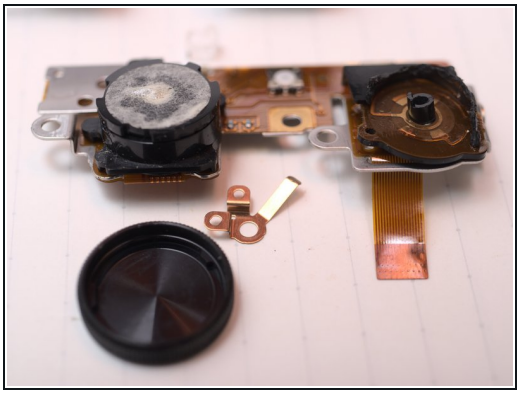
Step 33 — Mode dial cap

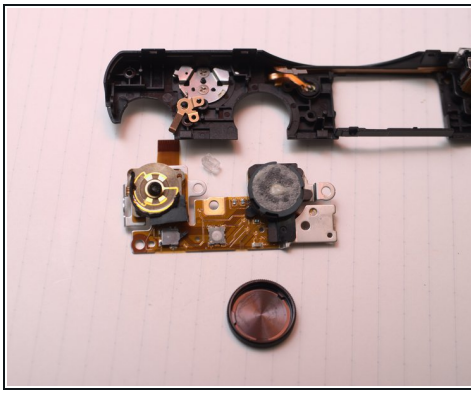


- Mode dial cap is double sided taped,
- Remove switch board.
- Someone else already murdered the main dial and video record button...

Step 34

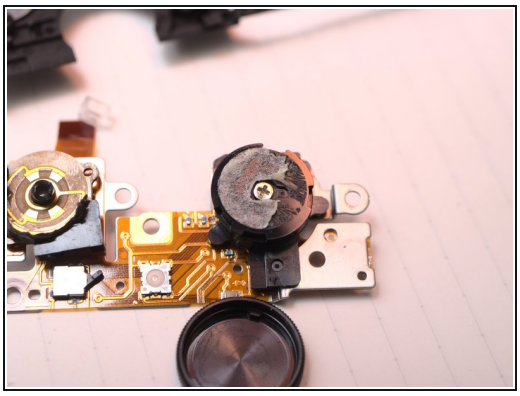
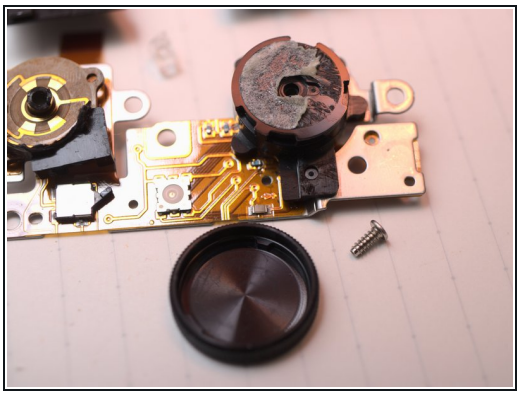
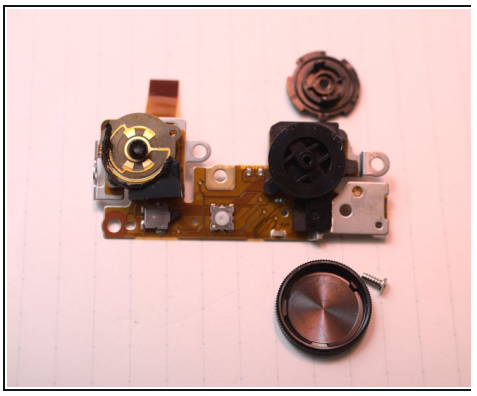






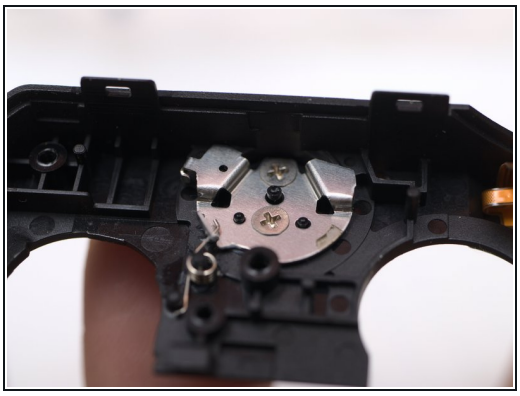
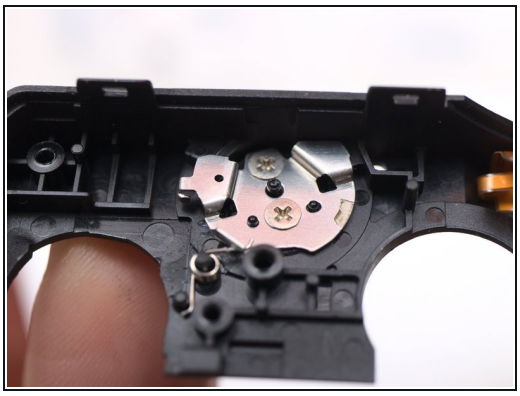
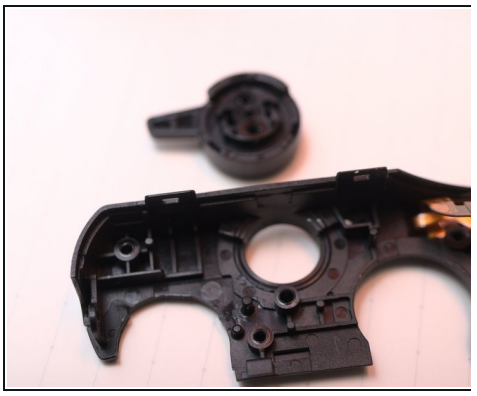
- Light guide
- other angles

Step 35 — Mode Dial

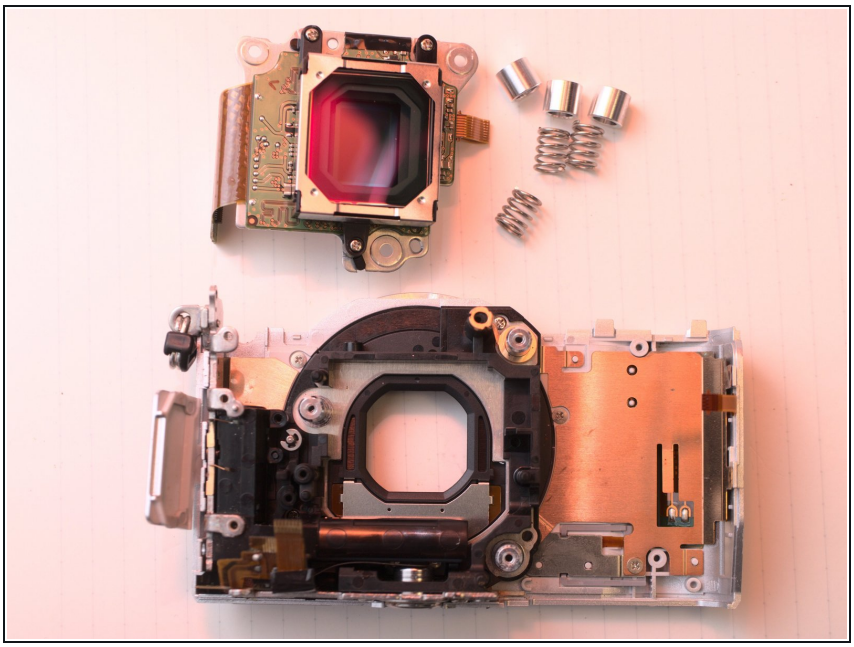
- Sneakier screw

Step 36 — Power switch and shutter button

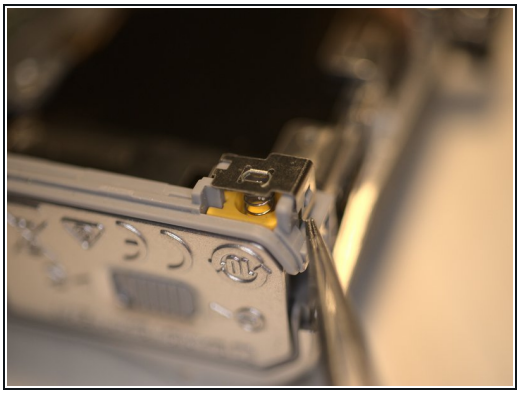
- sc...s

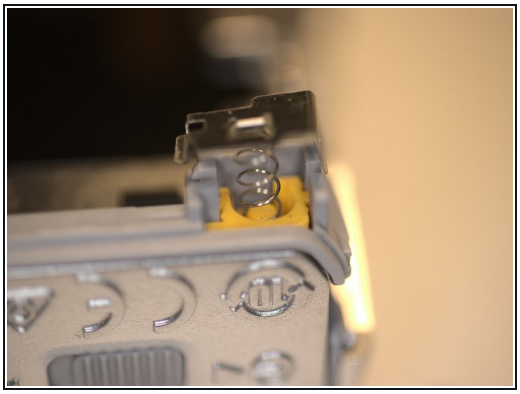
Step 37 — Sensor and focus adj

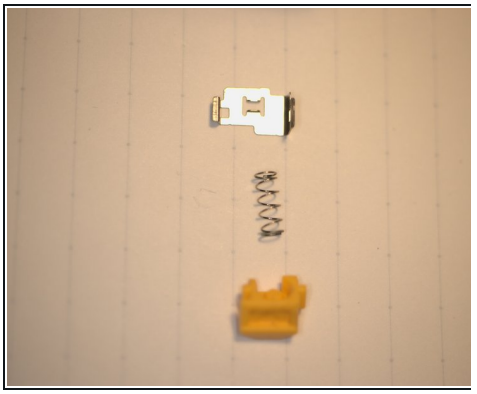


- Focus adjust and focal plane calibration is important to par-focal lenses

Step 38 — Battery latch

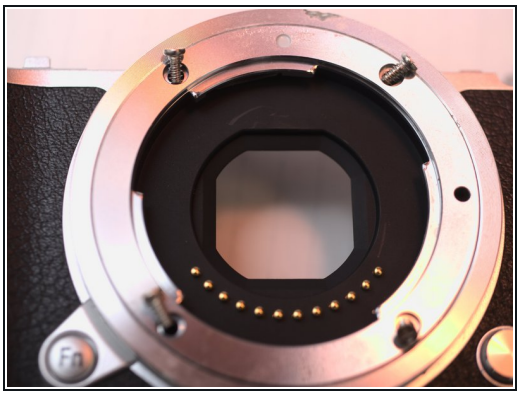
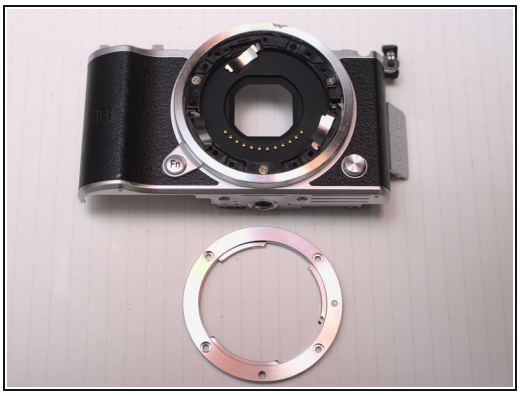
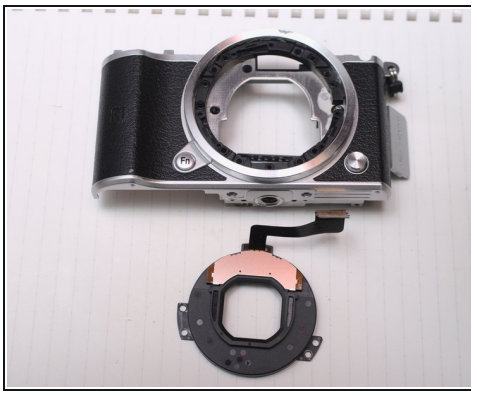






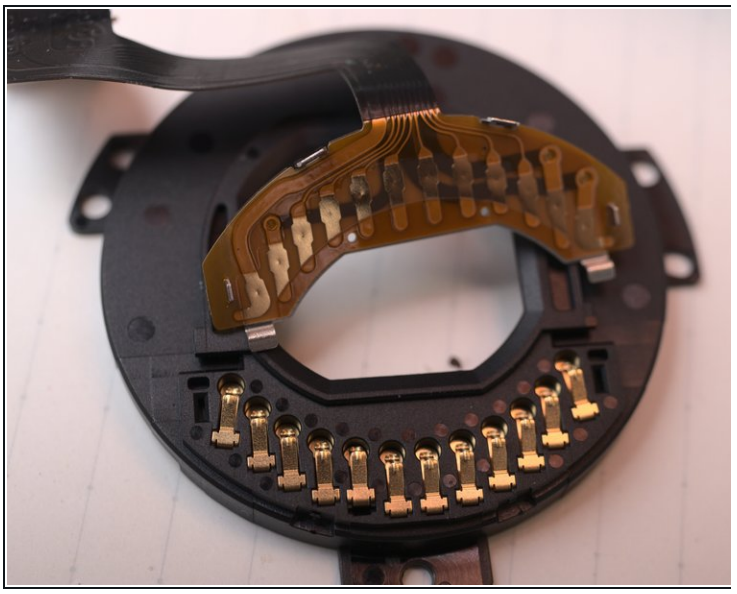
- Insert wisdom here.

Step 39 — Lens mount

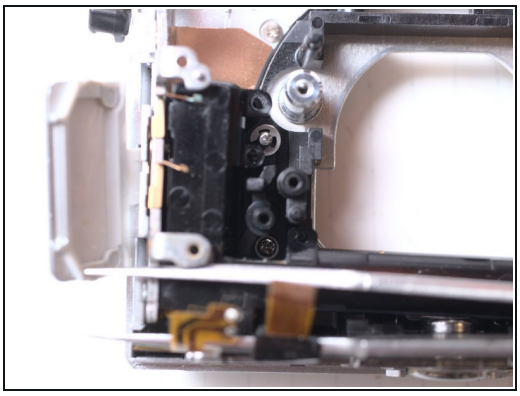
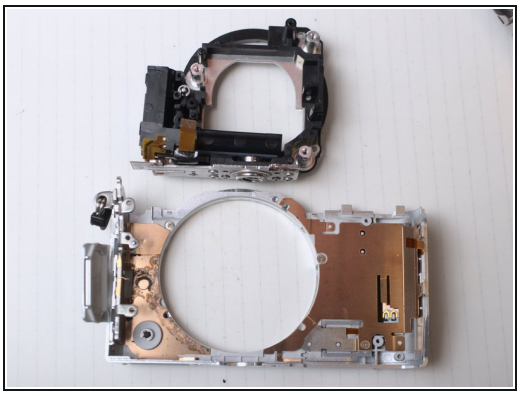
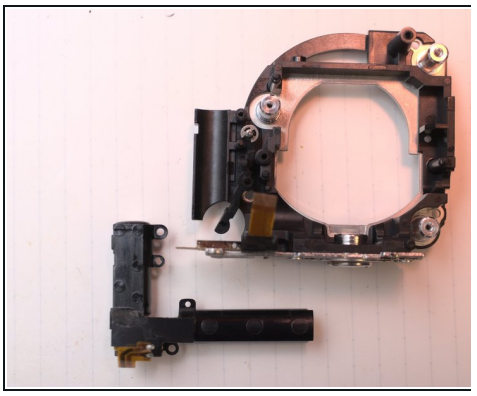
- and lens contacts

Step 40 — Lens contacts

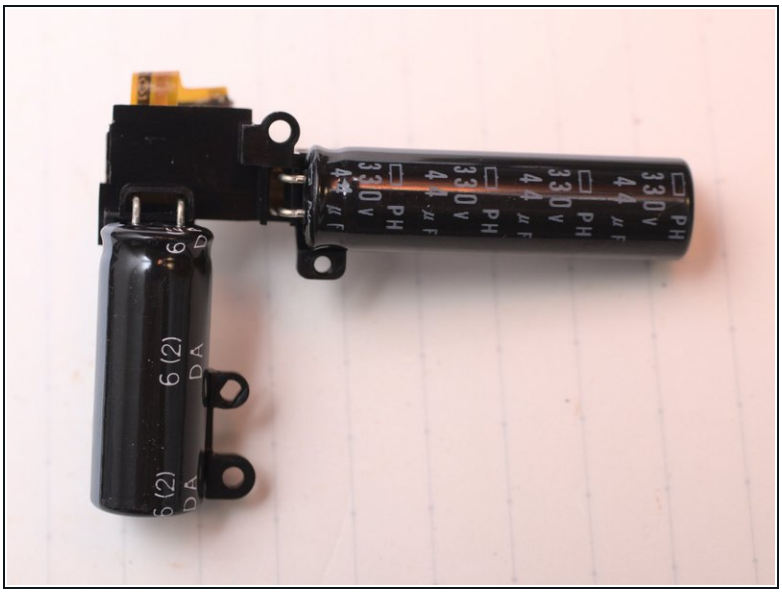
- Insert wisdom here.

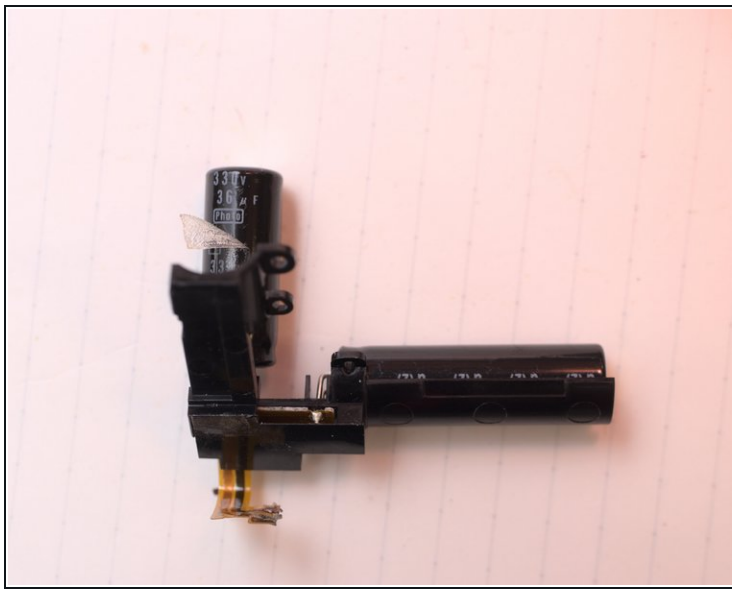
Step 41 — take apart everything

- Insert wisdom here.

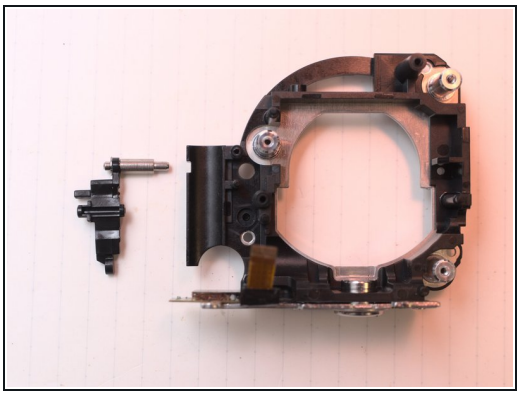
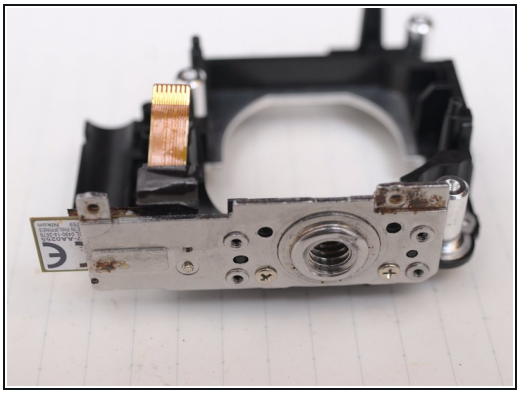
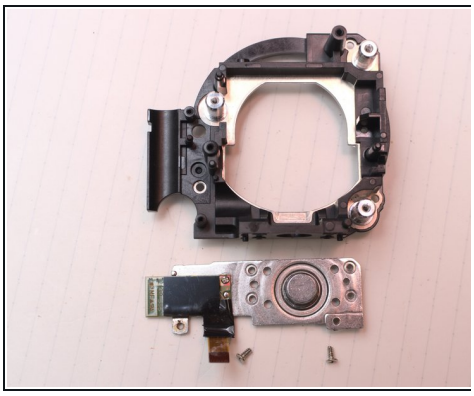
Step 42 — Flash capacitor





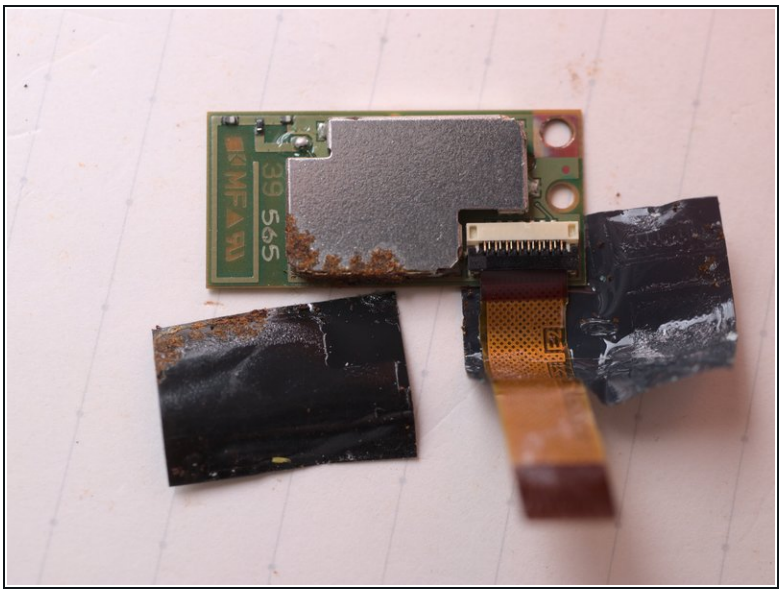
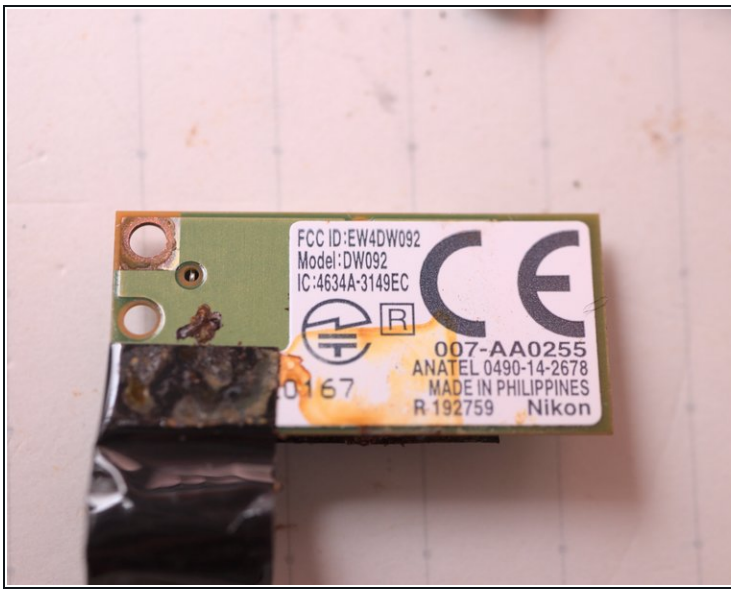
- Capacitor / condenser, which do you prefer?

Step 43 — Wireless module

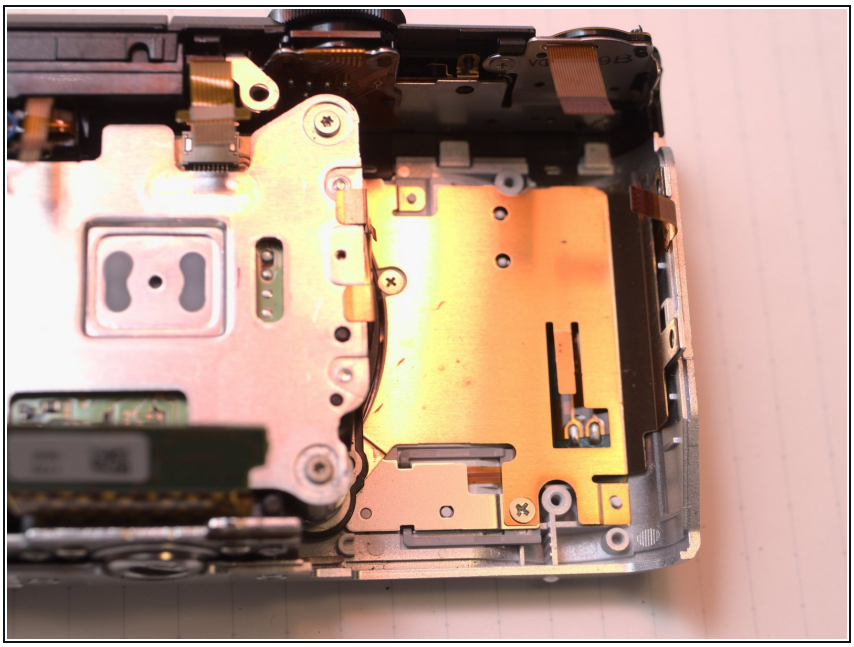
- WiFi and bluetooth
- Lens latch pin

Step 44 — Wiireless module

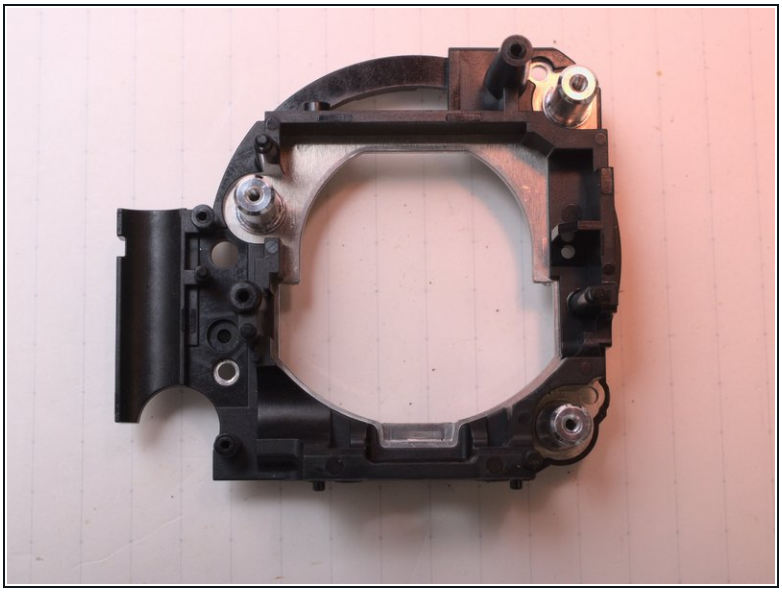
- This one is liquid damaged

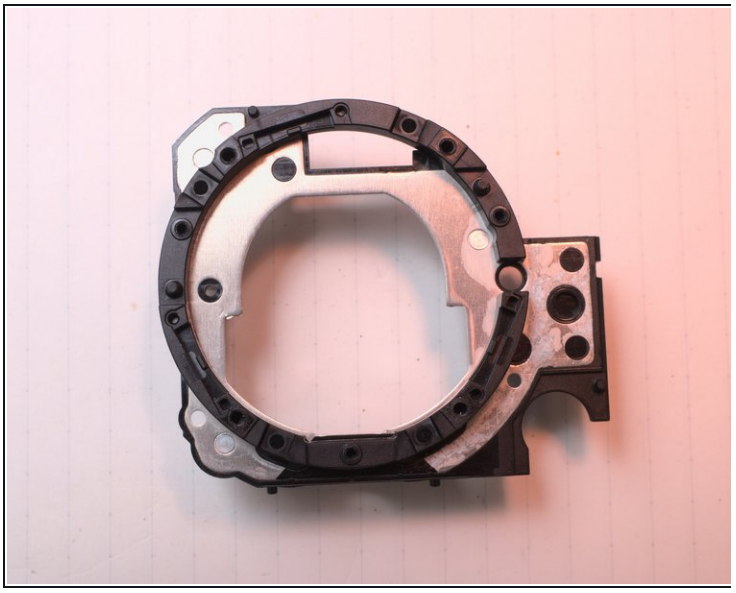
Step 45 — NFC module



- under the shield

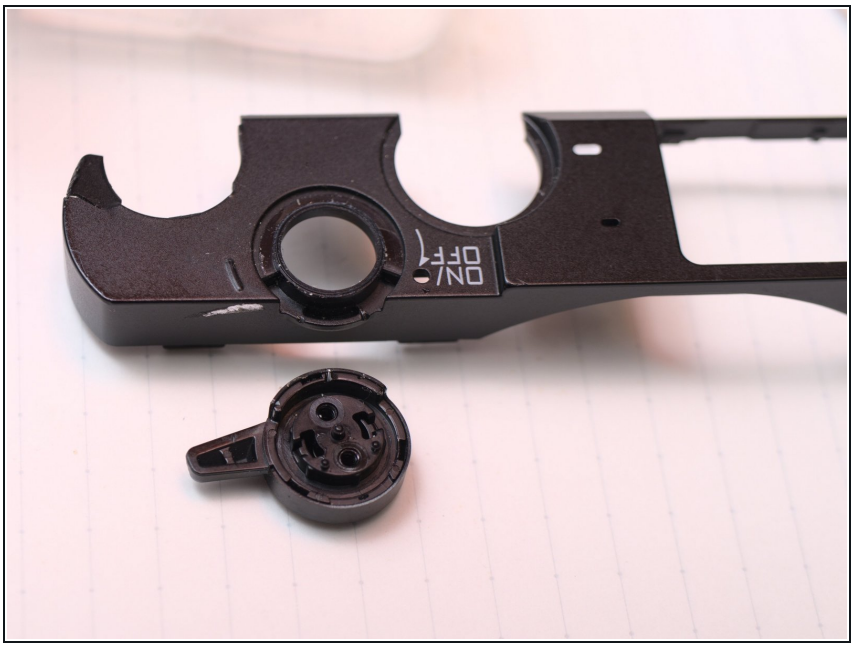
Step 46 — More pics





- Insert wisdom here.

Step 47 — More pics



- Insert wisdom here.