

H.4. Adjusting the gearing play

There are three different sorts of play (see also I.4. - I.6.):

- Every Schlumpf drive comes with 0.1 to 0.2 mm play in the direction of the spindle. After tightening the gearing system with the appropriate torque (140 Nm), this play mostly disappears. This initial play prevents the left industrial ball bearing from stress in the direction of the spindle.

- If you hold the left and the right crankarm and try to wobble them in lateral direction, a play can indicate a worn out left industrial bearing (or an inadequate grooved nut on the left side, because it doesn't guide the left bearing correctly). These industrial bearings have a life expectancy of 20'000 to 30'000 km. (See also I.16.6.)

- The typical play of the planetary gearing system can be felt by moving the chainring in lateral direction. This doesn't have something in common with play of the crankarms nor side play of the spindle.

If you can move the chainring, this play can be adjusted by the self locking nut on the left side. A few degrees should be enough to neutralize this play.

Important: don't tighten this nut too much! Preload on the bearing leads to higher resistance and wear on all bearings.

If you don't know, if the gearing play is adjusted correctly, unscrew the self locking nut on the left side of the axle approximately 1/4 to 1/2 turn. Now try to move the chainring in lateral direction. If you feel the play, start tightening the self locking nut slightly, until the play disappears!

No play, but also no preload!