

www.OdometerGears.com

http://www.midsouthvw.com/TechTips/OdometerGearRR.htm

HOMETechnical
IndexTech TipOdometer Gear Replacement
(VW Super Beetle)

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How about a short course in Super Beetle odometer repair? We will be covering the number one cause of �stuck odometers, � where your speedometer will tell you how fast you are going, but the odometer either does not move at all or seems to slip and not keep up accurately.

The cause of this problem is almost always a cracked odometer gear, which is driven by a spiral looking worm gear.

Until recently, just about the only option was to buy a new or rebuilt speedometer. But now, you can buy a new plastic gear through<u>www.odometergears.com</u>. Mr. Caplan, the owner of this small business in Maryland, was very helpful in making one available to fit my Super Beetle. I sent him my cracked one, he used it to make a casting and now you can purchase them and several others on-line at his site. My Super Beetle uses an 11-tooth gear & I am guessing that the older & standard Beetles are the same. But I have not verified that yet. The web site also includes links to other related sites, even ones that will fix your speedometer for you.

NOTE: At the <u>Odometergears.com</u> site, click on <u>VW</u> on the left, then be sure to use the pull down menu to make your selection. There are several listed. The **11 tooth for VW Super Beetle** is the one I used here; please compare pictures of the Super Beetle and the standard mechanical gear. It is very common to have a standard Beetle speedometer installed in a Super Beetle and the gears are different and will not interchange.



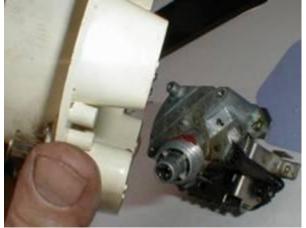
Here, we will be covering the steps involved in disassembly and reassembly.

Tools Needed

- Container for the small parts (cup)
- Medium, Flat-Tip Screwdriver
- Small, Flat-Tip Tweaker Screwdriver
- Pair of Needle Nose Pliers
- 1. Remove the speedometer from the dash:
 - Unscrew the speedometer cable from the back of the speedometer housing
 - Partially remove the speedometer from the dash (�73 & later Super Beetles have a friction collar & the unit just pulls straight out) enough to disconnect wires and unplug dash lights, etc.
 - Note or mark connections of wires and lamps, then disconnect them from the speedometer.
- 2. Remove the Gas Gauge. There are 3 slotted screws, 1 on each side and one securing a ground strap from the vibrator.
- 3. Remove the front �glass � and bezel that secures it. This will require bending the back lip of the bezel so that it will come off. You will be re-using this, so be careful.
- 4. Remove the 4 slotted screws (back), 2 on each side (L&R) that secure the white, plastic body into the galvanized metal housing.



5. From the back of the unit, remove the 2 slotted screws that secure the odometer into the white, plastic assembly and remove the odometer assembly.



-- You are now ready to replace the broken gear. �

NOTE: In the picture above and below, the dial face has been removed for better photo viewing.

6. The driven odometer gear that is the culprit is on the left end (as viewed from the front) of the shaft that runs through all the odometer read-out wheels. The old, broken one should just slide off the end.



- 7. **IMPORTANT:** Check the end of the odometer shaft (where the new gear will go) to ensure there are no burrs, bumps or knurling. The shaft must be smooth so as not to crack the new gear. If necessary, use a miniature file smooth the odometer shaft prior to pushing the gear into place.
- 8. Clean off any old, stiff grease from the gears.

REASSEMBLY

 Using a large pair of channel lock pliers or a bench vise gently press the new gear onto the shaft. The new gear has to fit tightly onto the shaft in order for the odometer to function properly. (Odometer Gears Ltd Edit)

Using nothing more than your fingers, push the new gear onto the shaft, while aligning its teeth with the driving worm gear. If it does not go on easily, STOP and inspect for malformed shaft end where a predecessor might have knurled it to try to get a bad gear to grab hold.

- 2. Mount the odometer into the white, plastic housing and secure with 2 slotted screws from the back.
- 3. Mount the assembly into the metal housing, securing with 4 slotted screws, 2 on each side, from the rear.
- 4. Install the shroud, then place the �glass � over the front and re-install the bezel ring. You will now have to bend the backside of the bezel to hold it in place.

This ought to help you keep track of when your next oil change is due and calculate that fuel mileage too. Happy driving!

Air Bill



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