

Disassembly/Repair of the Nikon Coolpix L10 Camera as originally presented on “Do it Yourself Digital Camera Repair” <http://camerarepair.blogspot.com/>

The following outlines the steps to dissect the Nikon L10. They were developed by personal disassembly of the camera, and are not recognized or authorized by Nikon. Follow these procedures at your own risk. These procedures should only be considered as a last resort on a broken camera with an expired warranty. I take no responsibility should you damage your camera in following these steps. Also note that there is some danger of electrical shock from the camera's flash capacitor. I also take no responsibility if you zap yourself while following these procedures. Finally, I realize that some of these steps sound like they're written by the Anal Retentive Chef from SNL, but recommend strict organization of all the numerous little parts. That is if you wish successful reassembly of the camera.

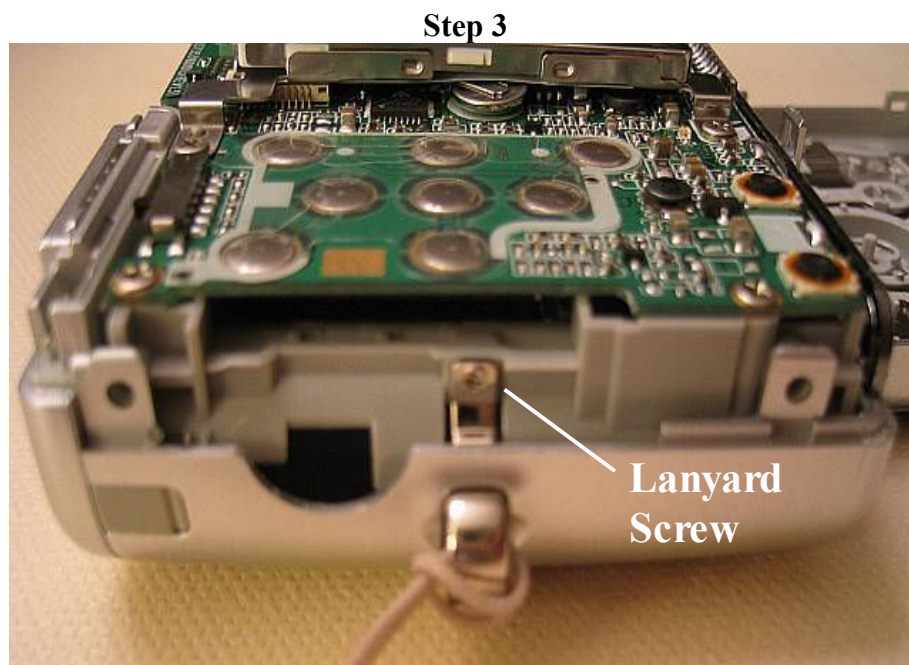
Step 1: Remove the seven outer case screws on the left (2), bottom (3), and right (2) side of the camera. Store the screws in a sandwich bag labeled Step 1.

Step 2: Pry open the case from its bottom left side. There will be a little resistance. Just use a butter knife at the bottom left (screen side) edge to pry it open. Note how/where the AV cover attaches to the case. Store the back casing in a separate sandwich bag labeled Step 2.

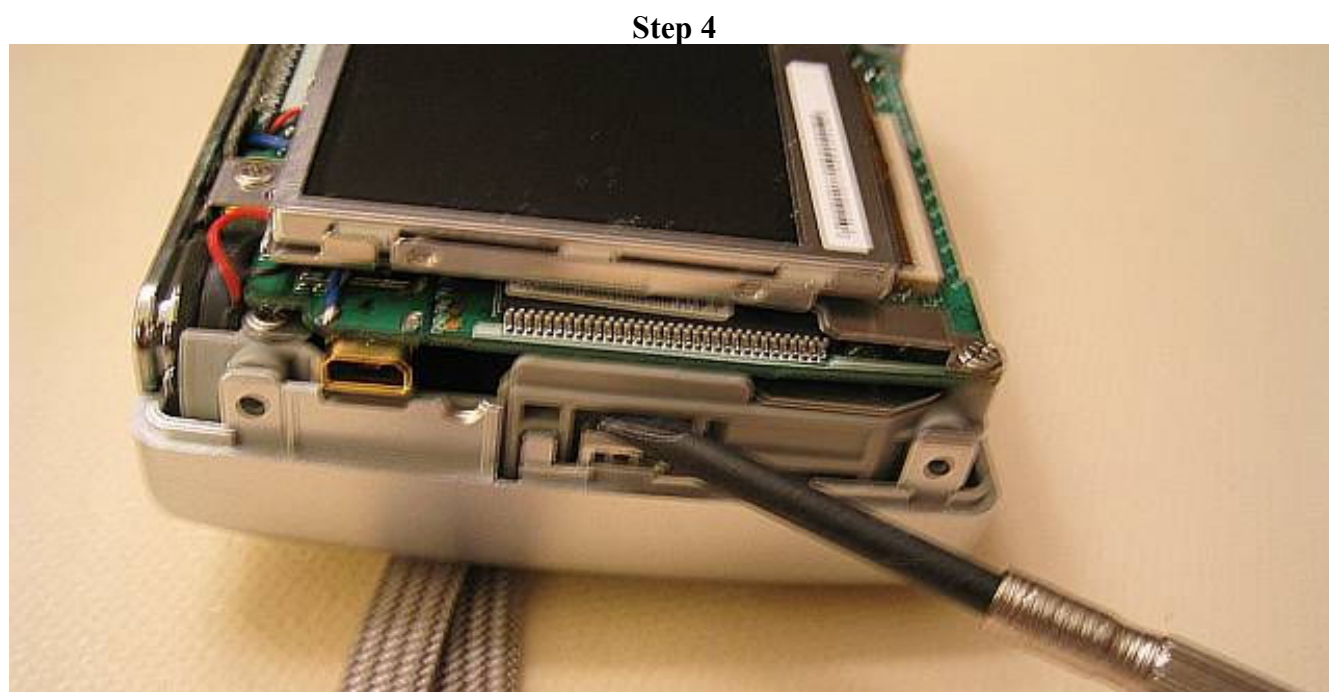
Step 2



Step 3: Remove the single small screw on the silver lanyard connector. Store the screw with the AV cover in a separate sandwich bag labeled step 3.

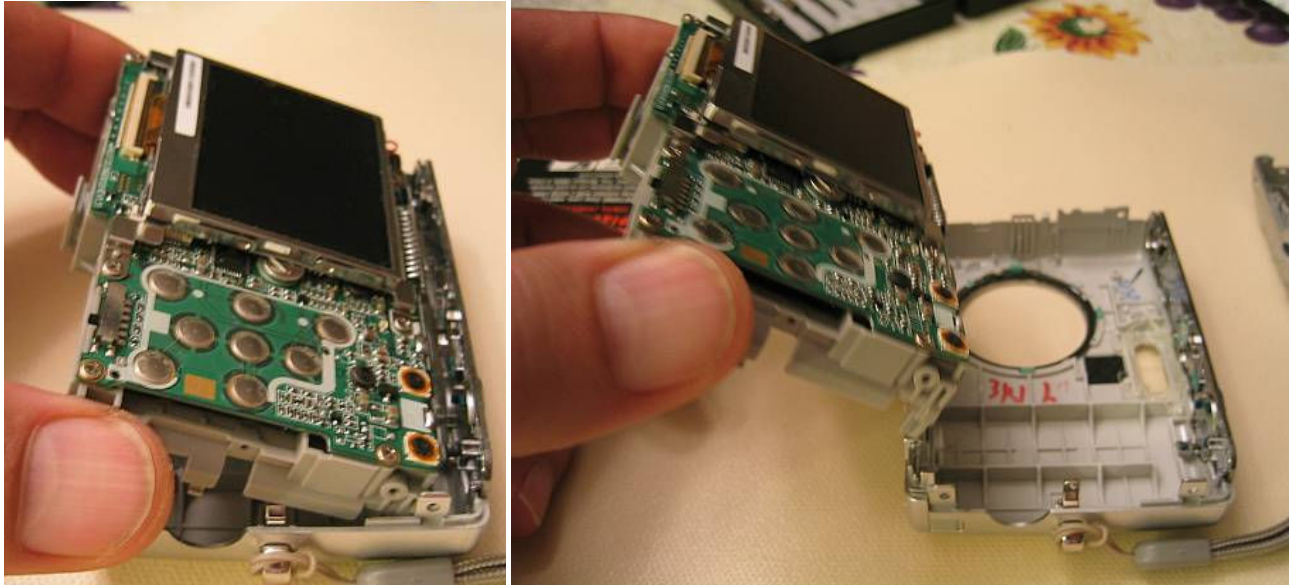


Step 4: Loosen the center electronics assembly from the front case by prying with a small screwdriver along the gray plastic on the left side of the camera.

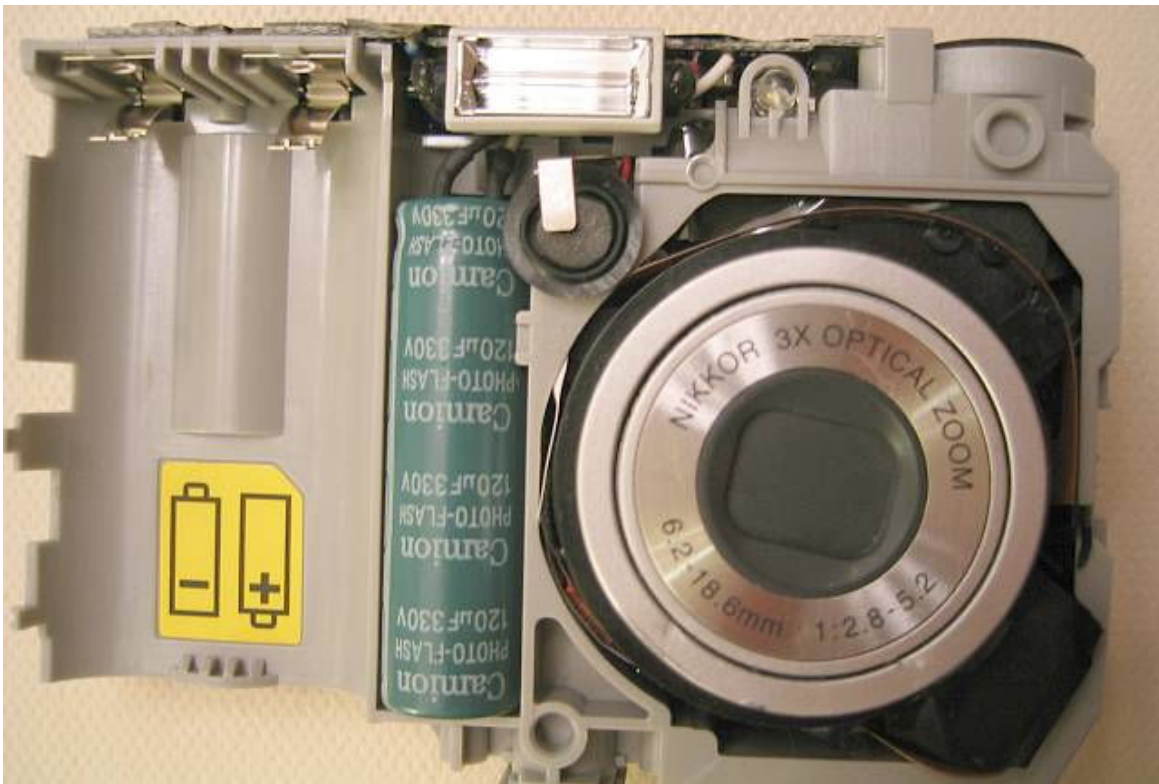


Step 5: Remove the center electronics assembly from the front case by lifting it up and out from its bottom. Store the front case in a sandwich bag labeled step 5.

Step 5

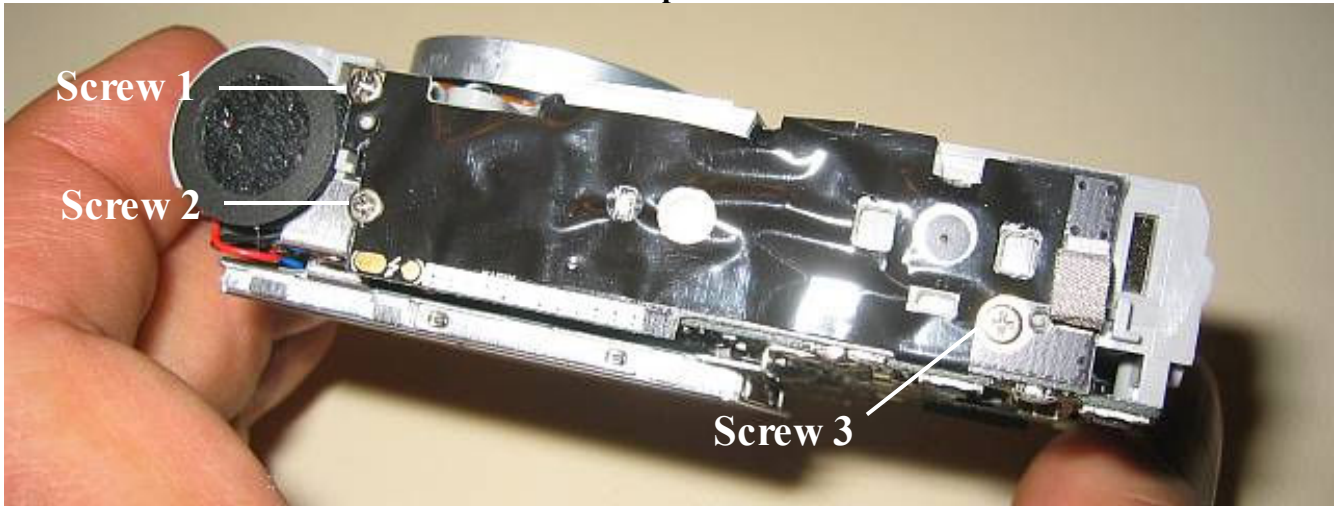


Now take time to examine the electronics assembly. Note the front face with the battery compartment, lens assembly (note that mine is crooked/damaged), autofocus illuminator, and flash assembly. Especially take note of the large green flash capacitor. DO NOT short the terminals of the capacitor to discharge it as you will damage it. Instead recommend slowly draining the capacitor of electricity by applying a voltmeter or some other resistive load until its voltage is discharged (see Step 6b).



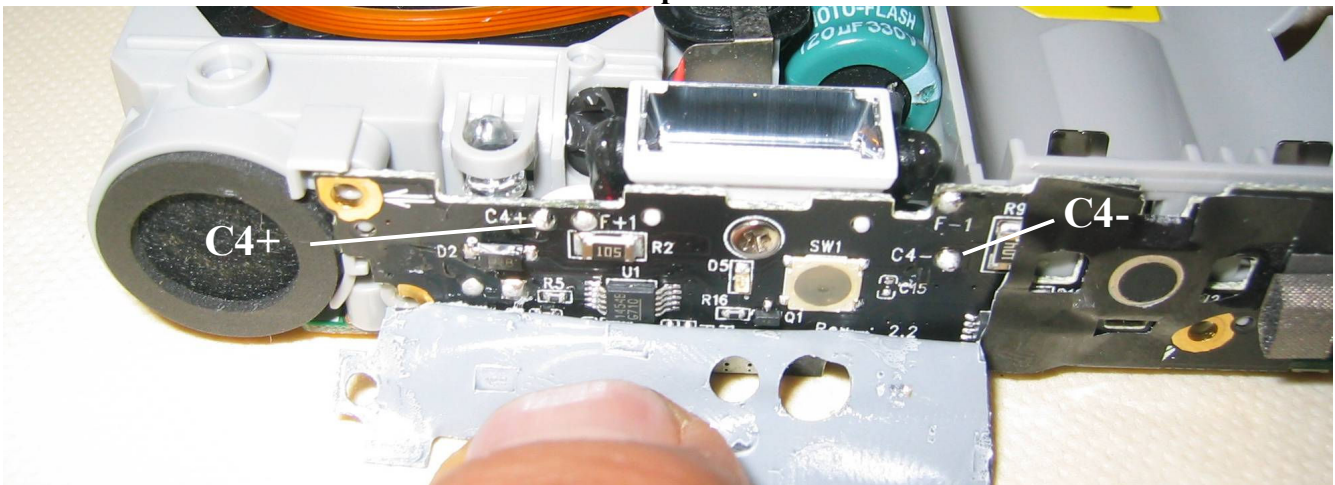
Step 6a: Now examine the top face of the assembly. Note the tape, and the three exposed screws. Remove and temporarily store these three screws.

Step 6a



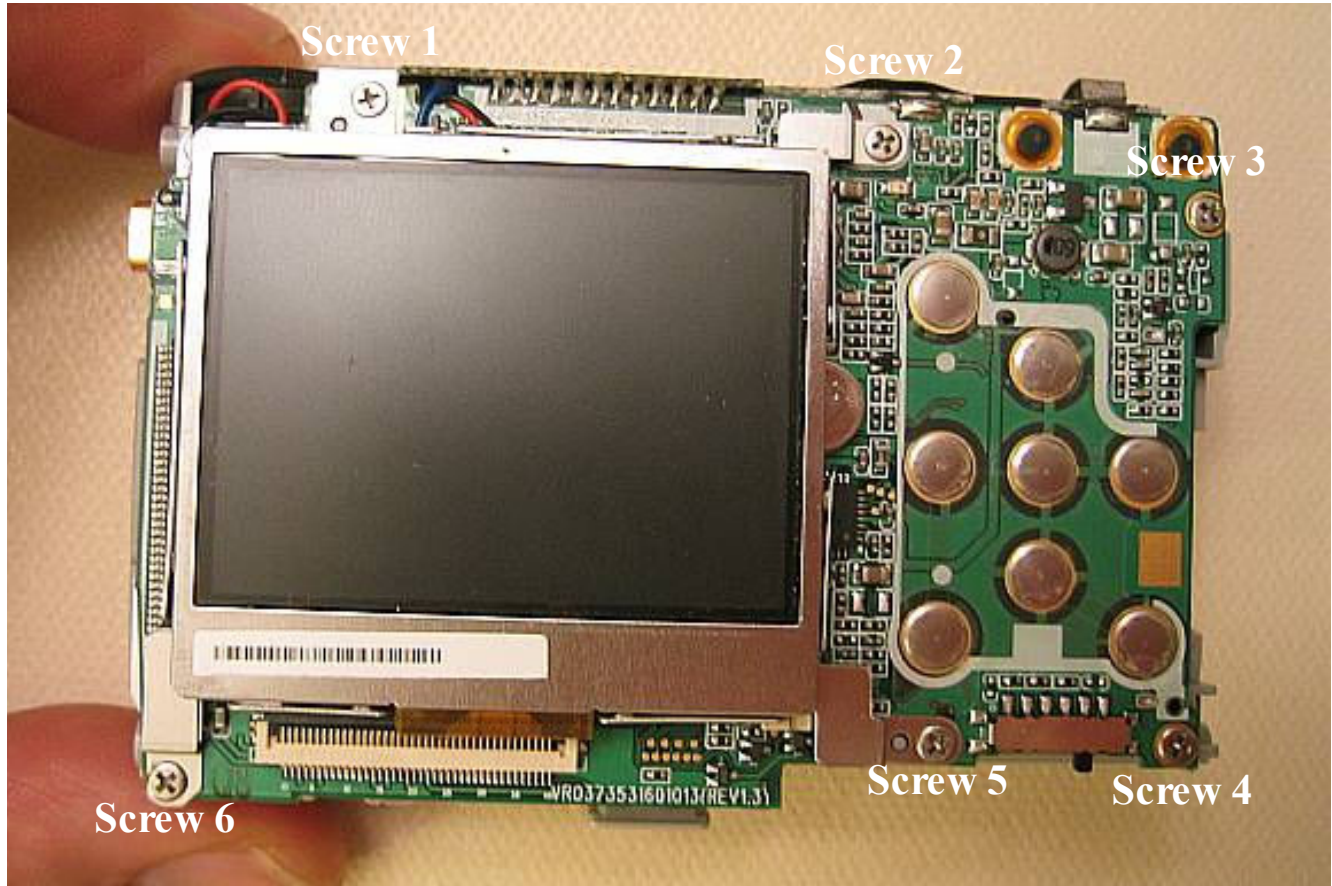
Step 6b: Now peel back the center portion of the tape. You may have to tear a portion of the tape. You'll see two electrical contact points labeled C4+ and C4-. Use these to discharge the capacitor. You'll also notice a single screw that attaches the flash bulb to the camera. Leave this screw alone as it is unrelated to the disassembly of the camera. Reattach the tape.

Step 6b



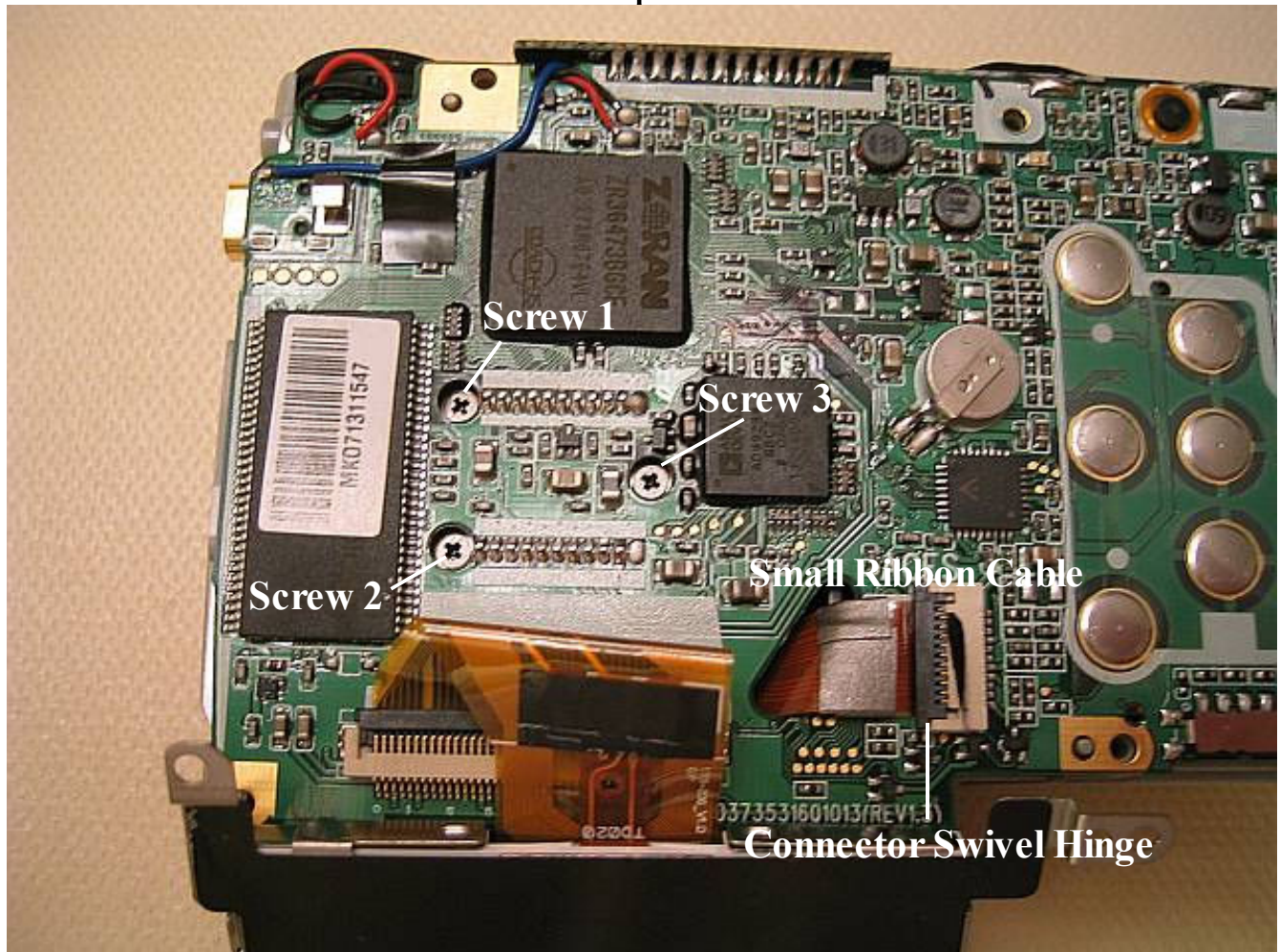
Step 6c: Now examine the back face of the assembly, taking note of the six exposed screws. Remove these screws, and store them (along with the three same-size screws from the top face) in a sandwich bag labeled Step 6.

Step 6c



Step 7a: Now gently flip the lcd screen and its metal holding bracket up and over to expose the circuitry beneath it. Do not disconnect the lcd screen's large ribbon cable. But do notice the three small recessed screws, and the smaller ribbon cable and its connector. Remove the three screws and place in a sandwich bag labeled Step 7a.

Step 7a



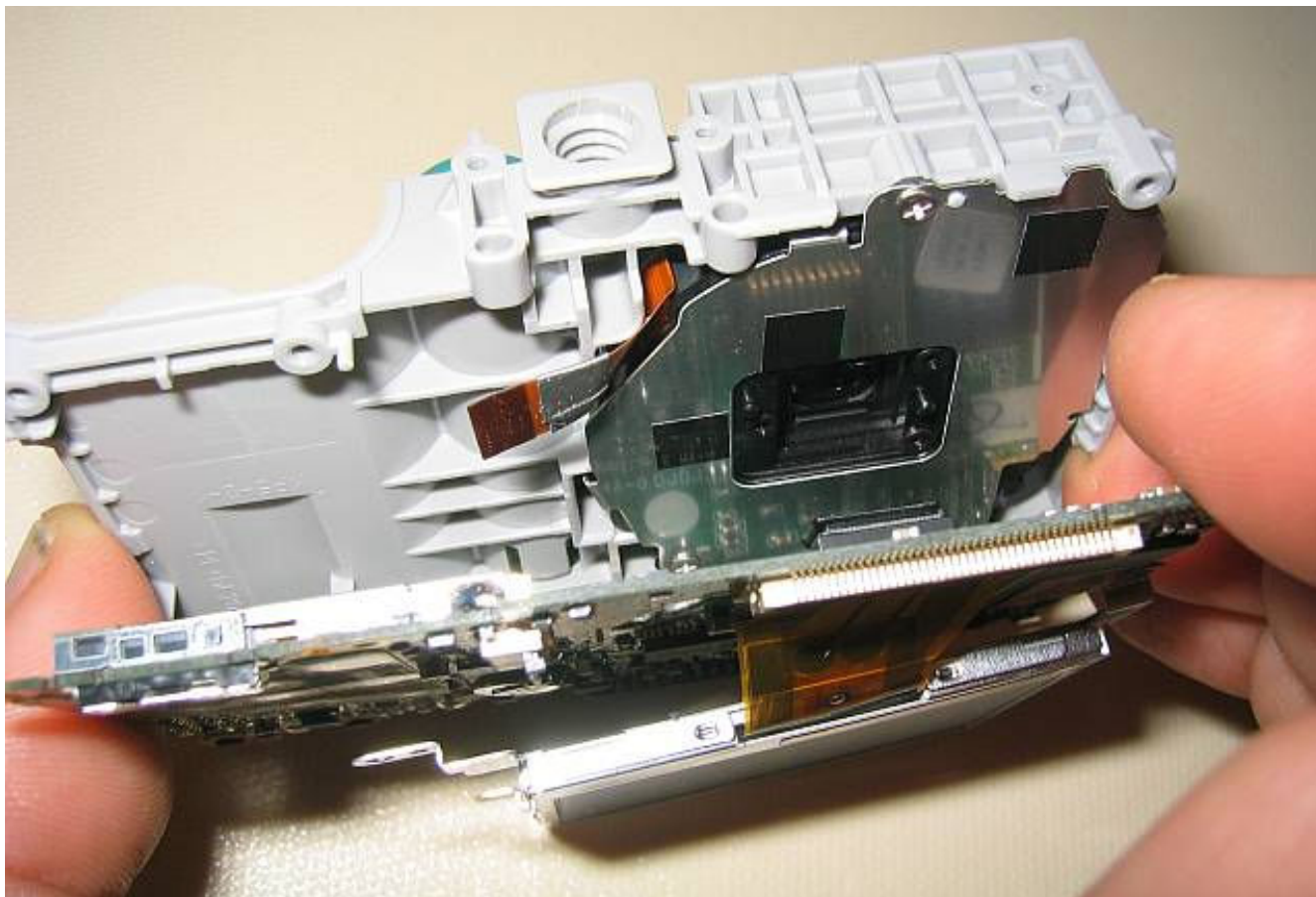
Step 7b: Now notice the black hinge on the small ribbon connector. Swivel this black hinge upward with your finger nail. The small ribbon should now easily pull free. Note that the cable has no connector on its end once it's pulled free.

Step 7b



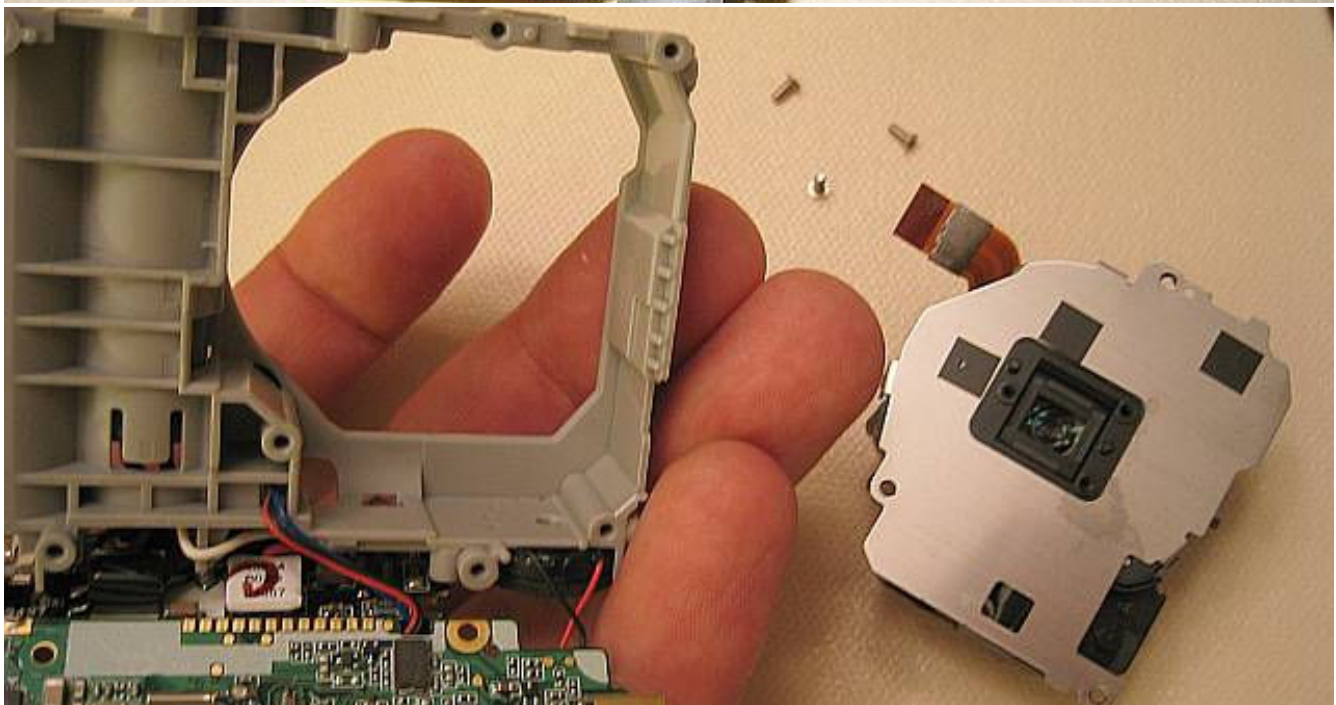
Step 7c: Now very carefully tug and lift the bottom of the circuit board. It should hinge upward as the battery leads bend and serve as the hinge point.

Step 7c



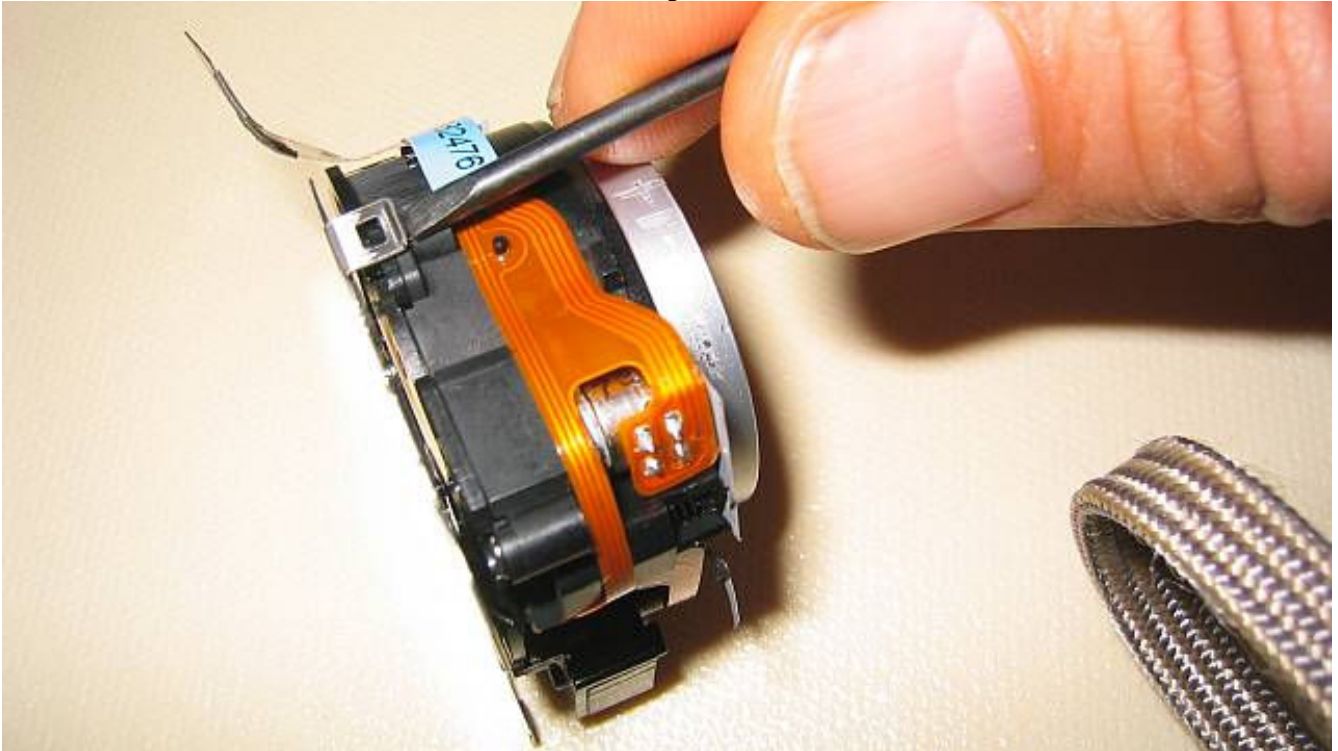
Step 8: Now remove the three screws on the metal cover plate over the lens assembly. Take extra care not to damage any circuit board components, especially the exposed CCD! After the screws are removed, the cover plate and lens assembly should now easily lift out. Store the screws in a sandwich bag labeled Step 8.

Step 8



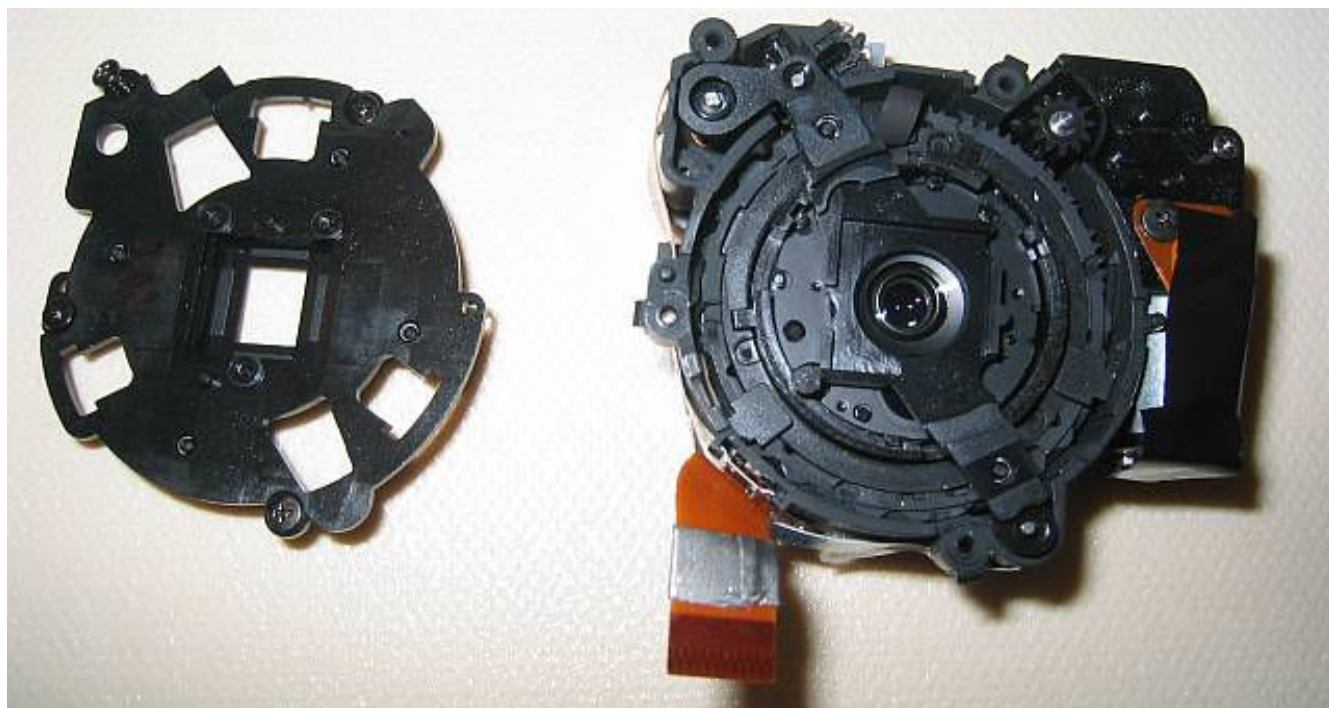
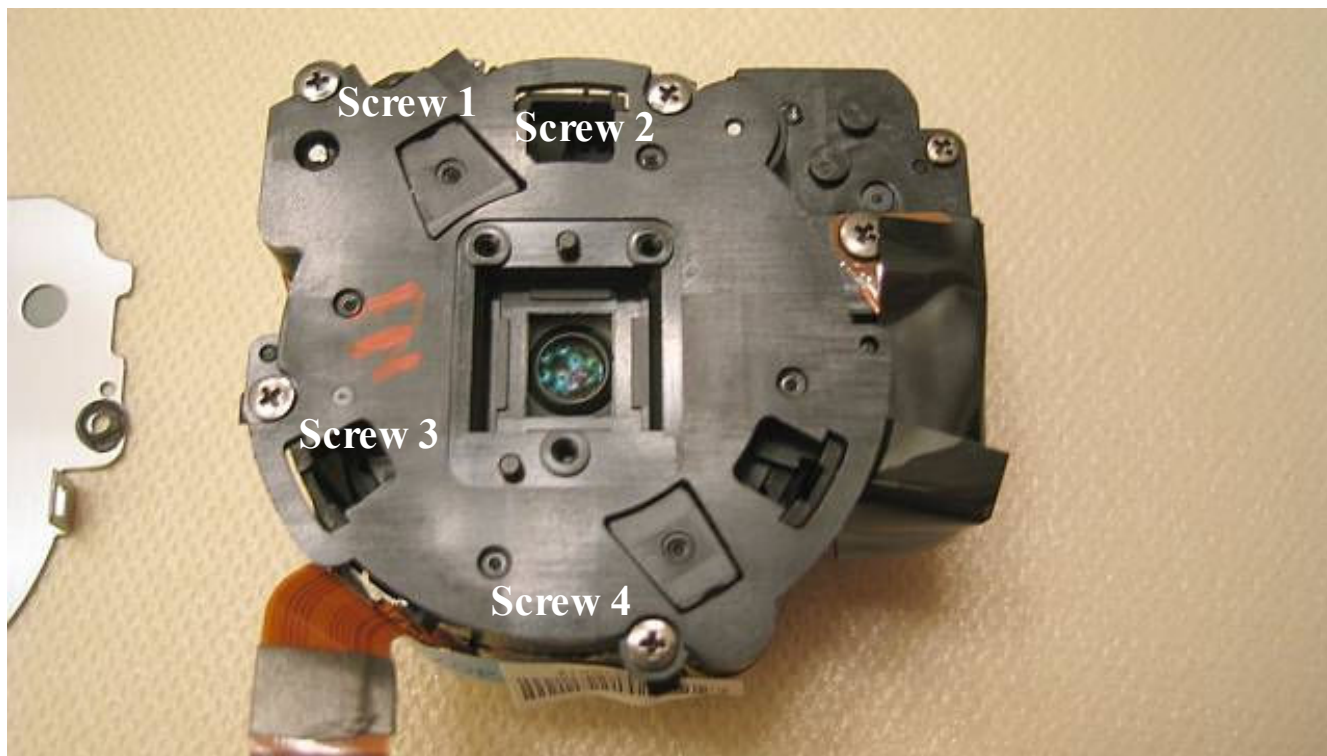
Step 9: Now pry the metal cover plate from the lens assembly. Do this by inserting a small screw driver under one of its three clips, and then twist it. The clip should pop free. Repeat on the other two clips until the plate is removed. Store the plate with its screws in the Step 8 sandwich bag.

Step 9



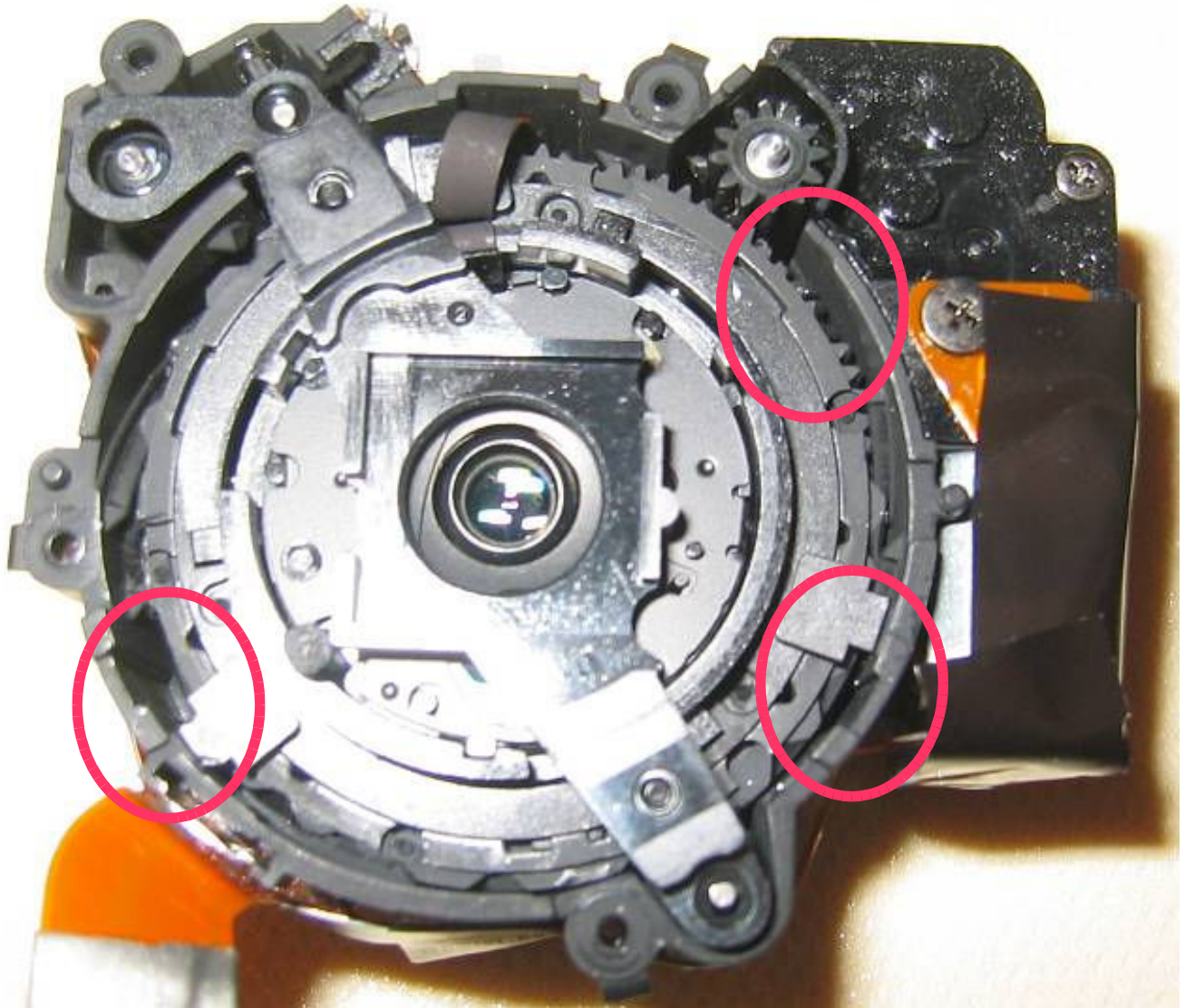
Step 10: Now examine the back of the lens assembly. Remove the four screws that hold its back cover on. Remove the back cover, and store the cover with its screws in a sandwich bag labeled Step 10.

Step 10



Step 11: Now examine the interior of the lens assembly for any anomalies that may indicate its malfunction. In the below example, two things are apparent. First is that the assembly's guide pins have been dislocated from their intended guide grooves (look at the 4 and 8 O'Clock positions). The second problem is that some of the teeth on the lens assembly's primary gear are missing and damaged (as seen at the 2 O'Clock position)

Step 11



Repair is possible by forcing the guide pins back into their grooves. However, camera operation would still be degraded due to the missing gear teeth. It would be necessary to physically help the lens extend and retract during power up/shutdown by pulling or pushing it. Because of this, it was decided to withhold repair and reassembly until acquiring another broken L10 from ebay (one with a problem other than lens error). The intent would to salvage and replace the lens assembly with an undamaged one.

