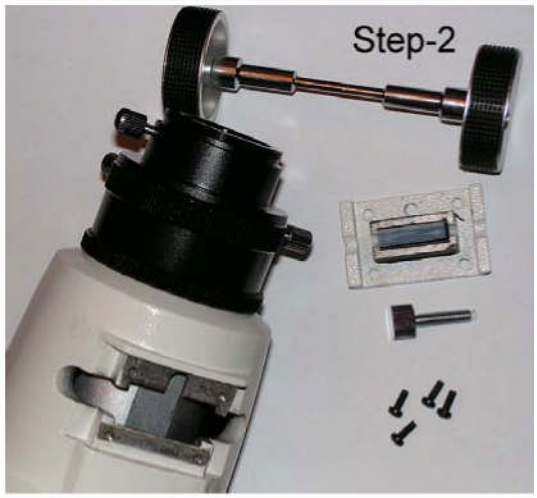
Lacerta Microfocus Upgrade Kit Instructions

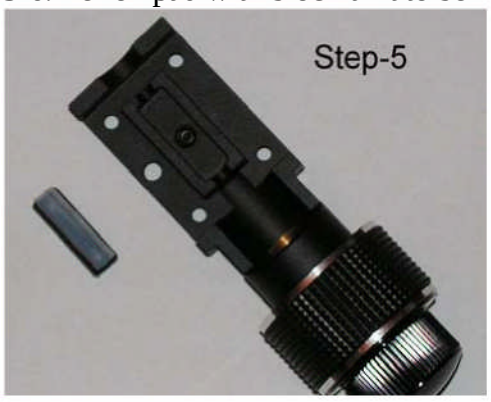
Tools required: 1.5mm / 2mm / 3mm Allen keys, Phillips screwdriver

1. Remove the four original fixing screws and the brake screw
2. Remove the original Crayford pressure plate and shaft

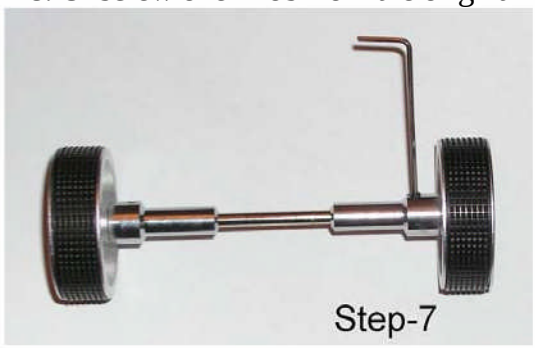


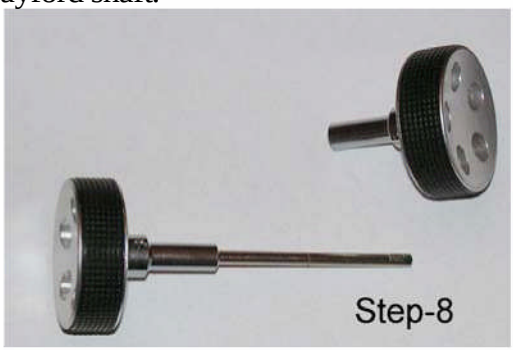
3-5. Remove and keep the Teflon pad together with the block unit

5-6. Teflon pad with block unit to be inserted into the new Lacerta pressure plate

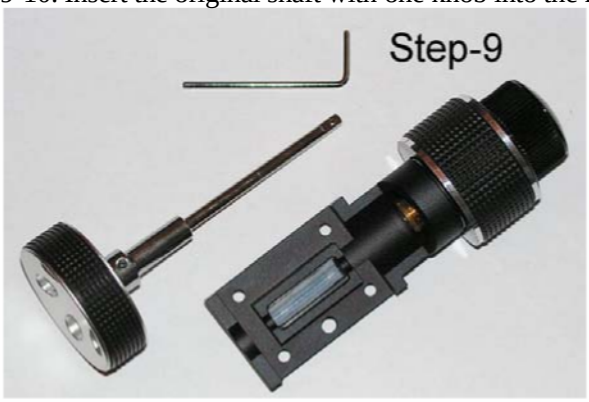


7-8. Unscrew one knob from the original Crayford shaft.

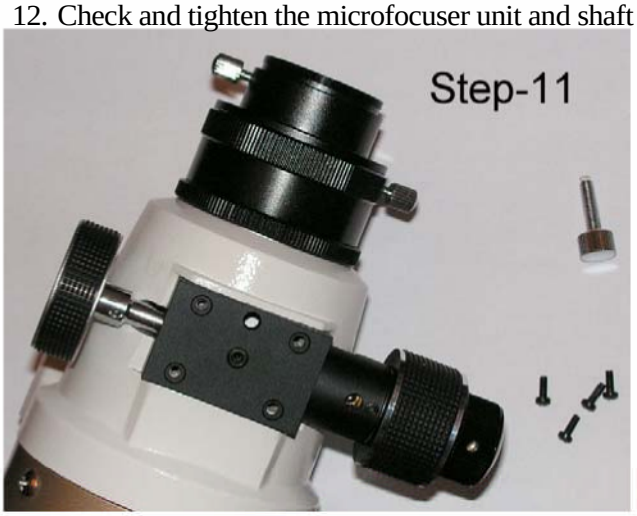




9-10. Insert the original shaft with one knob into the new Lacerta microfocus unit (do not secure it yet)

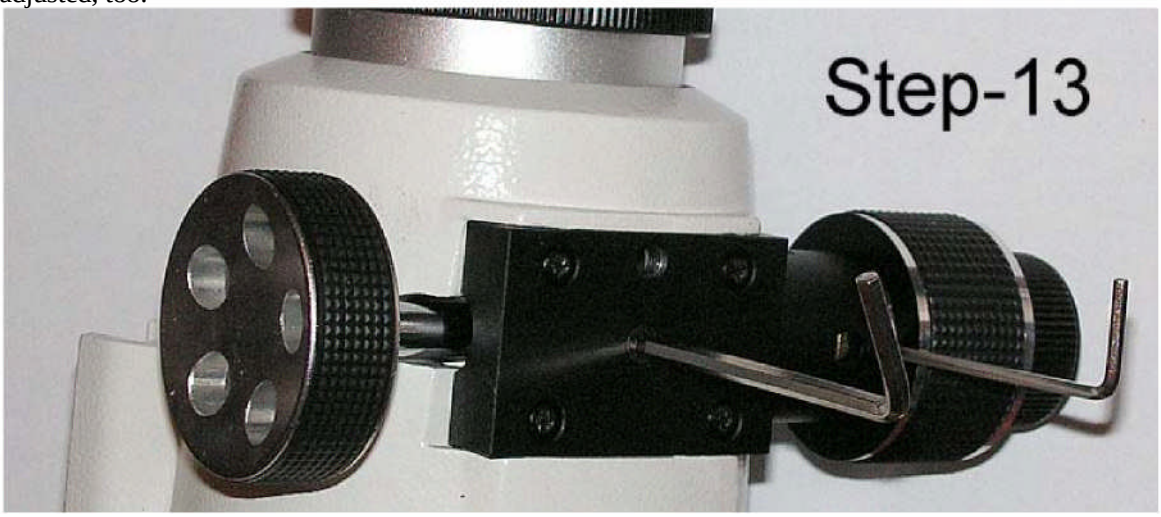


11. Install the new Lacerta microfocus unit containing the original shaft & knob onto the focuser.
12. Check and tighten the microfocuser unit and shaft of the turning knob

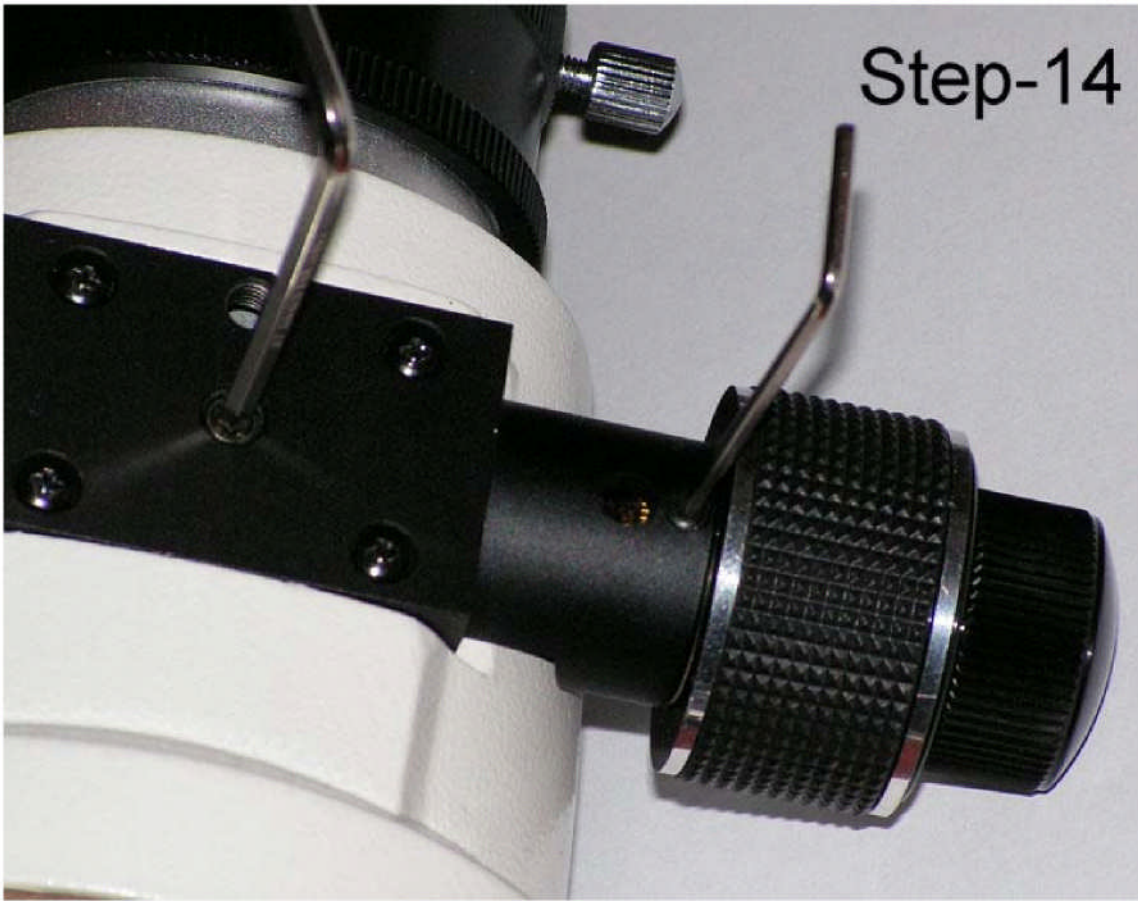


FINE TUNING

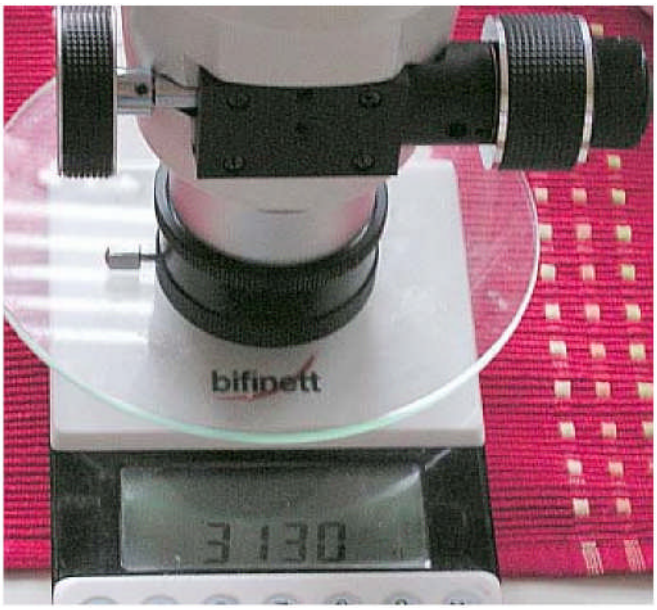
13 .a (Left Allen key on the picture) Reduce pressure on the pressure plate to the drawtube so that it can be easily moved by hand. If necessary, move the drawtube to ensure optimal fitting of the Crayford shaft. In repeated small changes increase the pressure slightly and do it until the drawtube stops autonomously slip in or out.
CONTROL STEP 1: verify that the Crayfor drawtube runs smoothly. If so, increase the pressure on the Crayford shaft until desired grip and resistance achieved.
13 b. (Right Allen key on the picture) If the Crayfor focuser doesn't run smoothly, the gear should be adjusted, too.



14. Loosen up the gear housing with the right Allen key
CONTROL STEP 2: Tighten up in small steps with both Allen keys whilst you move the drawtube in and out. Since the gear housing allows an easy play, the microfocuser's axis will reset itself into the correct position.



CONTROL STEP 3: If the micro focuser will still not run smoothly, it means that either the Crayford shaft or the drawtube has got larger than usual manufacturing tolerances. Here is what to do. Reduce pressure on the Crayford shaft (left Allen key) and then vary the strength of the four small Phillips screws to adjust the position of the back plate. Basically, try to achieve that the back plate will be exactly parallel to the shaft and apply equal pressure through it into the drawtube's flat surface. Then repeat steps 13 and 14.



As you can see from the picture on the left, a well tuned Crayford can withstand about 3 kg weights without defocusing without the use of the additional brake screw.

FURTHER ADJUSTMENTS:

Very rarely it might happen that the focusing knob of the micro focuser unit shows a little play. It is caused by a loose mounting screw that can be found under a rubber grip. See the picture below: