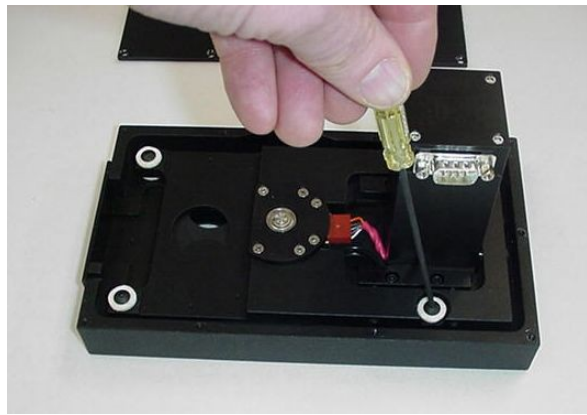
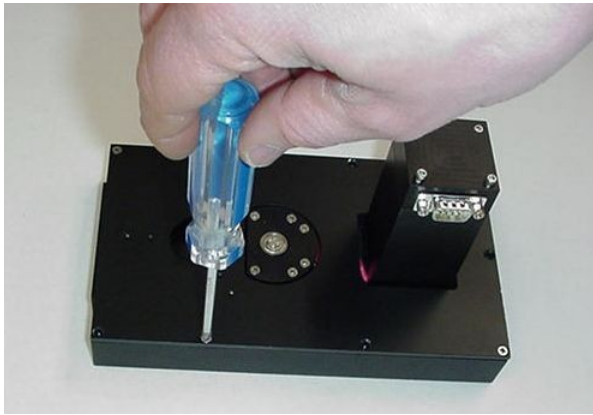


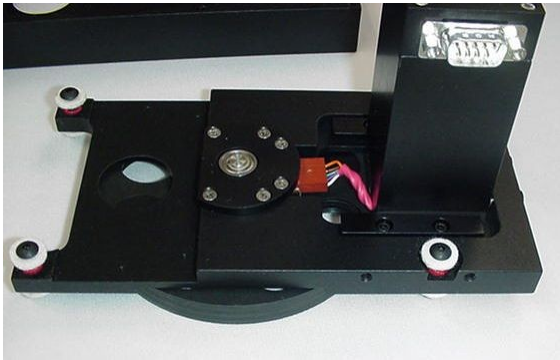
FW-1000 Motor Tension Adjustment

Adjustment of the motor tension on the FW-1000 filter wheel may occasionally be necessary due to wear of the friction drive o-rings, or if the tension is determined to be too loose or too tight for other reasons. These instructions describe the steps required to properly tension the motor.

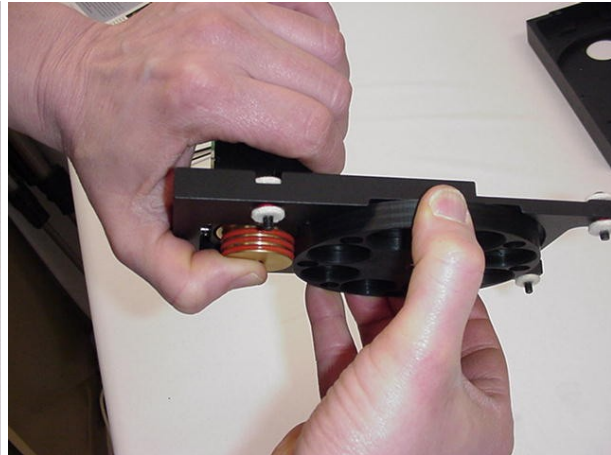
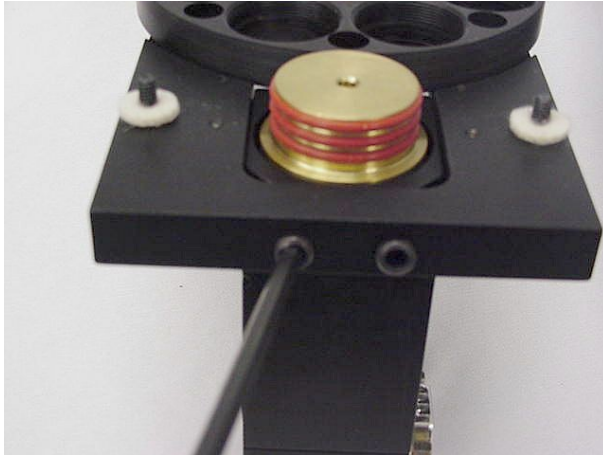
- 1) Remove the filter wheel from the microscope. Remove the cover plate from the filter wheel, fastened by nine flat-head screws, as shown below left. Lift the cover over the connector for the motor and set aside.



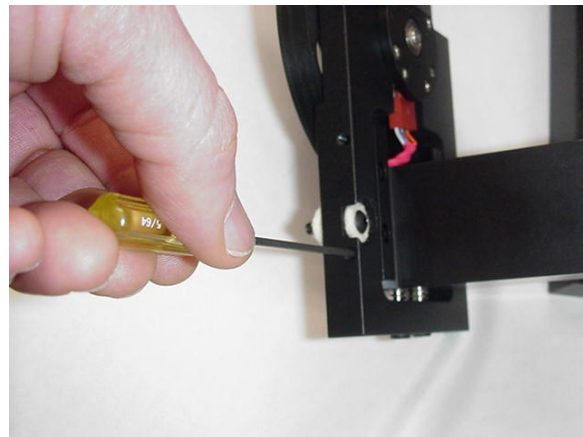
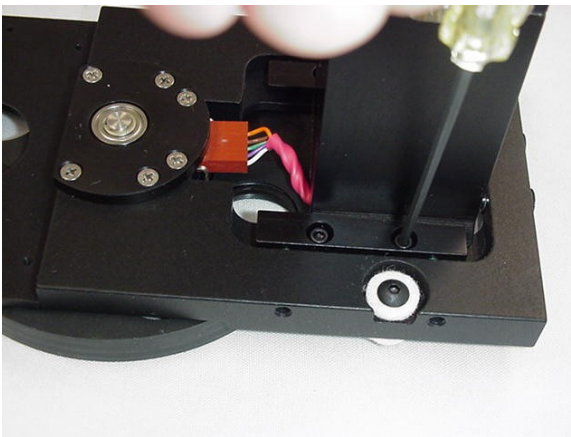
- 2) Loosen completely the four bushing screws using a 3/32 Allen wrench. Remove the motor/wheel assembly from the filter wheel body. Be sure to keep track of the felt bushings and washers.



- 3) The motor is held in place on a dovetail slide. There are two Allen head set screws on the end of the frame that press the motor against the filter wheel. Adjust these set-screws with a 5/32 Allen wrench such that the drive wheel o-rings always contact the filter wheel, even when the motor is pushed firmly toward the setscrews. Do not over tighten the setscrews. The wheel will not turn freely, and the o-rings will be forced out of their grooves on the drive wheel if the motor is pressed against the wheel too tightly.



- 4) Check the adjustment by verifying that the filter wheel turns easily against the drive wheel. Press the motor firmly against the setscrew stops and verify that there is friction between the filter wheel and the drive wheel.
- 5) If the motor is too loose or too tight in the dovetail slide this can be adjusted by loosening one of the dovetail rails and adjusting the sets screws that press it against the motor. (this step is often not required)



- 6) Reinstall the filter wheel frame in the filter wheel body. Snug the felt bushings screws and then back off one half turn. Reinstall the cover on the filter wheel body.