



If the wheel is not moving freely or is even frozen up, there could be several reasons.

1. Material expansion/contraction . If the instrument was stored in a very cold environment, let it warm until it reaches approx. room temperature.
2. It may have been dropped and the measuring wheel (W) touches the vernier (V), i.e. the gap between vernier and wheel must be opened up.
3. The whole mounting plate shifted in a serious drop and jams the dial gear against the worm gear (WG) of the instrument axis.

To correct for problems 2 and 3 you should have allen wrenches. If you do not, we suggest to try small screw drivers that engage into the adjustment screws. You may have to file the screw drivers down to make them fit.

To adjust the vernier gap :

Loosen both set screws **S** and move both bearings **B** to the left (this shifts the wheel axis away from the vernier) by pushing the right hand bearing extending out of the planimeter body **E** .

Make sure the gap between wheel and vernier is as small as possible to assure good readouts. Also make sure there is virtually no axis play between the bearings, i.e. if you push the measuring wheel left and right there should be at most an almost imperceptible movement of the axis between the bearings.

The measuring wheel must move freely and should rotate a few seconds if moved vigorously.

Moving the Mounting Plate:

If the axis adjustment outlined above did not correct the wheel freeze up, you have encountered problem 3. You must reposition the mounting plate. Make sure not to open screw S4 if your instrument is a Fixed Arm Model 10 or 20 in order to maintain the correct tracer arm length. If it is accidentally changed, the instrument would need to be recalibrated.

Loosen screws S1, S2 and S3 and move the mounting plate upwards away from the instrument axis in order to relieve the pressure from both dial gear and axis worm gear.

After finishing your adjustments, make sure that all screws are securely locked again.

t8\inst\adjust