

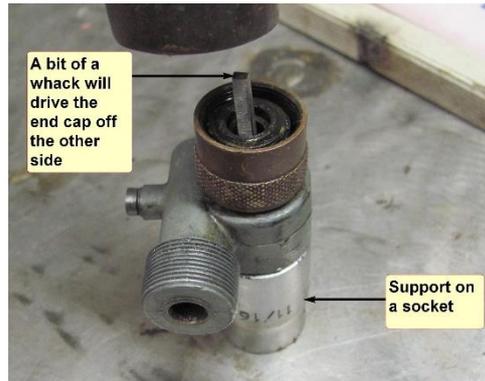
## Do it Yourself Speedo Angle Drive Repair.

When the angle drive to your Speedo fails and you do not wish to spend the several hundred Dollars for a new one, or find a repairer, take heart, it is not difficult to make it well again

Take an hour of your time and a spare 4mm Allen key, then do it yourself.



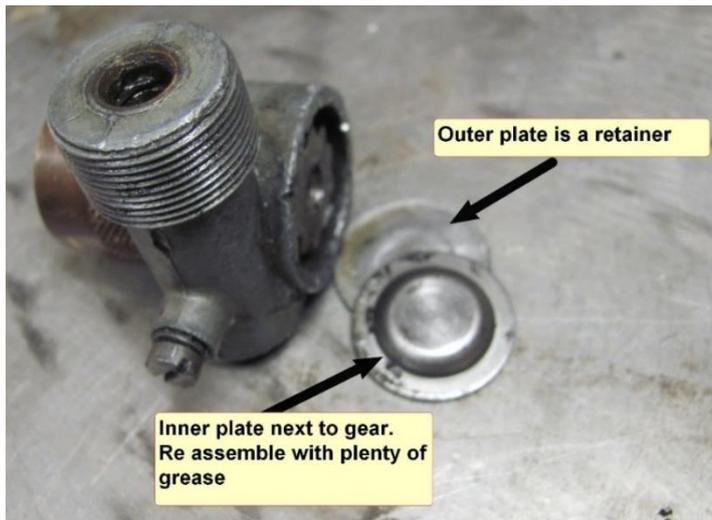
The first thing is to determine why it does not work. The most common issue is the rounding off of the male square drive shaft and sometimes it will be the connection between the drive shaft and the gear.



This is usually quite obvious however the whole thing has to come apart either way.

Support on a socket which is larger than the disc retainer but smaller than the housing and then hitting the end of the shaft will drive the gear assembly and the retainers out of the

housing.

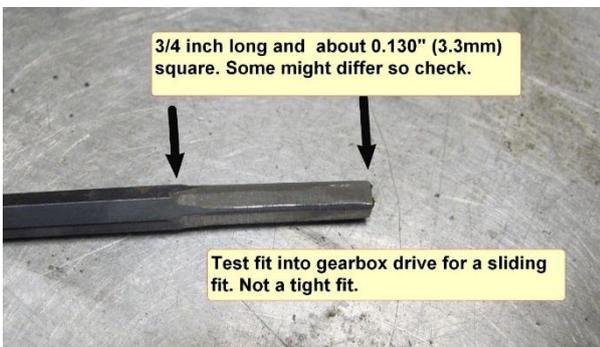


Now the shaft or old cable can be inspected and or removed. If the weld has failed and the square drive is still good, then just re weld.

The original units had a length of drive cable welded into the gear, however if a new one is required it is easily made using a common 4mm Allen key. They are supplied with almost every DIY assembly item on the planet so should be available for nothing.



You will notice that the top and bottom flats provide a perfect reference surface on the grinder guide as you want to remove the 2 side of the Hex to produce a square.



The starting size is 0.155" (4mm) and you want to end up with a square of 0.130" (3.3mm)

Keep checking until you get an easy sliding fit into the gearbox drive

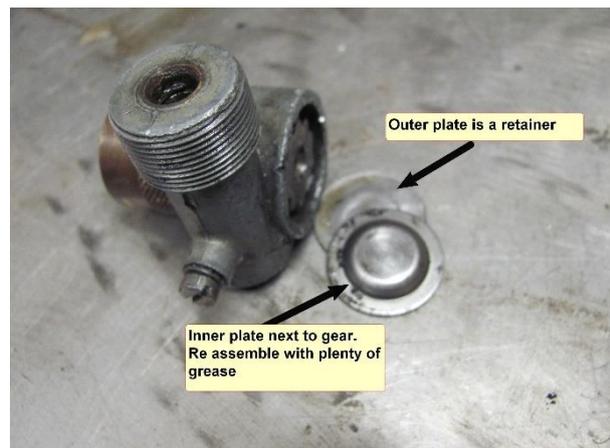
Cut the Allen Key off about 1.6" long, with a grinder cut off wheel as it is too hard to hacksaw.



Fit the square end into your electric drill and use a running grind stone to turn it down to fit into the gearwheel.

It is quite quick so keep a check on the diameter to obtain a tight fit into the gear. This will be about 0.115"-0.118" or to whatever size you drilled out the old shaft. Just make it a reasonably tight fit as the friction reduces dependence on the weld.

All that remains is to put a better dab of weld than mine, between the end of the shaft and the gear. The countersink you did before helps with weld penetration.



File it flush and reassemble the gear followed by the 2 discs with some grease on the face of the raised portion of the inner disc.



Fix the outer disc by burring over the edge with a chisel in 4 places, check that it turns freely and put it all back into the car.

Happy motoring.

Rob Bradford