NOVA MMB MESSTECHNIK

Additional Information for mounting of a mechanical speedometer dia 48 / 60 mm

On the occasion of a frequently occurred mistake when mounting the drive cable to the mechanical speedometer, we would like to inform you about the correct way of mounting the drive cable.

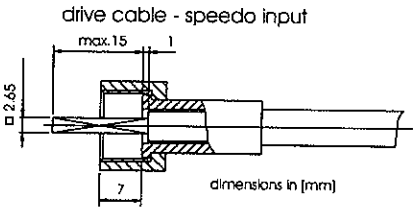
Recently we are faced to many warranty claims for mechanical speedometers. When we check these speedos, we often find out, that the measurement was destroyed because of the wrong mounting of the drive cable.
The mechanical speedometer works with the so-called "eddy current principle". The needle is triggered by a magnetic field. For assuring this working principle the needle shaft has to run very smooth. The needle shaft must not be driven from a fix mechanical connection.
If you mount a drive cable whose square end is too long, then this square end is pushing against the needle shaft inside the speedometer and a friction-type connection is established between the square end and the needle shaft.
If the drive cable is now moving, then the needle is moved by the square end, too. One revolution of the drive cable causes one revolution of the needle! The needle is stopped by the stop pin and the needle is bent.
The speedometer is destroyed.

To avoid this error, please mount the speedometer in the following order:

1. Mount the hub drive to the wheel.
2. Mount the drive cable to the hub drive.
3. Lay the drive cable from the hub drive to the speedometer according to the individual conditions of your motorcycle.
4. When the drive cable has it's final position, please measure the length of the square end and shorten it if necessary to the allowed length (maximum 15 mm).
5. Mount the drive cable to the speedometer. There must not be a gap between drive cable and speedometer. Screw the mounting nut straight on the speedometer without damaging the thread of the speedometer.

Please note, that most of the drive cables have a side for connecting the hub drive and a side for connecting the speedometer. That's why the square ends of the drive cable can have different lengths. Please do not mix up!
→ Please forward the information to your customers!

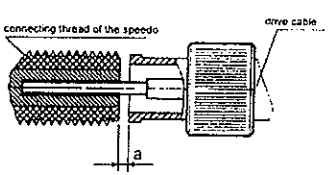
Sketches:



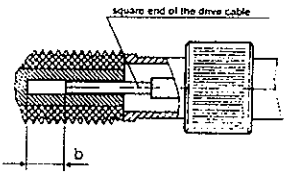
Wrong

Square end of drive cable too long.
gap "a" is not allowed!
long square end is destroying the speedo.

Right



gap "a" is not allowed



clearance "b" necessary