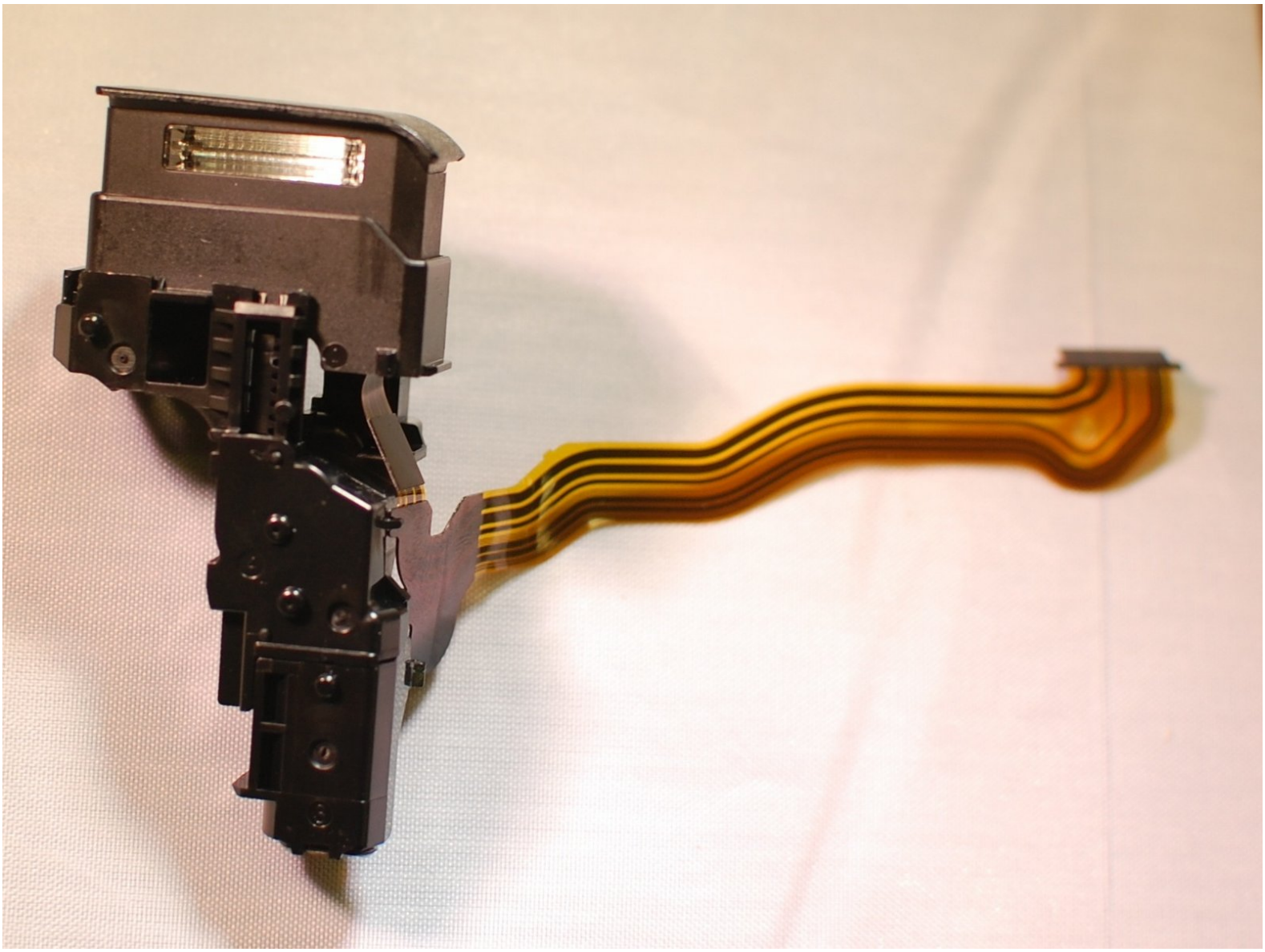
Sony Cyber-shot DSC-HX20V Flash Assembly Replacement

Pictures dark because your flash isn't working? We can help you fix that.

Written By: Bryson O'Neill



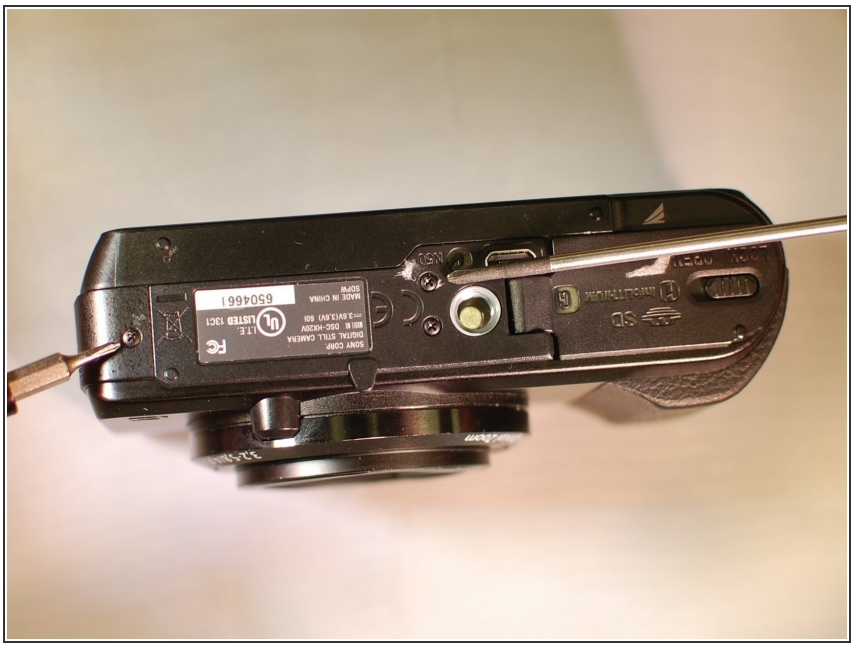
INTRODUCTION

To replace the flash on your device you are going to have to take quite a bit of pieces out.

TOOLS:

- 64 Bit Driver Kit (1)
- Phillips #00 Screwdriver (1)
- iFixit Opening Tools (1)

Step 1 — LCD



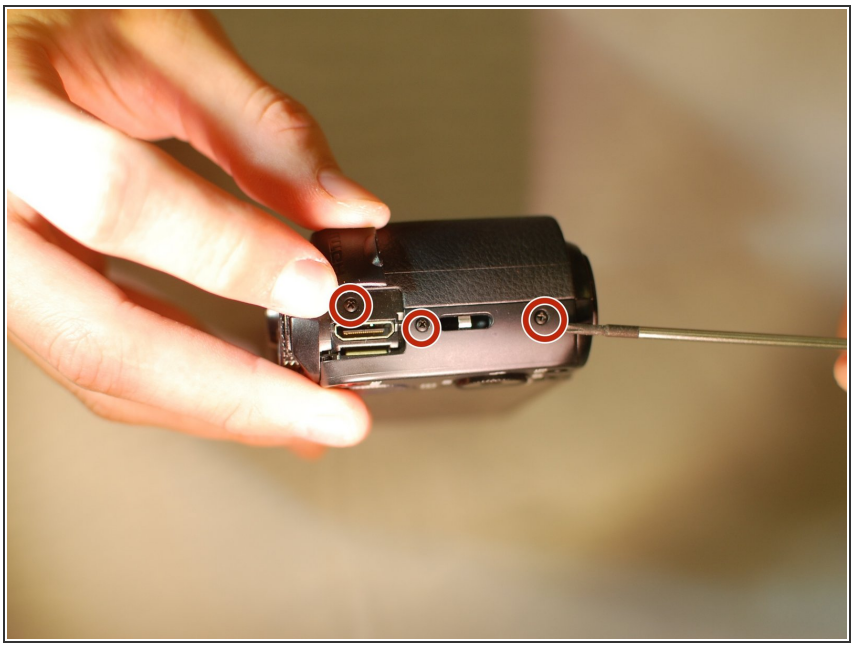
- Orient the device so the bottom is facing up, and the lens is facing you ("bottom view").

For further reference, consult the service manual. [Link to service manual.]

Step 2

- Remove these two black M1.4 X 3.5 Phillips head screws.
- The third, unmarked screw does not need to be removed at this time.

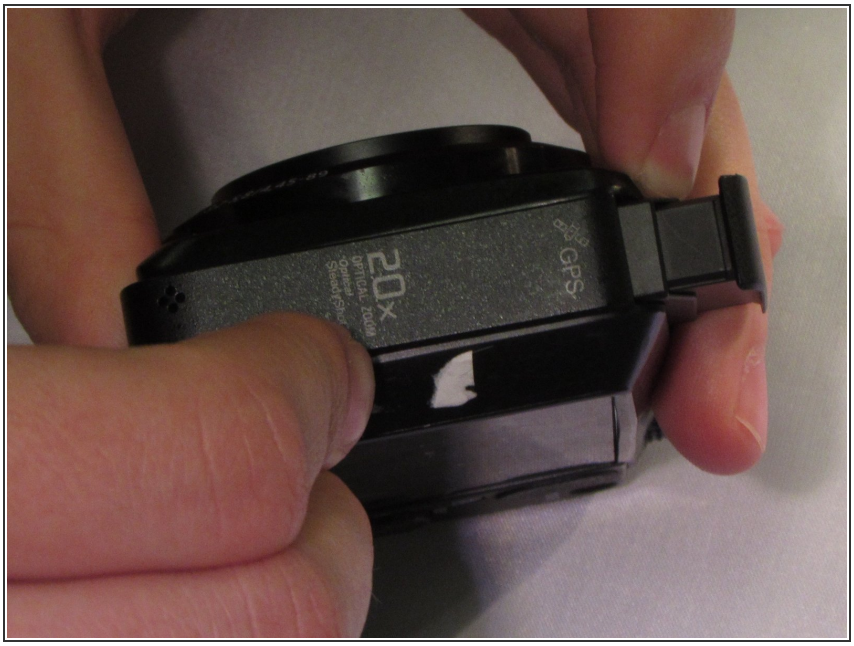
Step 3



- Orient the device so the LCD is facing you, and the hdmi cover is facing up ("left view).
- Remove these three black M1.4 X 3.5 Phillips head screws.

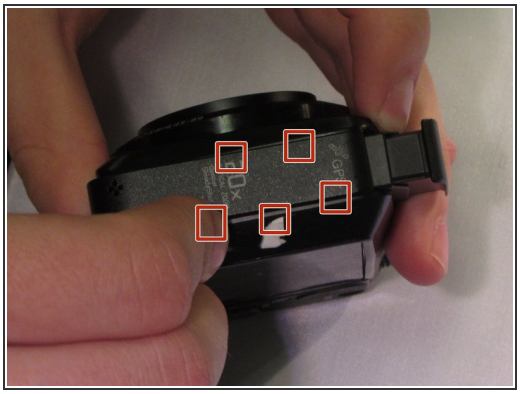
You must lift the hdmi cover to expose one of the screws.

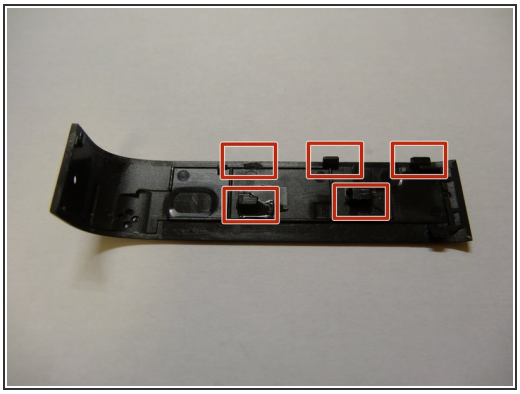
Step 4

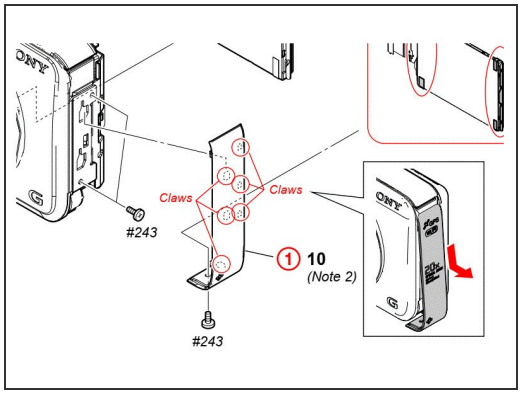


- Orient the device with the Wifi/GPS logo facing up ("right view").

Step 5







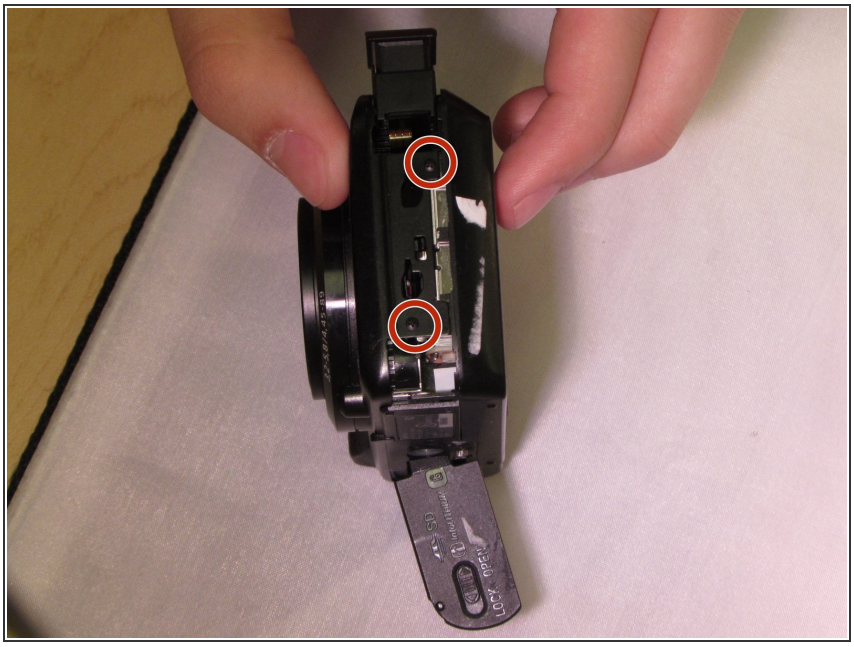
- Use a prying motion and a plastic opening tool to pry the side panel up.

Areas under the squares are approximate locations of retaining claws, shown at right.

Be careful not to break any of the retaining clips as you pry up this panel.

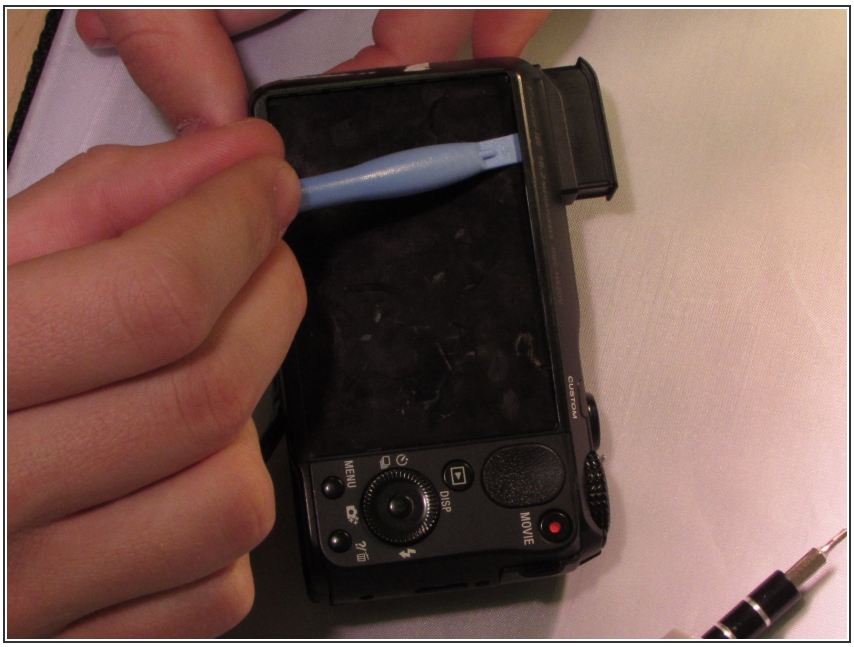
An image from the Service Manual has been added, which shows this side cover should be slid down before being removed, not just pried up as shown in the first picture in this step.

Step 6



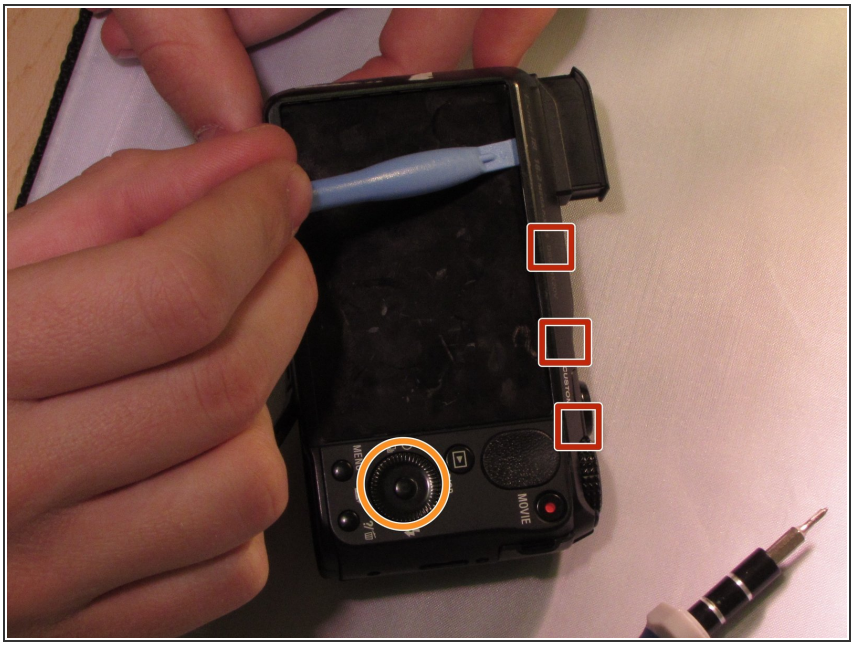
- After removing the panel, remove the two black M1.4 X 3.5 Phillips head screws.

Step 7



- Orient the device so that the LCD is facing you ("back view").

Step 8



- Use the plastic opening tool with a prying motion, going between the case and the LCD, from the middle

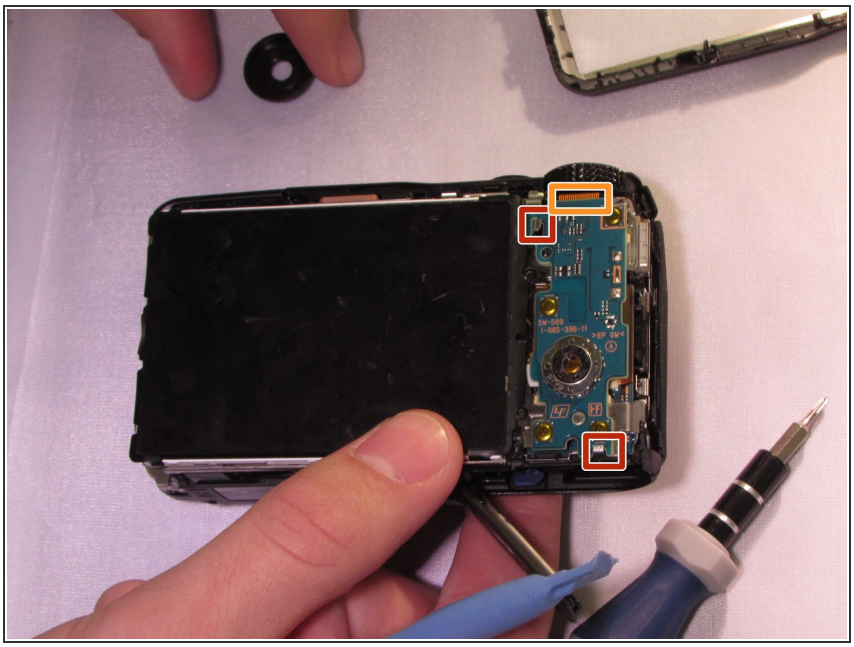
of the LCD to the right of the device, undoing the claws retaining the back.

When replacing the back cover of the device, ensure the flash module is **UP**.

The back cover should come off easily but you might hear light snapping or popping.

The rotary wheel and button are not secured. They will come loose when the back cover is removed. Set them aside for reassembly

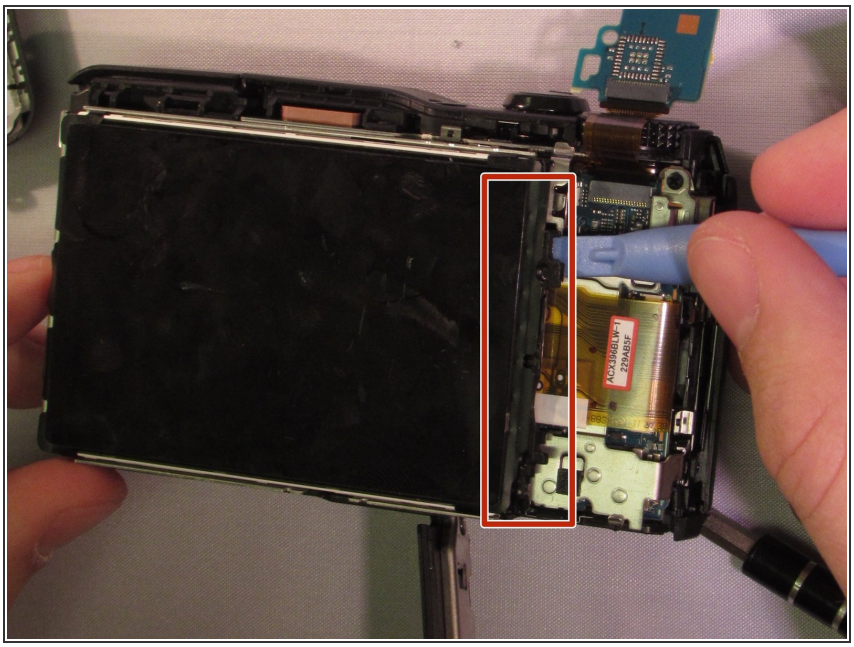
Step 9



- Unhook the small printed circuit board by gently pressing the board towards the top of the device and lifting up.

Note a ribbon cable should be attached at the top. This does not need to be disconnected yet.

Step 10

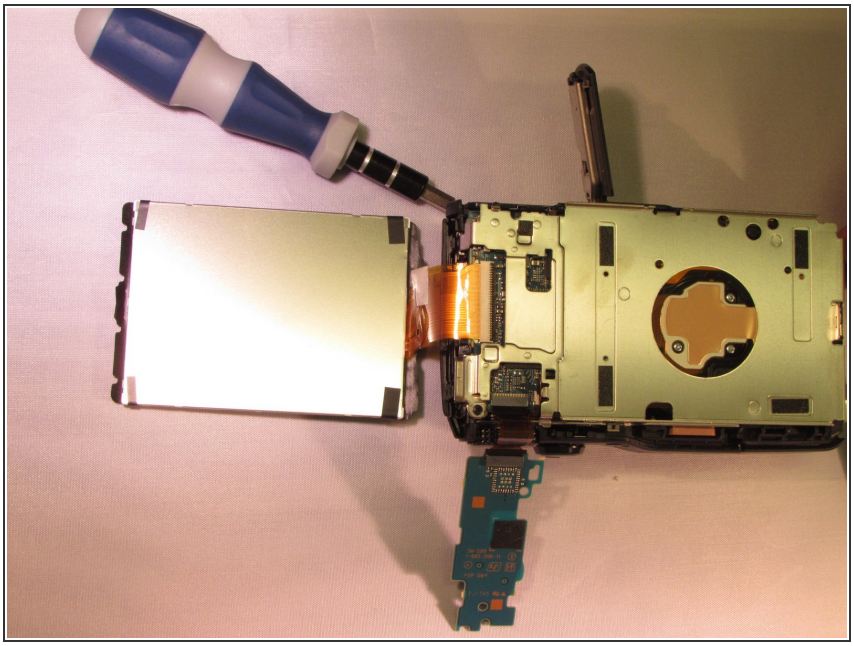


- Using a plastic opening tool remove the black LCD retainer clip to the right of LCD.

Note the orientation of the black LCD retaining clip and how it comes out of the camera.

If in doubt, consult the service manual. (Pages 25-27) Click to continue to the service manual. This has a reference number of 3 in the linked diagram.

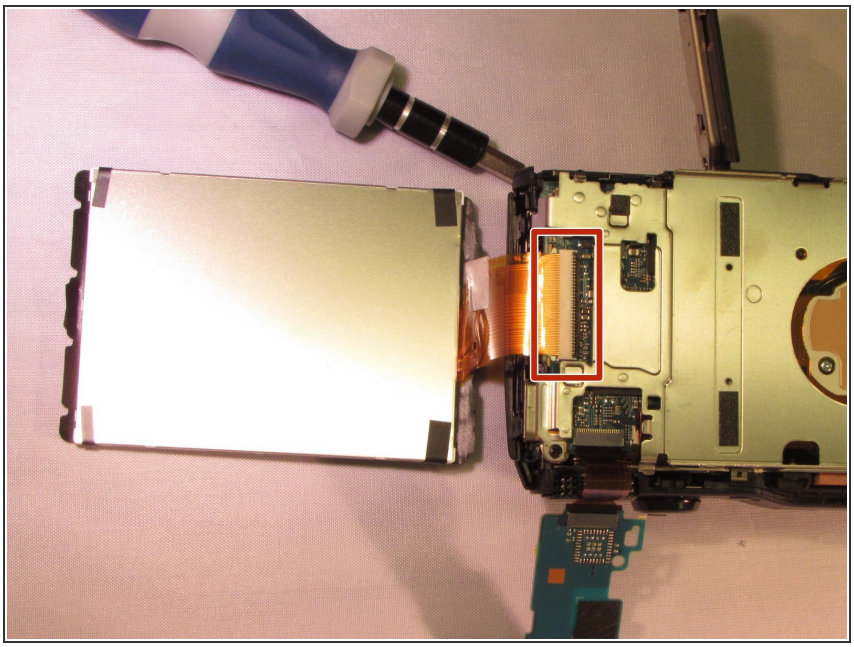
Step 11



- Use the plastic opening tool to gently lift the LCD from the device

The LCD should be attached to a ribbon cable

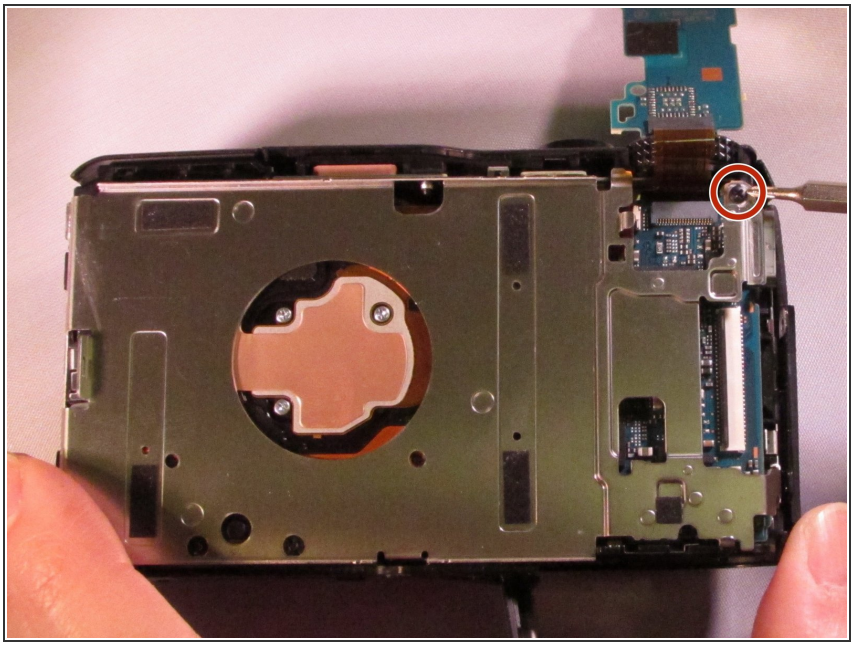
Step 12



- Using the plastic opening tool to lift the black retaining clip up to disengage the ribbon cable. Then gently pull the ribbon cable to remove.

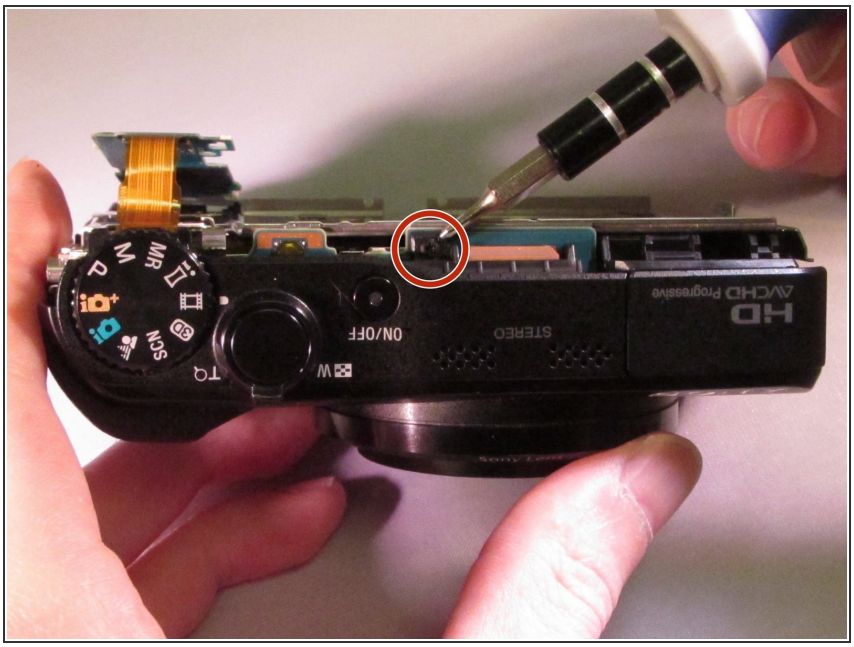
  ⓘ Be careful to not damage the cable.

Step 13 — Lens Assembly



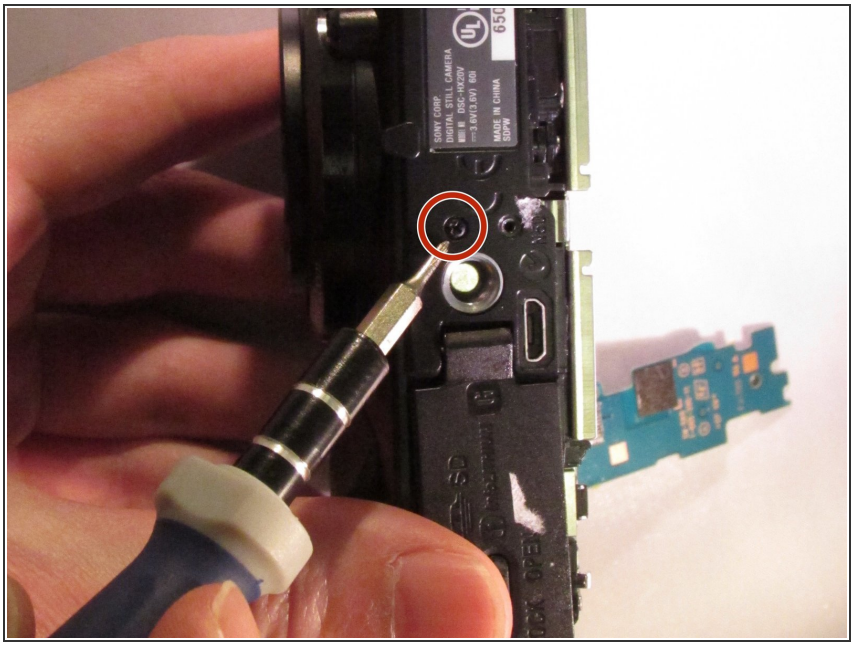
- Remove the black M1.4 X 3.5 Phillips head screw in upper right corner of the device.
- Service manual for reference: Click to go to the service manual.

Step 14



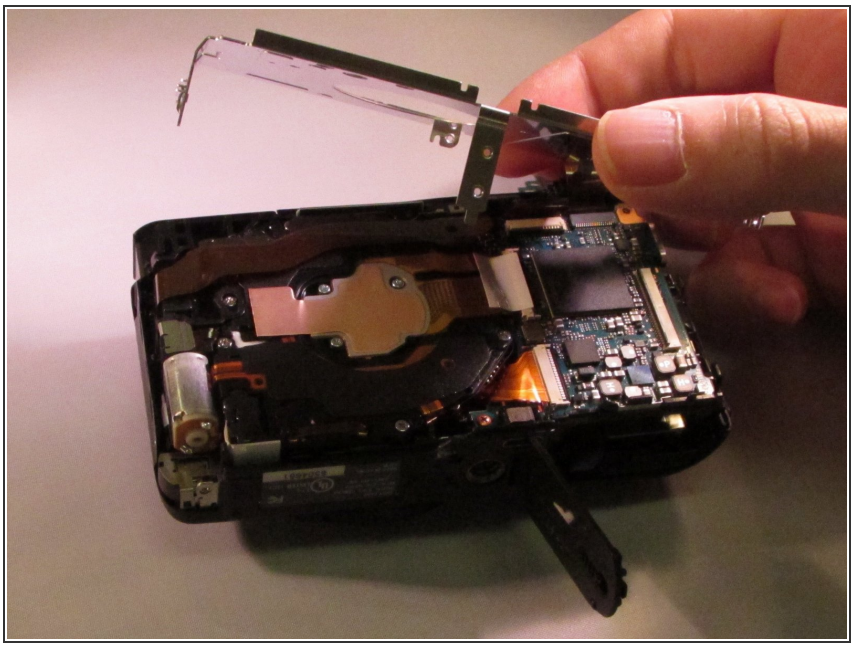
- Reorient the camera so you are looking at the "top view".
- Remove the black M1.4 X 3.5 Phillips head screw next to the ON/OFF button circled in red.

Step 15



- Orient the device so you are looking at the "bottom view".
- Remove the black M1.4 X 3.5 Phillps head screw located next to the tripod attachment.

Step 16

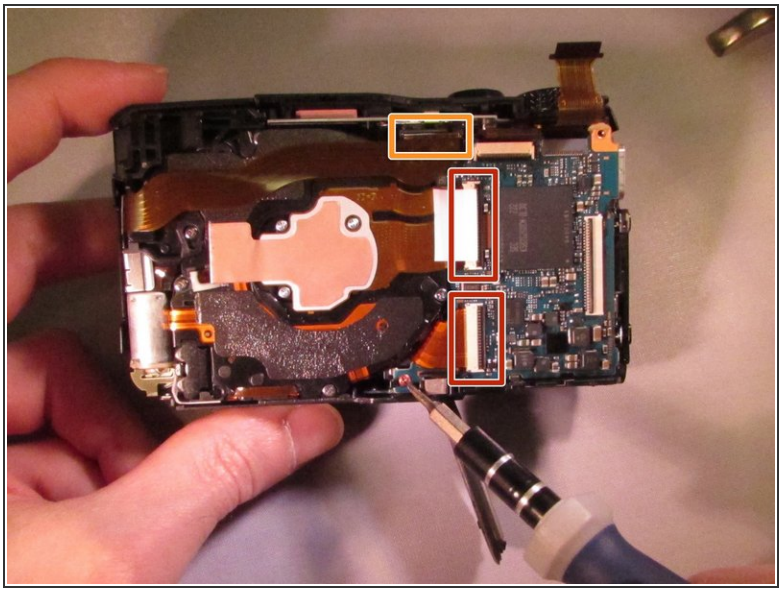


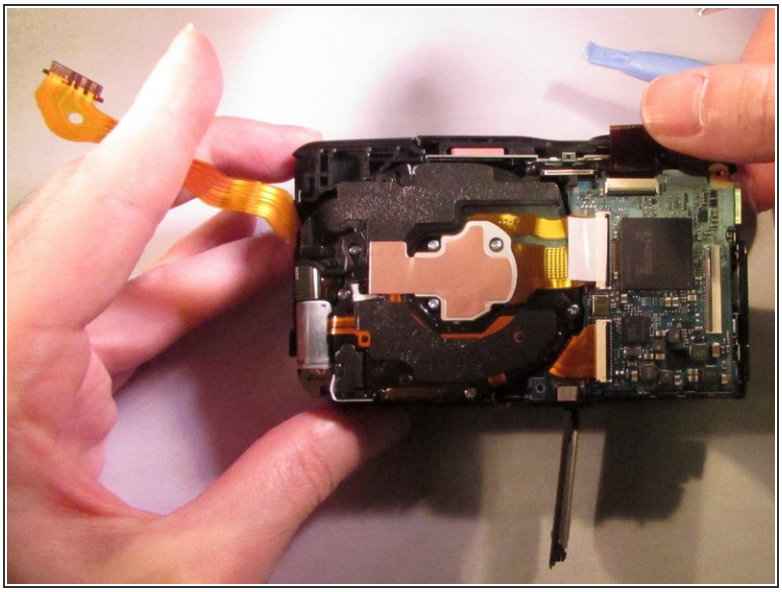
- Lift the aluminum back plate.

This should not take much force. If it doesn't come off easily, there is probably a screw still in.

Take note of the back plate's orientation for reassembly.

Step 17

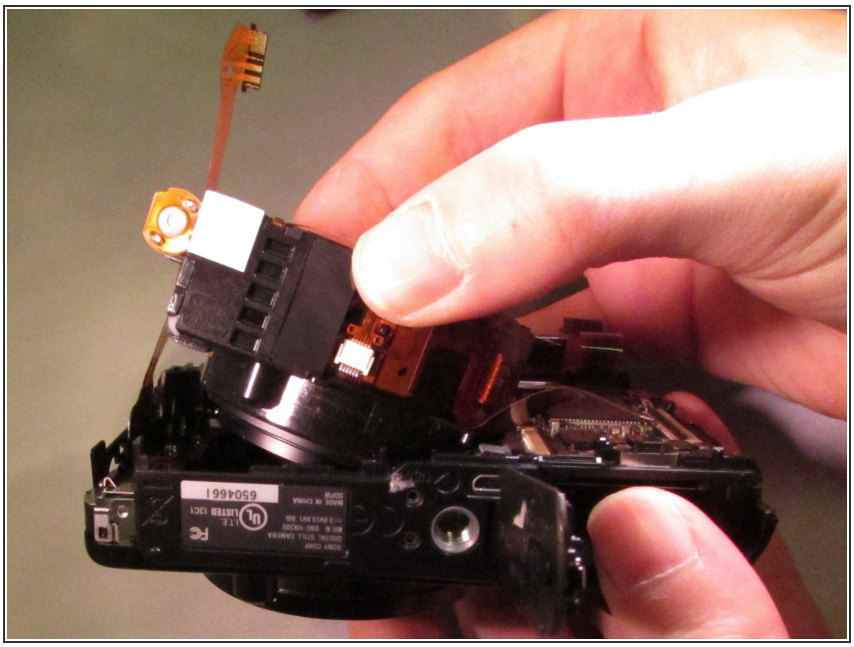




- The connections (red squares) have small black retaining clips. Using a plastic opening tool, lift upward towards the cable to unlock.
- The upper ribbon cable simply pulls loose.

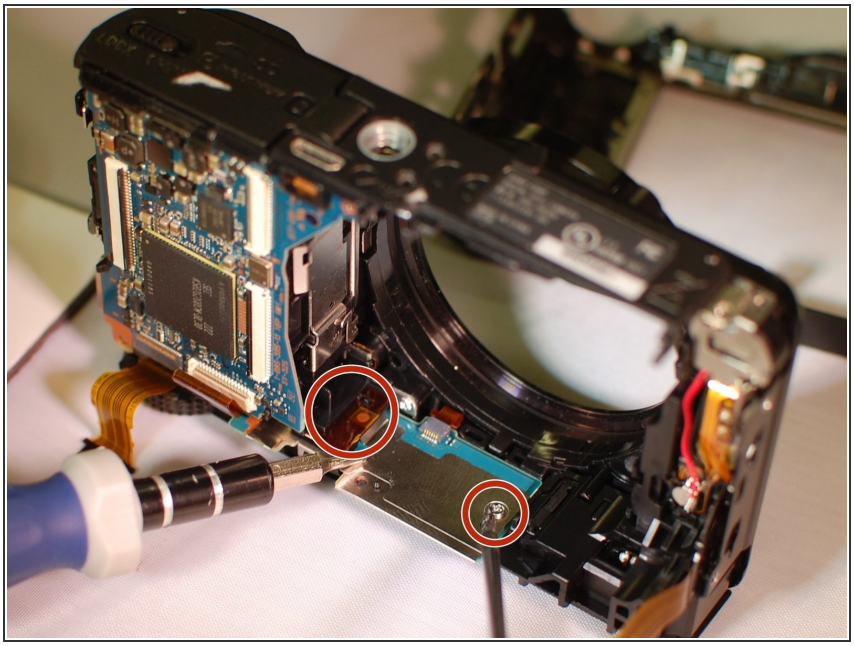
There is no retaining clip securing this ribbon cable.

Step 18



- Lift the lens block from the case.
  - You may need to gently push on the front part of the lens, from the front of the device, to help free the lens block. If you must, push on an edge, not the shutter.

Step 19 — Flash Assembly

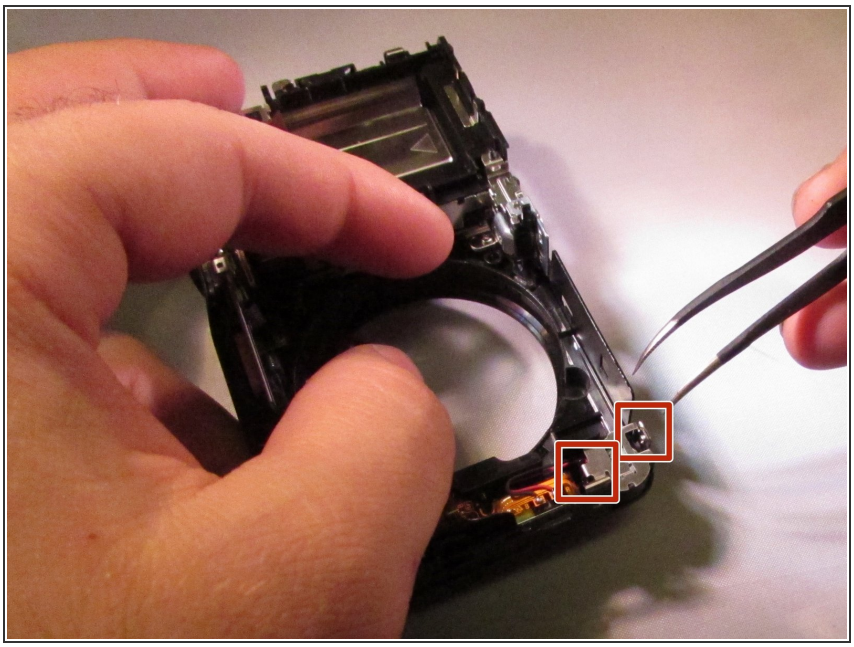


⚠ Charged capacitors can cause personal injury or damage the device. Use caution when proceeding.

- Discharge the capacitor by connecting the resistor jig between the highlighted squares.
  - ⓘ Keep the resistor jig in place for at least ten seconds.
  - ⓘ Create a 1kohm resistor jig (wrap the resistor with electrical tape leaving the ends exposed, use alligator clips, etc).

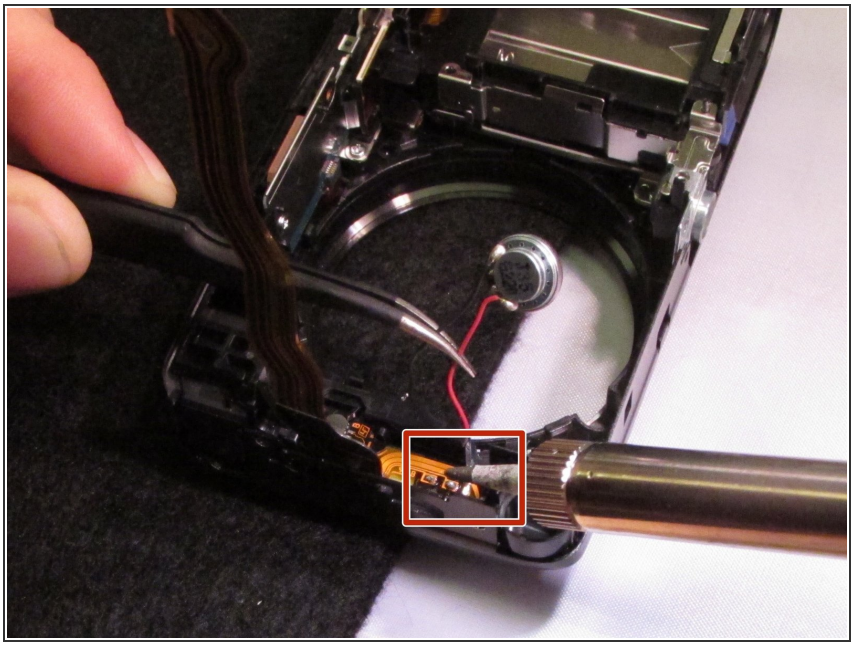
ⓘ For reference, consult the service manual. Click to go to the service manual page on discharging the capacitor.

Step 20



- Use tweezers to remove the speaker retaining clip. The retaining hooks locations are indicated, but not exact.

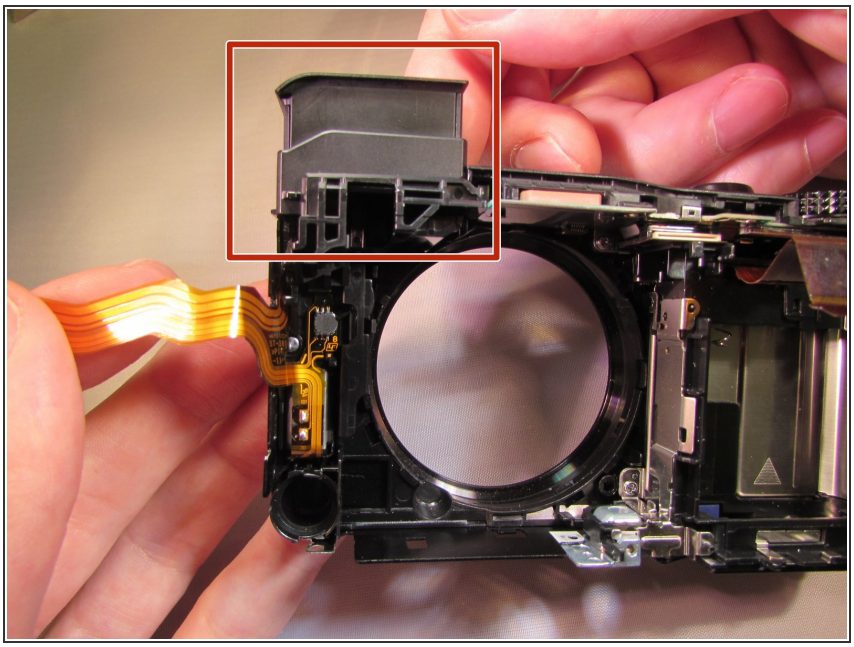
Step 21



- Remove the speaker by desoldering its wires.

This step is optional.

Step 22

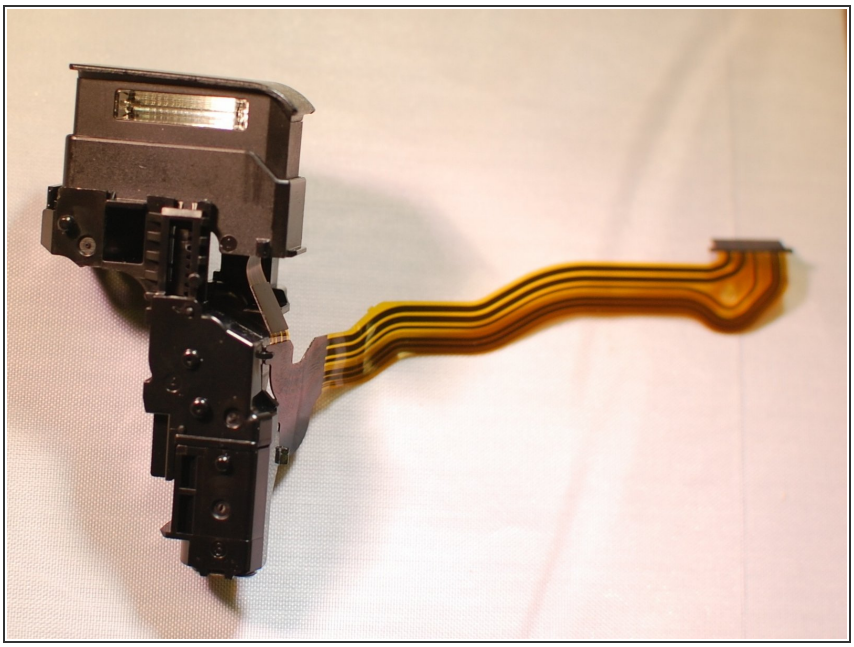


- Pull the flash up, as shown.

Step 23

- From the top of the camera, Use a plastic opening tool between the flash and the case to remove the flash.

Step 24



- And here is the how the flash module should look after being removed.
- This is a reference image: it is possible to further disassemble this module, and is not necessary.

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