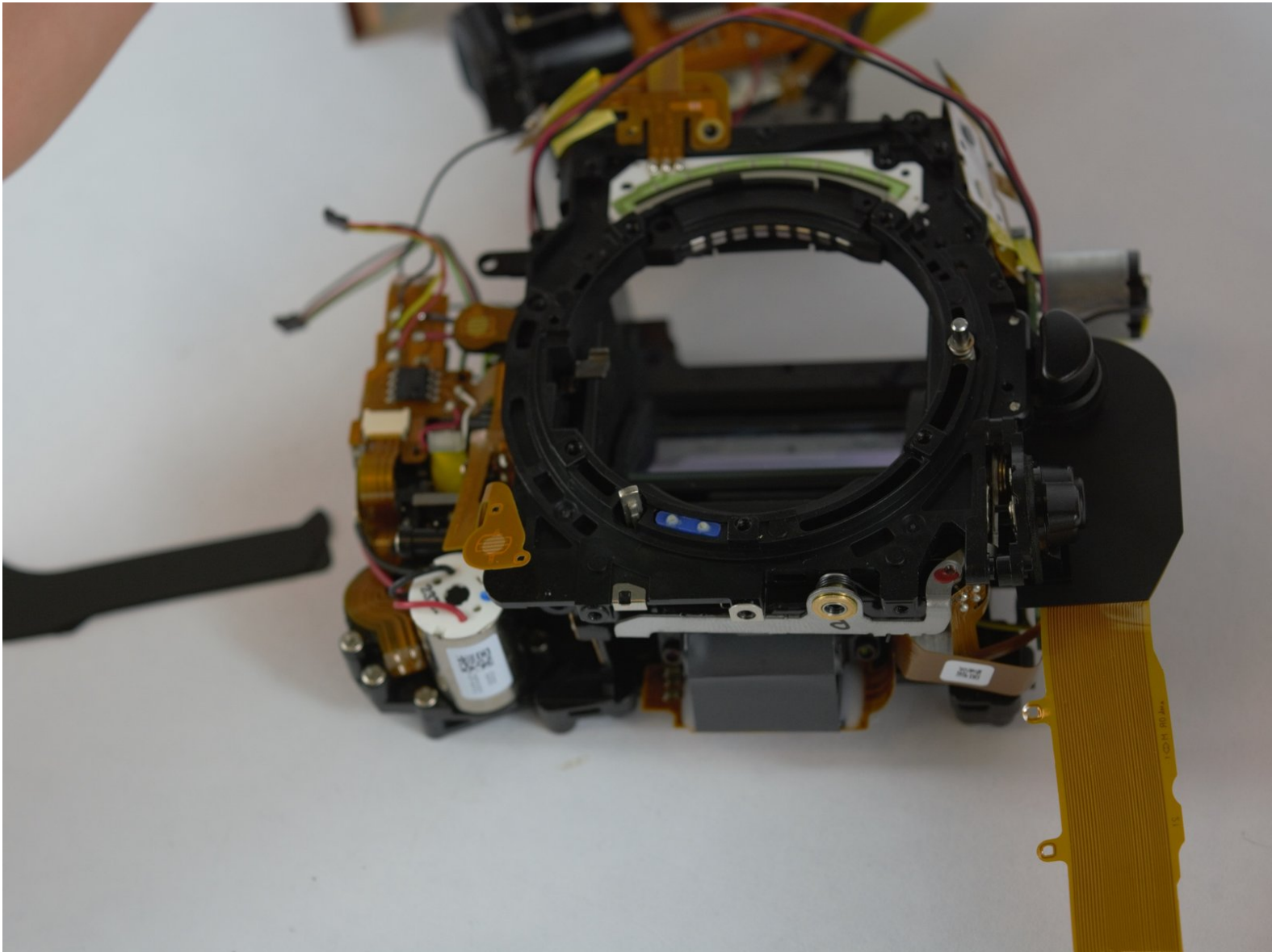




# Nikon D610 Autofocus Drive Motor Replacement

This guide will help you to replace the D610's autofocus drive motor.

Written By: Daniel Eagan



---

## INTRODUCTION

This guide will demonstrate how to replace the Nikon auto focus drive motor.

---

### TOOLS:

- [Phillips #00 Screwdriver](#) (1)
  - [Desoldering Braid](#) (1)
  - [Soldering Iron](#) (1)
  - [Spudger](#) (1)
-

## Step 1 — Battery



- First, power off the device.

## Step 2



- Set the camera so that it is sitting on its side.
- Open the battery compartment door by sliding the release button towards the lens.
- This will cause the door to "pop" open slightly

### Step 3



- Now lift open the battery compartment door.
- Push the yellow tab lock towards the center to release the battery.
- ⓘ This will cause the battery to jump up as there is a spring at the bottom.
- Pull straight out, slowly on the battery.
- ✦ Make sure you pay attention to which way the battery goes .

## Step 4 — Outer Case



- After removal of the battery. Pull the battery compartment door away from the lens.
- There are eleven Philips head screws that hold the bottom cover on, including a few inside the battery compartment.
- Remove all the screws and the bottom face should pop off easily.

## Step 5



- Then next step is removing the seven Philips #00 screws that hold the rear face plate on.
- There are screws hidden in three separate spots.
- One is under the rubber doors on the left side of the camera. the next one at the eye hole.
- The final one involves taking off the small dial that is about half an inch to the right of the eye hole.
- Removing this dial involves putting a spungder tool behind it and applying a gradual amount of pressure.



## Step 6



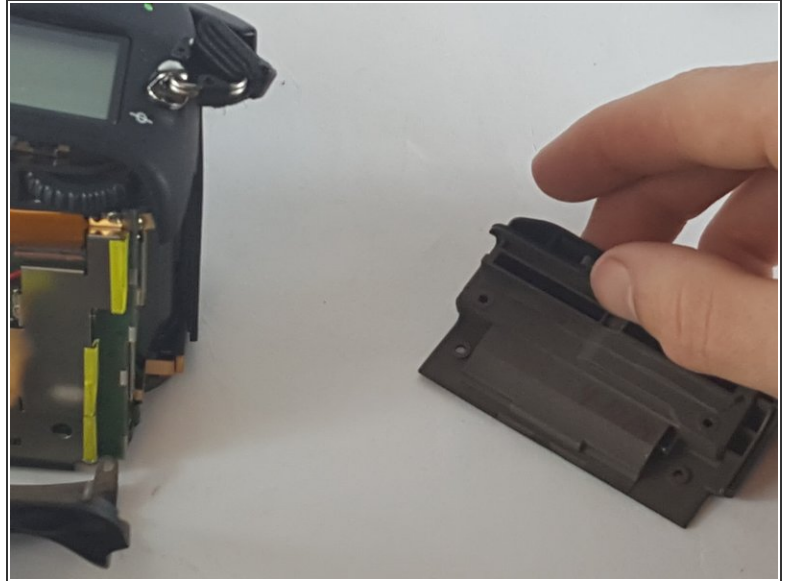
- The rear face plate will include the LCD display it separates from the body of the camera with a small tug.
- ⚠ Do not pull too hard otherwise you risk breaking the ribbon wire that connects the controls and the screen.
- Once there is enough space it will be possible to gently pull the ribbon cable out of their ports.

## Step 7



- The next piece to come off is the front plate and the red grip.
- The front plate is held on by 2 Phillips #00 screws on the front and two more beneath the flash bulb.
- Remove the two Phillips #00 screws holding on the grip and it slides off easily.
- ⓘ After removing the screws the face plate comes off by pulling it straight off to avoid damage.

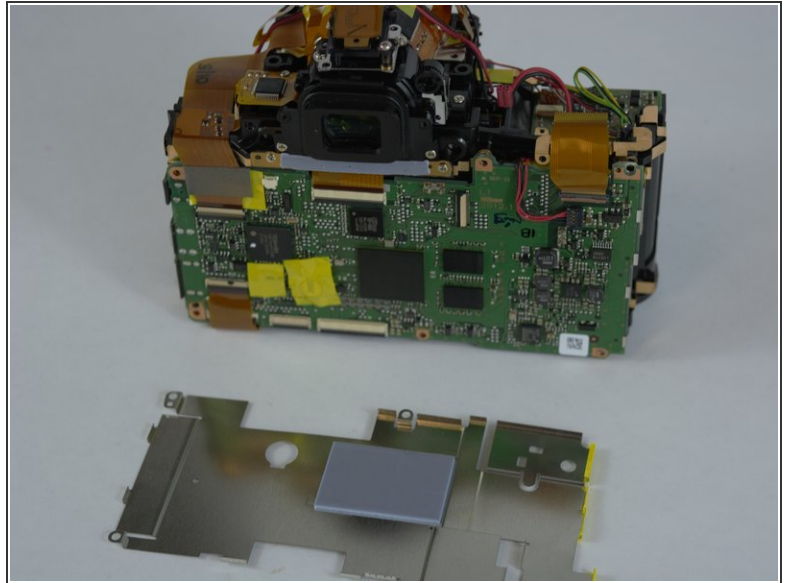
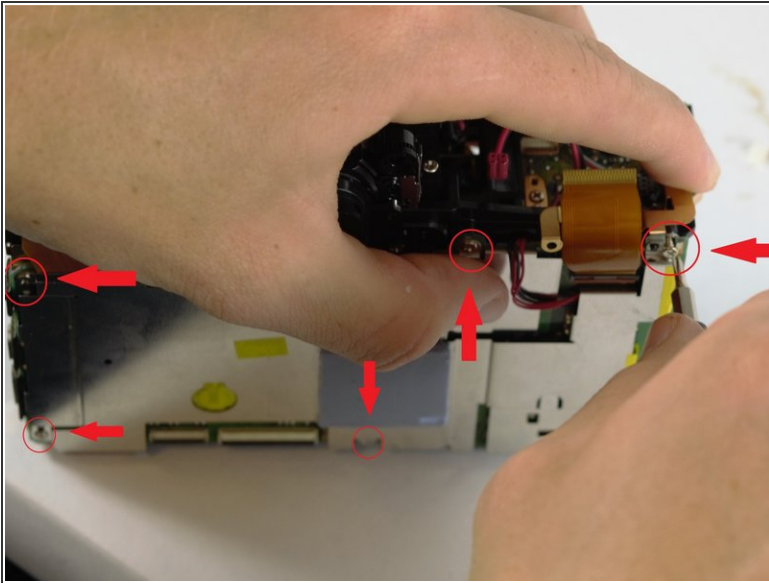
## Step 8



- It is now possible to remove the last three Philips #00 screws that are hidden under the memory card slot door.
  - The screws come out and the cover comes straight off.
  - The last cover plate is the top. The top is held on by two screws located just beneath the rim of the cover.
- ⚠ The top should be pulled off very slowly. There are several electronic components that connect between the body and the top.
- ⓘ There are three wires that need to be disconnected.

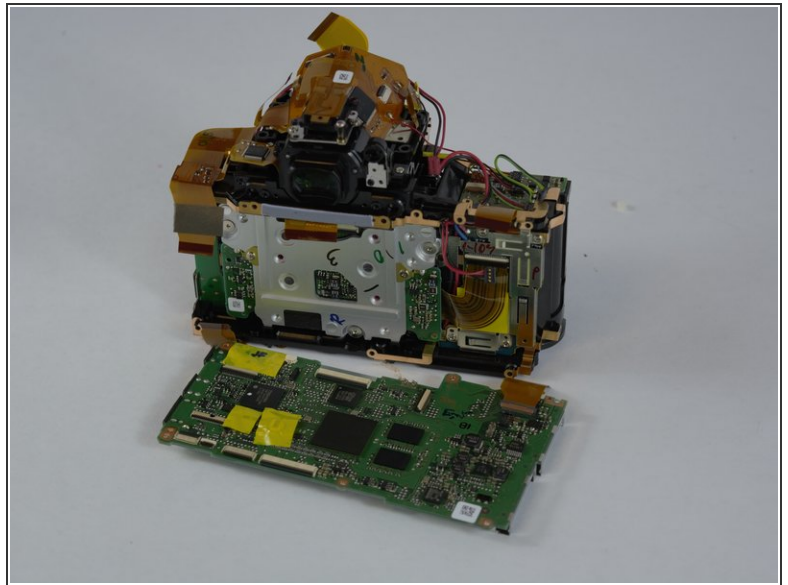
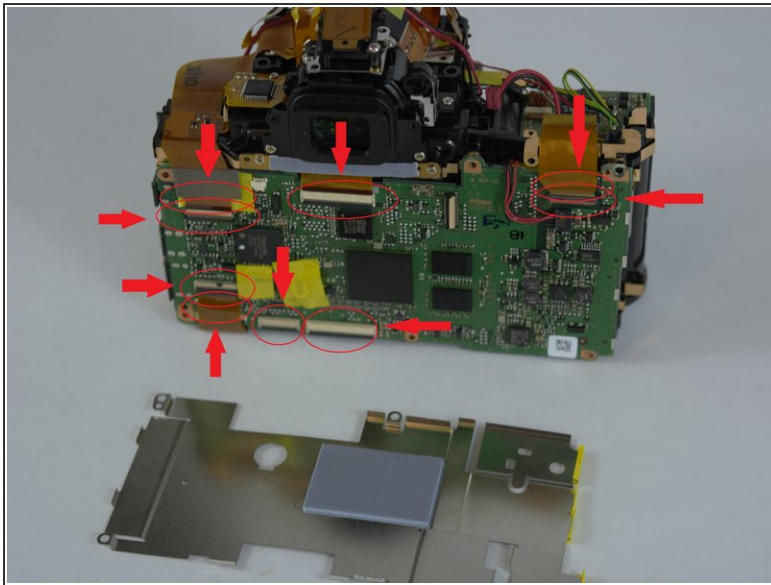


## Step 9 — Motherboard



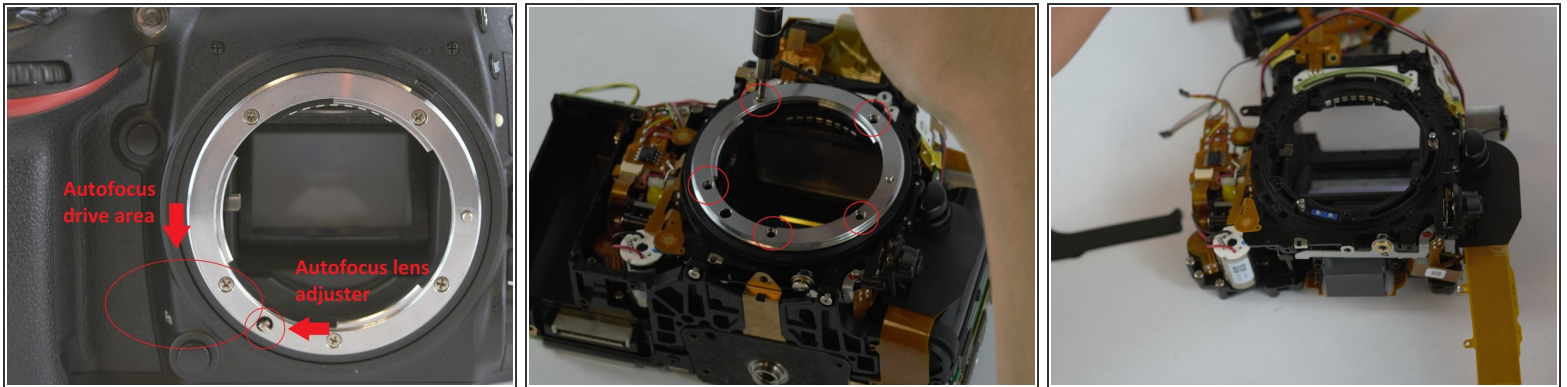
- The rear side of the camera is where the motherboard is located. It is visible after you have taken off the rear face plate.
- Remove the shield that protects it from static first.
- This shield has six Philips #00 screws that are positioned around the edge of the shield.
- After removal of the screws the shield will come free from the motherboard.

## Step 10



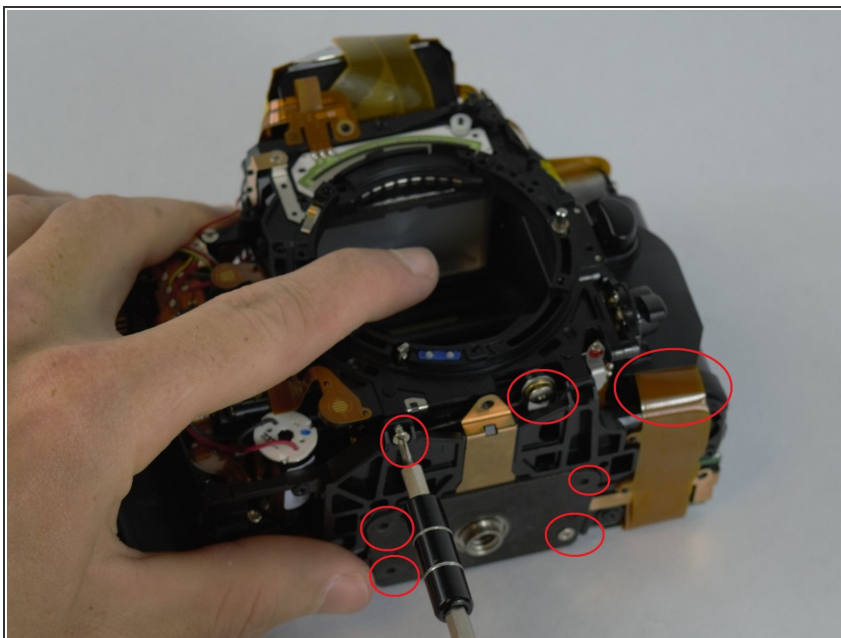
- i The six screws that were removed in the previous step also hold the motherboard in place.
- There are a few ribbon cables that connect to the motherboard to the rest of the camera with some of them hiding under other ribbon cables.
- ! Be very careful when removing the ribbon wires. If they break it can cause problems with needing more repairs.

## Step 11 — Autofocus Drive Motor



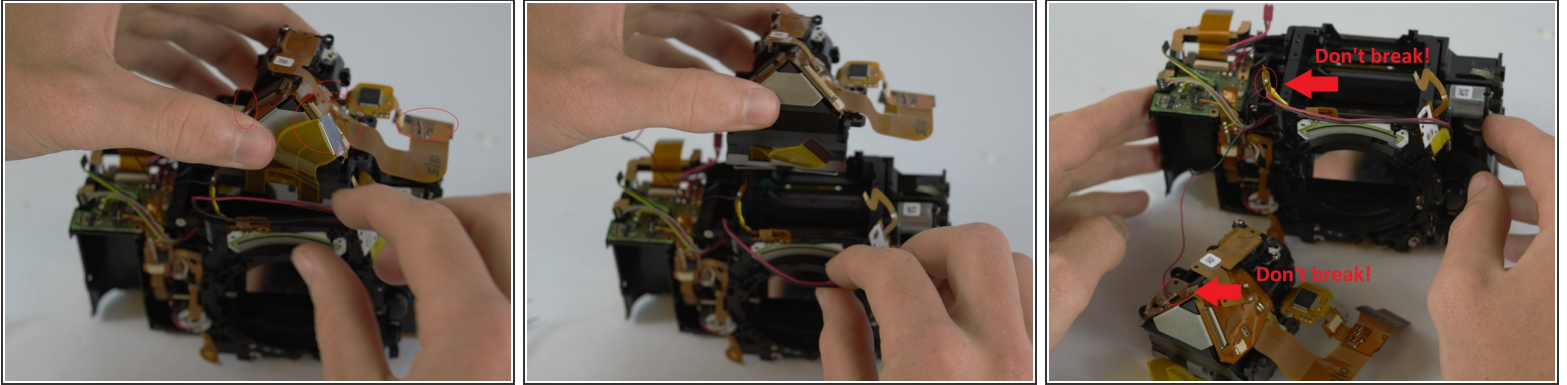
- i** The focus motor is located in between the right hand grip and the lens socket and requires several parts to be replaced as a whole because it is unreachable.
- Begin by removing the silver ring around the lens socket by unscrewing the five screws supporting it.

## Step 12



- Several screw and ribbon cables and the bottom portion of the camera need to be removed as shown in the picture

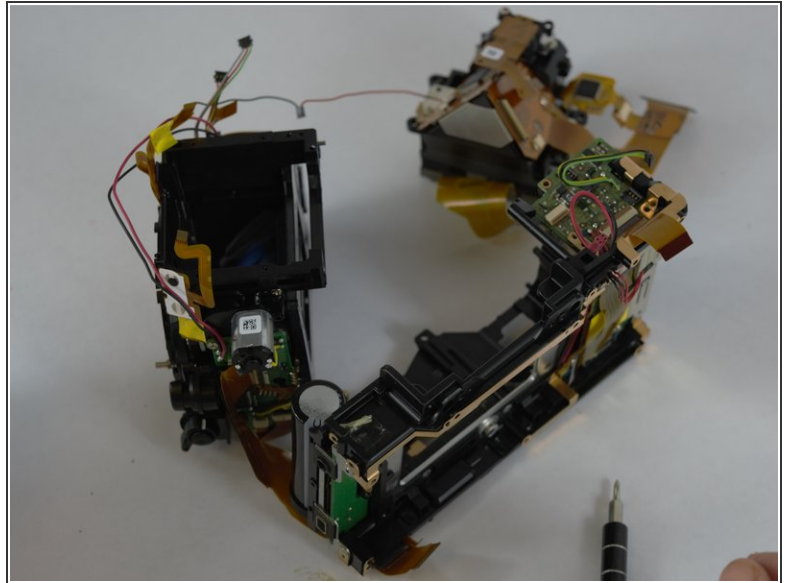
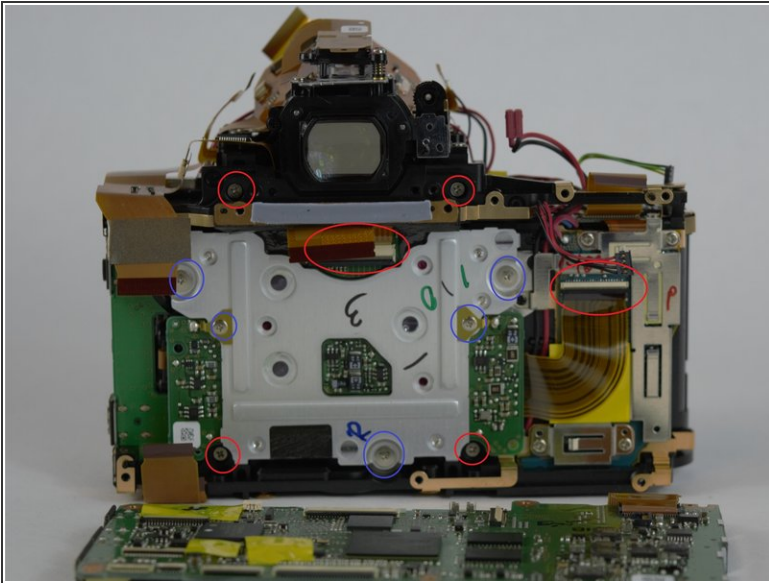
## Step 13



- Now that the bottom is prepped we move onto the top.
- Here we have more ribbon cables and screws that need to be removed that will end up releasing the top viewing lens area.
- ⓘ Some of the ribbon cables reach back around to the motherboard and may need to be removed there.
- ⓘ Also, there is a wire that runs along the top that just needs to be shifted out of the way.
- ⚠ be careful not to break the red or black wire attached to some of the ribbon cables as they will need to be re-soldered if broken.

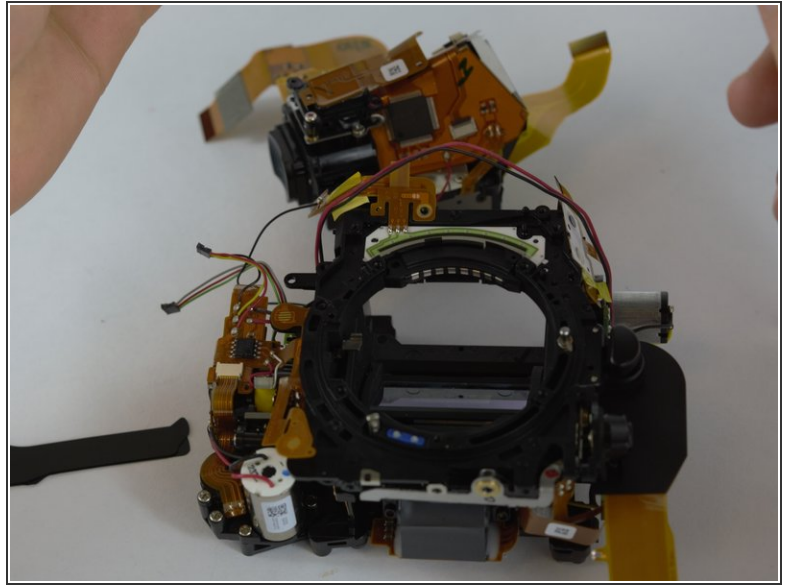
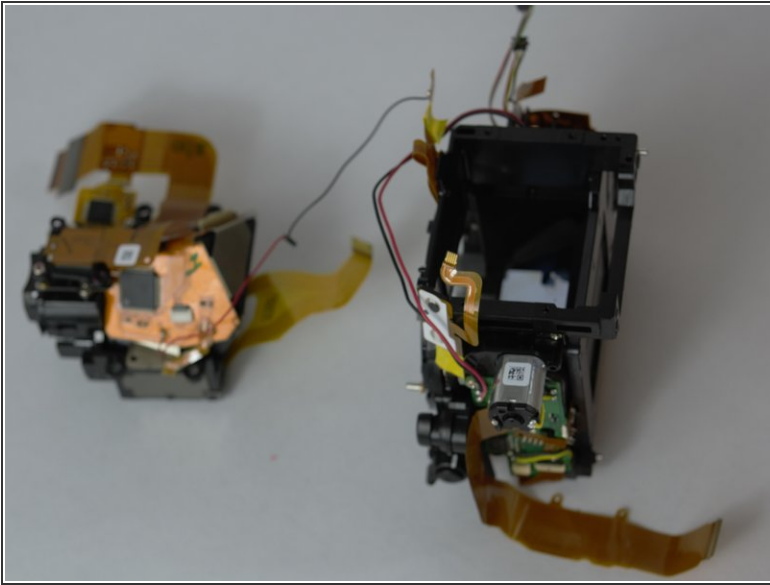


## Step 14



- This is where having the motherboard off is necessary as the screws we need are burrowed at the very heart of the camera.
- Four more screws and two ribbon cables marked by the red circles need to be removed to release what we need.
- ⓘ The blue circles indicate the screws that don't need to be undone to get to what we need.

## Step 15



- At last, the holy grail. We finally have the part that we want.
  - At this point, damage to the camera becomes highly probable if we were to continue to take it apart and we recommend replacing the entire lens housing.
- ⚠ We do not recommend tearing down any further as damage is likely to occur.

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