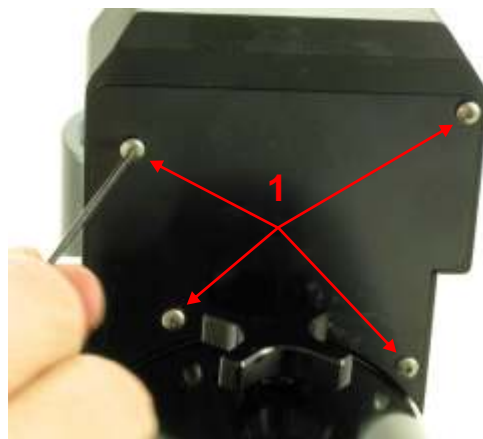


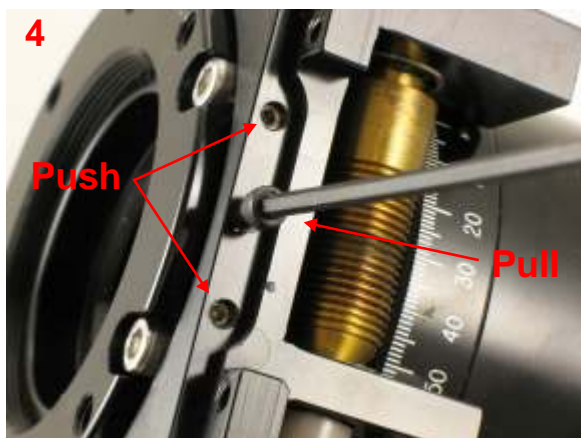
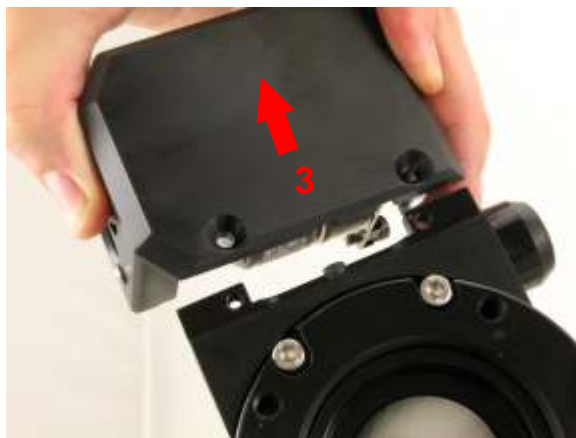
Astro-Physics 400QMD Dec Worm Mesh Adjustment

1. Remove the rear cover from the motor / gearbox.

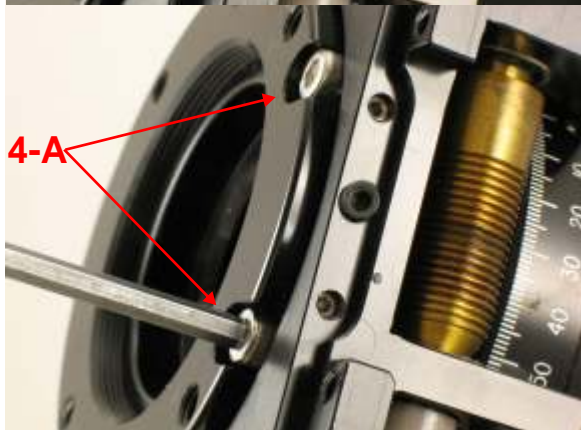


2. Remove the two screws that hold the motor / gearbox onto the worm gear housing.

3. Carefully lift off the motor / gearbox to expose the worm gear underneath.



4. The worm mesh is held by a push / pull system. To tighten the mesh, slightly loosen ONE of the "push" screws, and then tighten the "pull" screw. You may feel a lot of resistance when you "pull" the worm tighter. If it is too tight to budge, go to step 4-A. To loosen the gear mesh, do the opposite - loosen the "pull" and tighten the "push." Make only very tiny adjustments - 1/8 turn is equivalent to about 4/1000's of an inch. Test the mesh as described below in step 5. You may need to repeat steps four through five several times to get the mesh just right.



4-A. You may need to SLIGHTLY loosen one of the two screws that hold the worm gear housing to the axis. Loosen only the one nearest the push screw that you are using for the adjustment. This should actually be rather snug during the adjustment so that the gear housing and worm gear are held firmly to the axis. If you must loosen one of these, it is only loosened slightly to allow the push pull adjustment. Re-tighten before testing the mesh in step 5 below, as it can affect the final outcome.



5. Remove the round black end cap from the worm gear housing. Turn the gear by hand to test the mesh. (You may need the Allen wrench shown in the photo. The smooth surface of the aluminum is difficult to grip. Do not try to remove the socket cap screw.) Ideally, the worm will turn smoothly with zero backlash when the direction is reversed. Repeat the adjustment process starting back at step four as needed. When finished, be sure you have re-tightened the screw from step 4-A, if you had to loosen it to make the adjustment.

Re-assemble by doing the first three steps in reverse.