

The Zorki Cameras - Part 1

Text & Photos from Stefan Sztromajer

In 1948 in The Krasnogorskij Mechaniczeskij Zavod the production of the Leica like miniature cameras called Zorki began. These cameras were similar to the FEDs, produced in parallel by the Charkovskij Kombinat.



Fig. 1. The early Zorki, similar to the Leica II.

At first the production was rather limited as the plant was designated for the quite different production. In 1949 the small number of cameras were produced under the name "FED Zorki" - now very rare indeed. The serial production of the Zorki cameras began in 1950.

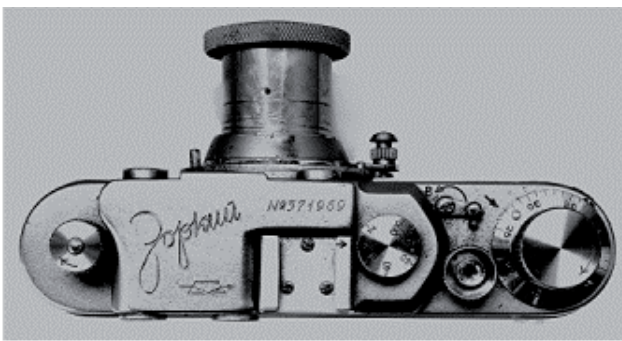


Fig. 2. Showing the Zorki engraving.....

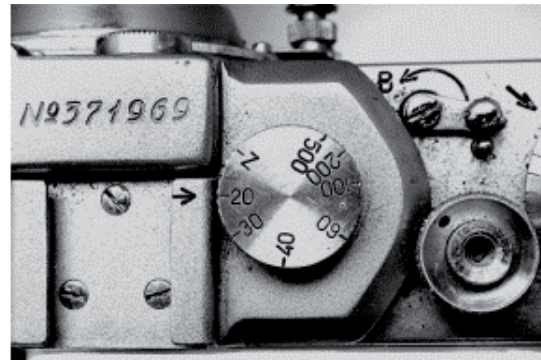


Fig. 3. and the serial number.

From the beginning the standard focal distance of all Zorki cameras was equal to 28.8 mm. so theoretically every body would accept every Zorki and later FED lens, as its mount thread diameter is 39mm. I say "theoretically", as on the beginning the production was not always enough carefully tested, probably there was an optimistic opinion, being that the most common use of the camera would be on sunny days when f/8 – f11 aperture value would be the best choice. The Zorki is very similar to the chrome edition of the Leica II. And no wonder to the early FED. Looking at the front of the camera (from left to right) (Fig. 1) we will see the large film transport knob, provided with the frame counter, the tiny lever for uncoupling the transport mechanism after the film is exposed, the shutter release button, provided with the cable thread, the shutter setting dial, the rangefinder, and the finder windows, plus the knob for rewinding of the exposed film. For rewinding the knob may be lifted up, similar as in the case of the Leica cameras. On the top plate there is Zorki engraving and the serial number (Fig's 2 & 3.)

The body of the camera is vulcanite covered (Fig. 4.) The film loading is quite Leica like after the bottom plate is opened. (Fig's 5, 6 & 7.) The fabric focal plane shutter offers the following speeds : 1/20, 1/30, 1/40, 1/60, 1/100, 1/250, 1/500 and Z (For Zeit in German), long exposure.

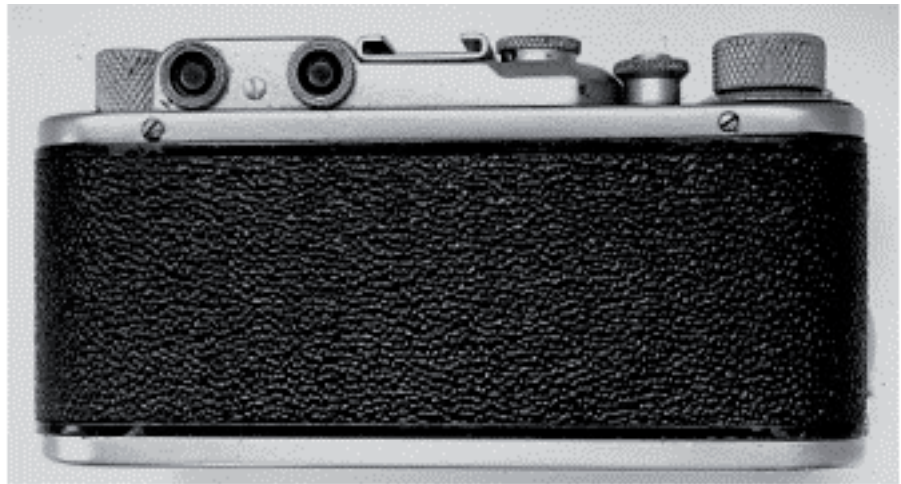


Fig. 4. Showing the Vulcanite body covering.

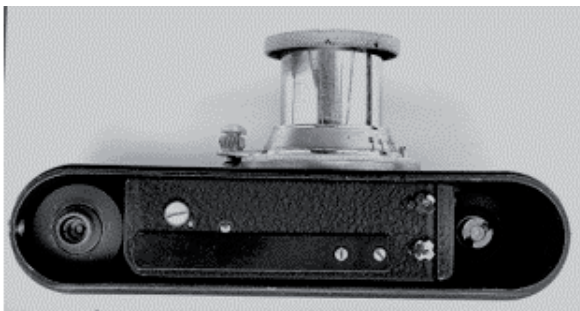


Fig. 5. Leica type bottom loading.



Fig. 6. Inside of the bottom loading plate.



Fig. 7. And the outside of the plate.



Fig. 8. Industar 22.

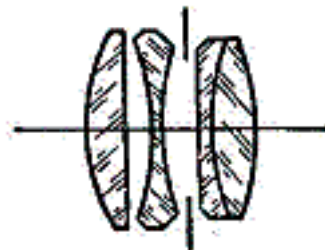


Fig. 9. Industar 22.

The camera is fitted with the collapsible Industar 22; f3.5/ 50 lens of the Zeiss Tessar design. (Fig's 8 & 9.)

The optical properties of the Industar 22 lens are as follows:

- Focal length 50 mm. (in reality 52.4 mm.)
- Maximum aperture 1:f3.5
- Angle of view 45 degrees.
- Resolving ability
- Centre 32 lines/mm
- Edge 20 lines/mm

There were produced a very small number of the Industars 22 in the quite different, non collapsible mount. (Fig. 10.) Considering its rarity, I believe it is of the pilot batch, if you have a look at its se-

rial number. In 1952 the alloy die cast body was introduced, making the camera more robust.

The small number of Zorkis, designed for export, was produced very carefully. These cameras have the different gravure and are usually fitted with the excellent specially selected Jupiter 8, f2/50 lens, (Fig's 11, 12 & 13) and sometimes –very rare- the Jupiter 3 f1.5/50 lens. (Fig's 14 & 15.) Both Jupiter lenses are copies of the famous Zeiss Sonnar lenses.



Fig. 10. With the non collapsible Industar 22.



Fig. 11. Fitted with the specially selected Jupiter 8 f2/50 lens.



Fig. 12. Top view with Jupiter 8 Lens fitted.



Fig. 13. Jupiter 8.



Fig. 14. With the very rare Jupiter f3.5/50mm.

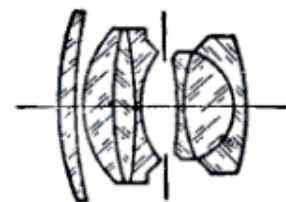


Fig. 15. Jupiter f1.5/50

The optical properties of the Jupiter 8 lens are as follows:

Focal length	50 mm. (in reality 52.45 mm.)
Maximum aperture	1:f2
Angle of view	45 degrees
Resolving ability	
Centre	30-39 lines/mm (there is substantial difference between the individual lenses depended on the care of its assembly)
Edge	18-24 lines/ mm

The optical properties of the Jupiter 3 are as follows

Focal length	50mm. (in reality 52.15mm.)
Maximum aperture	1:1,5
Angle of view	45 degrees
Resolving ability	
Centre	31-38 lines/mm (as in the case of the Jupiter8)
Edge	20-28 lines/mm

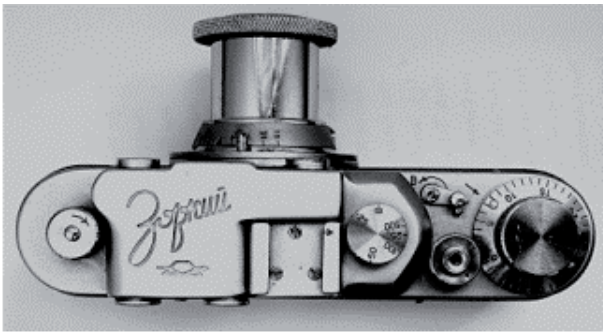


Fig. 16. Zorki with new shutter speeds.

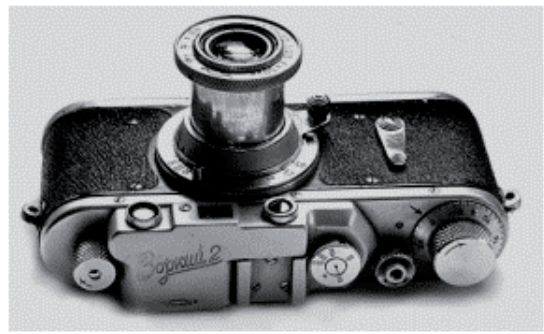


Fig. 17. Shown with self timer.

In 1954 the new standard of the shutter speeds was introduced, 1/25, 1/50, 1/100, 1/250, 1/500 and B. (Fig. 16.) At the same time appeared the Zorki 2, similar to the second edition of the original Zorki, but fitted with the self timer. (Fig's. 17 & 18.) The shutter speed setting knob has a central index rather than the arrow on the edge of the accessory shoe. The uncoupling of the transport mechanism after exposing the film is achieved by rotating of the small ring placed around the release button. The number of the Zorki 2 is limited; it is estimated about 10,000 units.

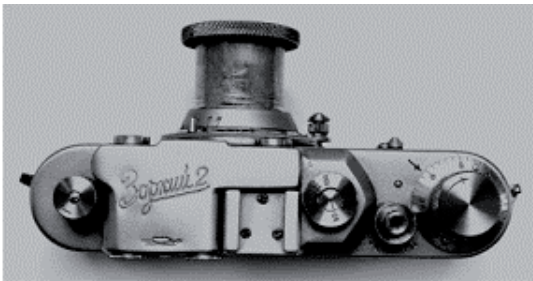


Fig. 18. Shutter dial now with central index.

In 1951 the new model, the Zorki 3 has been introduced. The Zorki 3, produced until 1956 was a quite new concept. The focal plane, fabric shutter offers more speeds: 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/250, 1/500, 1/1000 and B. The shutter setting is very similar to that of the Leica 3, there are two knobs, one governs the slow speeds (1-25) on the front of the body (Fig. 19) while the second knob, placed on the top plate sets the fast speeds (1/50-1/1000) (Fig. 20.) The viewfinder and the rangefinder are combined in one window. The

eyesight correction could be properly set by means of the lever placed just under the film winding back knob on the left side of the top plate.



Fig. 19. Zorki 3, full range of speeds via two dials.

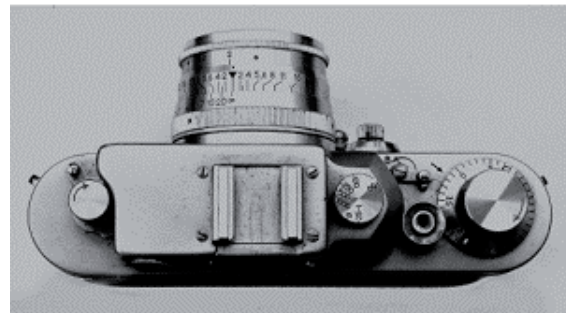


Fig. 20. High speed top dial on the Model 3.

The film loading is easy after removing the back of the camera. (Fig's 21, 22, 23, & 24.) Such design is a copy of the Zeiss Contax.



Fig. 21. View/rangefinder now combined.

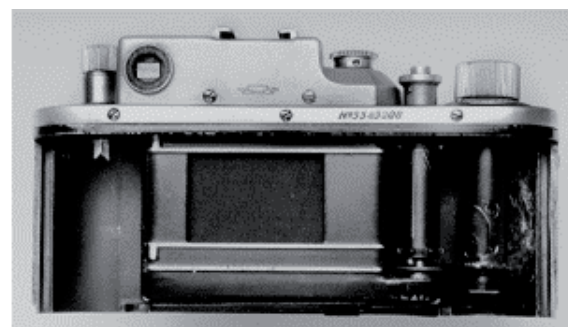


Fig. 22. Removable back for easy film loading.

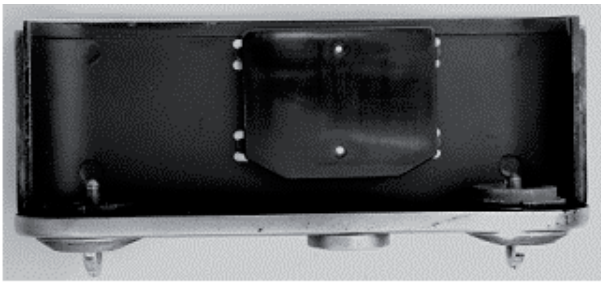


Fig. 23. Detail of the pressure plate in removable back.

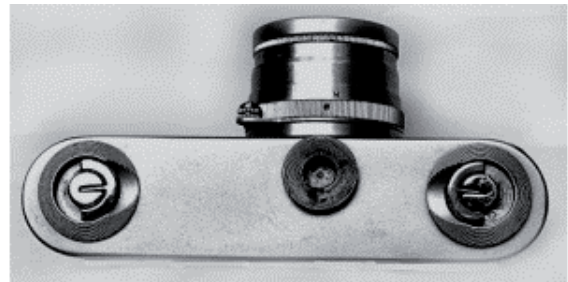


Fig. 24. Base of camera.

The Zorki 3 was usually fitted with the Jupiter 8 f2/50 lens. The early version of that lens is provided with a small focusing knob attached to the focusing ring. (Fig. 25.) In the meantime, in 1954 the Zorki 3M was introduced. That camera was very similar to the Zorki 3 but the shutter speed dial on the front was removed, and now setting all the speeds is controlled by one dial, placed on the top plate of the body. (Fig's 26 & 27.) In 1955 its production was ceased as it was replaced by the new model, the Zorki 3C. The Zorki 3C has a new shape, the flat top plate, a new film transport knob and the most important improvement – the synchro contact. (Fig's 28, 29 & 30). The flash synchronization delay, which is necessary when using flash bulbs, is set by a dial surrounding the shutter speed control.



Fig. 25. Jupiter 8 with focusing knob.

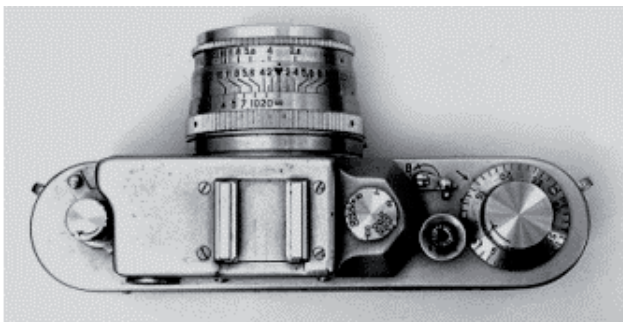


Fig. 26. Zorki 3M with all speeds now on the top dial.



Fig. 28. Zorki 3C with flat top plate, redesigned transport knob and... flash synchro.

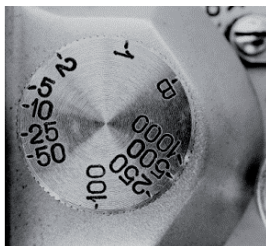


Fig. 27. Detail of the 3M's shutter speed dial.

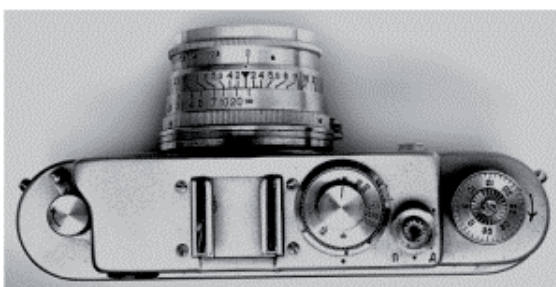


Fig. 29. Zorki 3C, top detail.

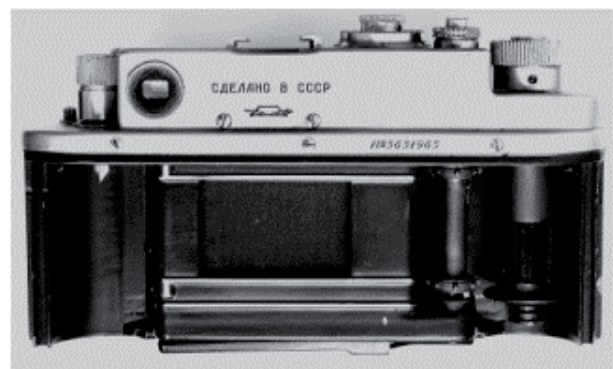


Fig. 30. Shutter and transport of the 3C.

The next, most common model is the Zorki 4, released in 1956 is very similar to the previous one, but provided with the self-timer. (Fig's 31, 32 & 33.)

On the 50th anniversary of the Soviet revolution (1967) some Zorkis had the special inscription in red (Fig 34.) It seems strange those cameras were provided with the less costly Industar 50 lens.

The Industar 50 was an improved, recomputed version of the Industar 22 of the similar Tessar like design. (Fig's 35, 36, & 37.)

The optical properties of the Industar 50 lens are as follows:

Focal length	50 mm. (in reality 52 mm.)
Maximum aperture	1:f3.5
Angle of view	45 degrees
Resolving ability	
Centre	43 lines/mm
Edge	25 lines/mm.

The next model of the Zorki 4, the Zorki 4 K was introduced in 1978. The difference lies in the film transport; the transport knob was replaced by the lever wind. (Fig's 38 & 39) The cheaper version of the Zorki 4 is the Mir (peace in Russian) introduced in 1959. (Fig's 40, & 41.) That camera is provided with the simple shutter that offers the less speeds, 1/30, 1/60, 1/125, 1/250, 1/500 and B. This model is fitted with the Industar 50 lens.

To be continued in next issue.



Fig. 31. The Zorki 4 of 1956.

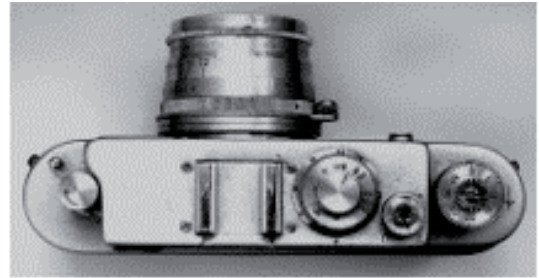


Fig. 32. Top deck of the Zorki 4.



Fig. 33. Rear view of the Zorki 4.

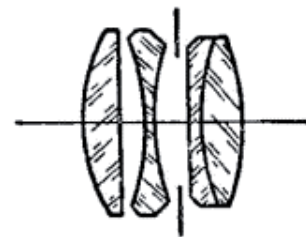


Fig. 35. Industar 50.

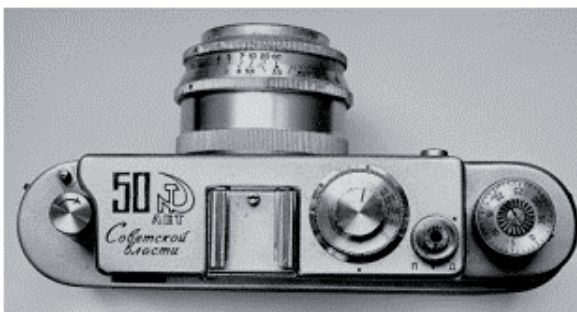


Fig. 34. The 'Anniversary Zorki'. The large 50 and Symbol to the right is in bright red.



Fig. 36. Industar 50 Lens.



Fig. 38. Zorki 4K, released in 1978.

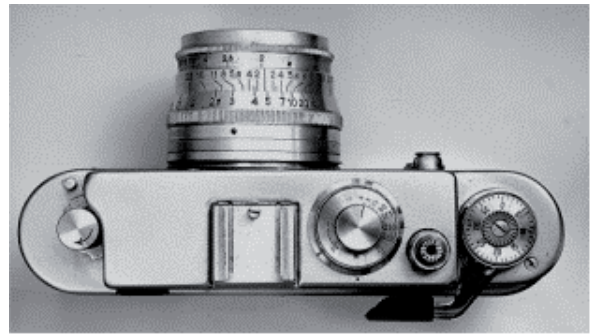


Fig. 39. Top deck of the Model 4K.



Fig. 40. The less expensive Zorki Mir (Peace).

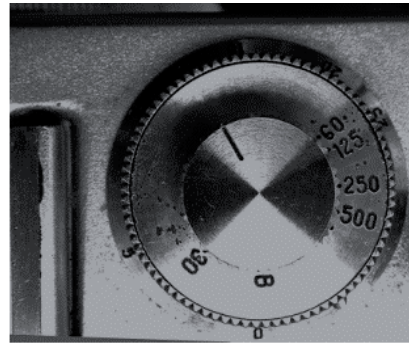


Fig. 41. Speed dial of the 'Mir' with its limited range.