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## Porsche 924 Speedometer Service/Odometer Repair

http://www.924.org/techsection/odo speedo repair.htm

This page will describe how to fix the typical odometer failure, as well as how to open up the speedometer for service. For now, it's just a series of pictures - instructions to follow.

The black bezel is pried off with a very small screwdriver. Start with a small screwdriver and work your way all the way around the bezel.



Then use a larger screwdriver to work around again. Eventually the bezel will slide off easily.



The back of the bezel paint will be scratched but will not be visible once the gauge is reinstalled in the dash. If you are concerned you can touch up the bezel before reinstalling with a small amount of black model paint.



Now it has been lifted off (carefully), and the plastic lens comes loose as well.



The speedometer without lens.



The two screws in the back of the speedometer are removed.



Then the speedometer guts come right out



Most of the inner workings, such as we need, can be gotten to at this point, at least to fix the odometer.



The small black gear is the one that either cracks and does not hold tightly to the odometer shaft any longer. Need to count the teeth in order to order the correct replacement gear. Most US Spec vehicles are 17 and most European Spec is 11.



If this gear is bad, use a flat tip screwdriver under to gear to pry off. Press on the new gear with your fingers or a large pair of channel lock pliers. Just inside the speedometer clear plastic housing is located the lead gear that must fit tightly on the shaft in order for the odometer to work correctly. If this spins on the shaft it must be replaced as well.



If you need to replace the lead gear the speedometer face must be removed.

First make a mark on the edge of the speedometer face where the needle rests.

DO NOT PRY UP ON THE NEEDLE TO

REMOVE! This is the trickiest part of the job. The needle is pressed onto a shaft that is extremely thin. It feels like a pretty tough metal, but you need to be careful here. *Do not* pull straight up. *Do not* put any torque on the shaft.

We need to have a picture from the rear of the speedometer to update this repair as well as refresh exactly how to remove the needle without damaging the speedometer.



The internal workings of the speedometer with the face removed. Before installing the outer gear use a center punch to gentle tap the odometer shaft out. You only want to remove this shaft just far enough to remove the lead gear. Install the new lead gear in place and use a large pair of channel lock pliers to gently press the odometer shaft through the new lead gear. You do not want to squeeze this together to tightly as the assembly must still be able to spin freely. Now install the outer gear



Reinstall the odometer face and just tighten the screws until they touch the face.

When reinstalling the Speedo needle, make sure you gently push down evenly on the center hub of the needle. Once it is on firm enough, lock the speed cup (need to have a picture of the rear of the speedometer to further finish the how to repair) and gently rotate the speedometer needle until you have the needle lined up with the mark you made earlier. Once everything is back together, also gently recompress the trim ring around the back of the Speedo housing. You could use a black permanent marker to cover any scratches. Plug the unit back into the dash and reinsert into your gauge opening. Hopefully all is now re-recording miles.



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