

Grease on an old microscope

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I recently bought an old Reichert Zetaplan, where the focusing screw was so hard I had to use both hands to move it. However, using rather much of "sewing machine oil" It is now working fine.

Also the microscope was equipped with an Apochromat 45 /0.90 Korr with a correction ring that was stuck. I was able to unscrew the front lens, remove the correction ring and make it work (I have compared it with a another Reichert Iris 40 / 0.90 and the performance is rather similar).

The original grease was very hard and I replaced it with the "grease" used for lubricating a water-tap (gel-like in consistency and colour), since I was afraid any ordinary grease (e.g. the grease used for a fishing-reel) would sweat out to the glass surfaces. (I have successfully used this "water-tap grease" for a Nikon SLR lens focusing thread before, and this has worked fine for many years.)

But, now I'm a bit worried still if it was the right thing to do, can this special "grease" meant for a totally different purpose (heat and water persistent), destroy the lens surfaces or the cement holding the lenses together? Should I try to remove as much as possible of the new "lubricant".

Any other advises how to use (and add) grease & oil in a correct way to a microscope.

Thanks in advance

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Trond

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