

Trouble shooting VSS mileage problems.

When the mileage count on you Record CGII meter is either missing or irregular, check the following:

- a. Check that the correct VSS wire is connected to the meter junction box, terminal "DISTANCE SENSOR +"
- b. VSS connection should be soldered to the VSS wire, since the VSS signal is not very strong a good connection is essential.
- c. Connect the meter ground direct to the battery ground wire. This simple step solves 90% of all mileage problems.
- d. Check meter calibration (step 5 installation guide). Both the filter value **F1** and the calibration number must have a number other than "0", or the mileage will not work. Nominal factory settings are filter **F1 2** and calibration number **1250**. To program filter and calibration number, follow step 6 of installation guide.
- e. Check meter operation as follows. With meter in test mode (step 5 installation guide) and VSS wire disconnected, short the 2 terminals on the junction box DISTANCE SENSOR + to terminal - (minus) with a piece of wire. Tap the 2 terminals together while watching the meter, the display should count from 0-1-2-3-4 etc. every time the terminals are shorted together, simulating mileage input as if driving. The count indicates the meter works correctly, and the mileage problem is not the meter but in the car's mileage pulses or in the meter grounding (see steps c and g).
- f. Road test the VSS sending unit as follows. Place meter in test mode (step 5) and drive car at 50 Km or 30 MPH, observe meter for a steady count, slow down by braking, than accelerate to resume speed. The meter count should at all times be consistent with the car speed. A faulty VSS sending unit will stop or hesitate when accelerating in most cases. For your safety use an observer for this test.
- g. If problem remains, a bad ground is the most likely problem. For FORD and CHRYSLER cars connect the meter ground to the transmission near the VSS sending unit, on GM cars connect the meter ground to ECM or computer ground where the VSS signal originates.
- h. Install revision -F type junction box and install jumper.

Specific problems:

With meter in test mode, engine running, the meter is counting while the car is stopped.

On newer type Chrysler cars, install rev-F box or newer and jumper.(step g)

On GM cars with same problem, change meter ground to same ground as ECM (step f) or change to rev-F box and jumper. (step g)

Power box revision -G or newer no mileage count. Install a ground wire at DISTANCE sensor (-) terminal.

For cars with calibration number over 15000, enter **F1 1** filter number when calibrating.

General:

VSS pulses on all cars are factory standard at 2000 or 4000 or 8000 pulses per mile, which is 1250 or 2500 or 5000 per Kilometer. Any factory standard car should have a calibration number relatively close to one of these numbers. If not, re-drive the calibrating distance 1 or 2 time and check that the count remains the same over the same distance. If not, check steps a, b, c, f, g and h above.

If a meter does not charge consistent, charges too high or too low. The problem is nearly always caused by VSS problems. Check all the above. Once the problem is rectified re-calibration might be necessary.

New installs:

Chrysler and GM cars - use jumper.

Ford cars - remove jumper.

