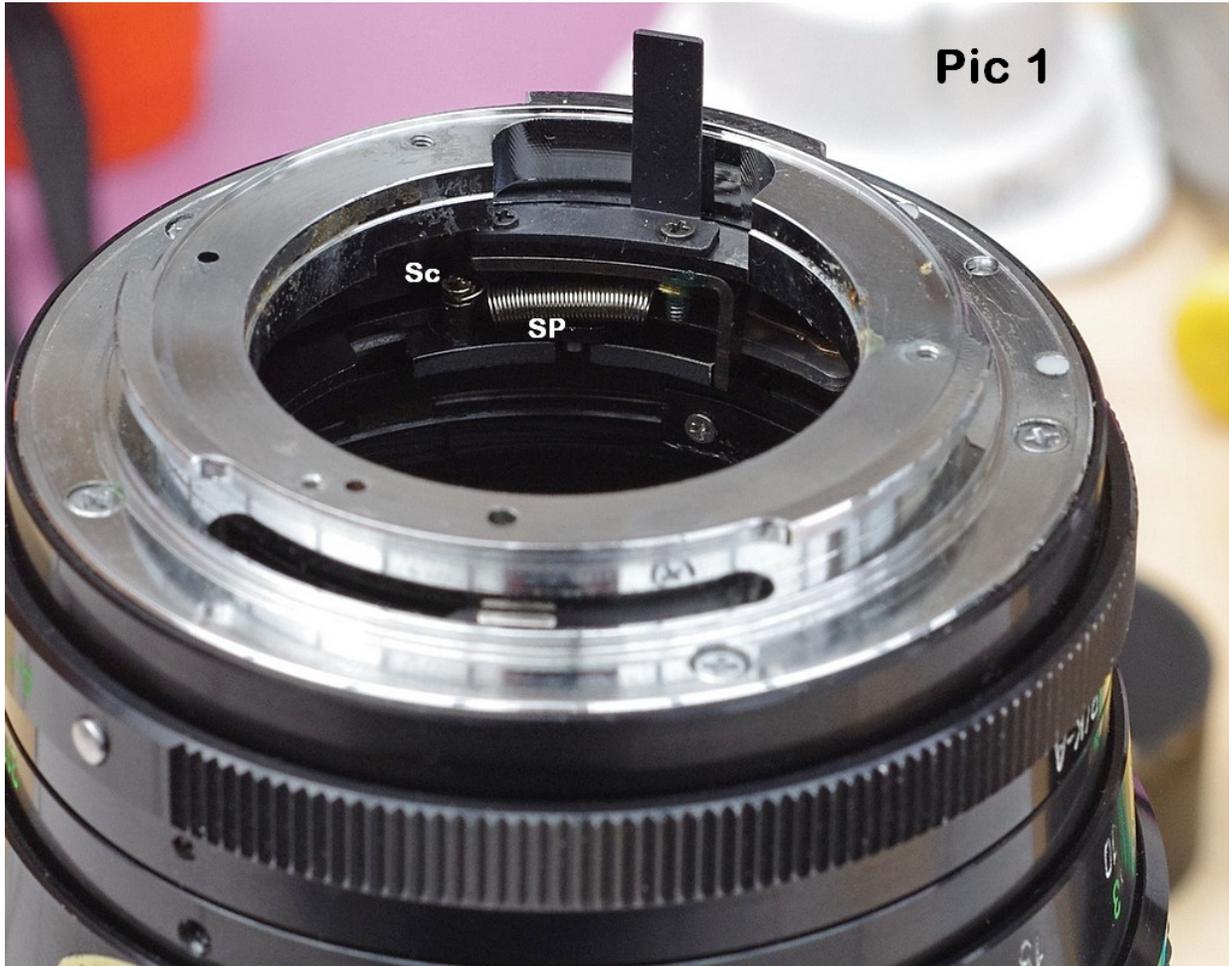


## Vivitar (Komine) 70-210mm, PK-A mount, additional notes

These notes are supplemental to Mels notes for a CFD mount lens. They are an abbreviated, overview account of disassembly for iris cleaning, with specific detail for the PKA mount.

1. Remove the plastic aperture lever protector from the mount (3 x JIS), and pull out the cylindrical light baffle underneath. You can now see a spring SP (pic 1).



2. Unhook the spring from a screw Sc. Thin fuse wire bent into a hook can be good, or a small jewellers screwdriver may be sufficient.
3. Now proceed with mount removal as per Mel's notes:
4. Remove three JIS screws to slide the index ring forward (p8).
5. Loosen three set screws in the aperture index ring (with the red dot) (p10). Now this ring and the f-stop marked ring will be able to slide forward. NB remember to catch the detent ("clicks") ball bearing, it is right next to the red dot, and the wee spring in the hole.

6. Three x JIS screws are now exposed, remove these and the whole bayonet mount will come off. It's a close fit, so ease it off (p11). First time round this is when I had to unhook the spring, but with hindsight it is easier and better to do that first as per #1, 2.

7. Unscrewing the union ring is the most technical part. Read Mel's notes (pp 12-13) and pay particular attention to marking a guide rail and making connect/disconnect marks/scratches. I used a feeler guage to measure the gap between the union ring and the bump ring - 38 thou. As you can see in 'pic 2' I made a diy tool. This was necessary, it was pretty stiff to move the union ring on my lens. The tool is made from a ~1" piece of heavy duty pvc pipe reinforced with Davids Isocon/similar filler, which made a thread for the two bolts, ends shaped with a dremel. Although the unit still isn't very rigid that is actually beneficial, I can place the tool into position by squeezing it gently.

You can observe the disengagement of the rails from the mount end through the gap between the rear optical group and the mount end (actually it might be possible to unscrew and remove the rear optical group at this point which would make that much easier). Then the union ring and mount ring screw off readily by hand together.



8. Prime lens assembly (rear optical group + iris) is held in by 3 x round head JIS. The rear optical group unscrews from the iris assembly, loosen this while it is still in the lens.

9. My first cleaning was unsuccessful, the iris was still sticking after reassembly, even though it had seemed snappy enough. I had tried some spray PCB cleaner - C<sub>6</sub> iso-alkanes. Second time round I soaked it in coleman fuel as well – success!

10. Reassembly is a straight reversal of 1-9. The icky stage is the re-engagement of the guide rails as the union ring is screwed back on. The rails can be observed from the mount end, my impression is that one is slightly longer, once this one is engaged the others will do so naturally. A bit of wiggling and to-and-froing did the trick. The main thing is to check that the guide rails go back into the correct guide slots. Provided nothing else has been rejigged the lens will end up naturally as it was, checkable with the feeler gauge.

One minor hang up was the lens focus/zoom ring moving back enough for the long aperture actuation lever to come out of its slot while the union ring was being worked with (p14, photo J), necessitating placing the lens on its front end and a little fiddle with a screwdriver to gently re-engage the lever with its slot.

11. Replacing the mount: the screw holes need to line up but also there is a small silver stud SS (pic 3) that has to engage in a stirrup St. It's a bit fiddly because the spring loaded aperture lever on the mount needs to be held to keep the connections clear of this stud so that it can engage.



**Pic 3**

12. Line up the aperture rings, replacing the detent ball bearing and spring. The f-stop ring is aligned by a slot that needs to engage with a small metal tab on the mount. The "spot" ring is lined up by eye with the infinity marks on the lens and by eyeing the "click" slots for the detent ball bearing.
13. Refit the index ring before tightening the set screws on the aperture ring. Note that the aperture won't click correctly into "A" until the spring has been reconnected.
14. Finally reconnect the spring disconnected in #2 - hook the loop end onto a small jewellers screwdriver and use a second screwdriver/toothpick etc to push it over the screw. Replace the baffle and aperture lever guard. Test et fini.

Marcus Brown 5/16