SERVICE NOTE

MFK2: Cleaning the Up/Down mechanism

Before you start

The Up / Down mechanism gets dirty after some time of use. It is heavily loaded especially during the high / low temperature measurement, when the number of up / down cycles significantly greater than during the anisotropy measurement.

The dust accumulates on the inner surface of the plastic tube, which consequently causes creation of the scratches on the inner surface of the tube.

All the deposits also increase the friction in the system. The Up/Down Mechanism must be cleaned especially if it makes suspicious noise or if the time of movement UP is too long.

Testing the Up/Down mechanism

- Switch on the Kappabridge and open the software SAFYR. From upper main menu select *Execute* > *Auxiliary commands*.
- Move with the holder down and up using buttons in Auxiliary screen. The execution time of "Up" movement must be less than 3.6 sec.
- \cdot If not, clean the Up/Down mechanism following next steps.



Figure 1

Cleaning the Up/down mechanism

- Move the Up / Down mechanism to "down" position using the button in Auxiliary commands window.
- Loosen a little bit the screw marked by red circle in Figure 2 and then remove the arm of the holder. Use the proper size of screw-driver.



Figure 2

• Unscrew the plastic screw using 5mm hex key. Screw is marked by red circle in Fig. 3. Then remove the plastic disc from the tube.





• Prepare a paper strip for cleaning. Fold one sheet of office paper few times along the longer side to get similar shape as in Fig. 4.



• Clean the space between outer tube and inner cylinder using the paper strip. Move with the paper along the surface of the inner cylinder and simultaneously (a little bit) move it up and down, as you can see in Fig. 5.



Figure 5

- $\cdot\,$ Do not lubricate the inner cylinder by any lubricant.
- **Do not use alcohol for cleaning.** It may damage the plastic cylinder or tube due to evaporated heat from alcohol.

- You can use a vacuum cleaner to remove any dust particles from the space between plastic tube and inner cylinder.
- Wash the plastic disc in water, dry it and reinstall it into the tube in correct position. Tighten it gently by the fixing screw.
- Mount the arm of the holder and fix it gently again by the small screw.
- Check the execution time of the mechanism in movement "Up" (less that 3.6 sec).
- In case the cleaning does not fix the problem, please contact Agico for further steps.