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Programmable Speedometer with LCD Trip Odometer Part Numbers R5482M, R5483M, R6482M, R6483M

Calibration Number

The programmable speedometer with LCD trip odometer can be programmed for any calibration number between 1000 and 99999. Calibration number is defined as the number of pulses per mile the speedometer sensor outputs. The calibration number can be found in the following ways:

1. Refer to the vehicle specifications.
2. Use a commercial pulse counter.
3. Calculate the value by multiplying the tire revs per mile times the differential ratio times the number of teeth on the transmission tone wheel. U.S. transmission tone wheels are usually 16 teeth. European transmission tone wheels are usually 13 teeth.
4. If the vehicle is being modified for an electric sensor from a mechanical speedometer, multiply the sensor pulses per rev by 1000 to get the calibration number. (Mini-Gen sensors are 30 pulses per rev.)

If you cannot determine the number of pulses per mile, you can set the speedometer for 30,000 pulses per mile. Drive at a known speed by following a vehicle or use distance and time. Divide the speedometer reading by the actual speed the vehicle is going, then multiply by 30,000. This will give you the pulses per mile of your vehicle. It is possible to use this technique using the odometer. Divide the distance the speedometer has recorded by the actual distance run and multiply by 30,000 to get your new calibration number. The longer the distance traveled between readings, the better the accuracy.

The calibration number is in Miles per Hour. If the calculations are in Kilometers per Hour, multiply the result by 0.621 to get Miles per Hour.

Setting the Speedometer

The speedometer will work with 12 or 24 volt negative ground systems. Calibration can be done either in the vehicle or with a DC power supply on a test bench.

Connect the Red and White wires to positive, and the black wire to negative.

To enter the calibration mode, press and hold the trip reset button and apply power. The unit will enter the calibration mode and show "PULSE". Press and release the reset button until the first number is displayed correctly. Wait for the display to flash 5 times for the unit to go to the next digit. Repeat digit setting and waiting for all remaining digits. Once all 5 digits have been programmed, the speedometer comes out of programming mode and is ready to use. If the unit is programmed incorrectly, cycle power and repeat the above procedures.

Installing the Speedometer in the Vehicle

Speedometer has 12 volt bulbs installed at the factory. If the vehicle system voltage is 24 volts, replace both 12 volt bulbs with 24 volt bulbs, supplied loose in kit.

Connect wires as shown below, and install speedometer in vehicle using the clamp supplied.

- [+] Red Wire: Connect Ignition voltage wire from vehicle (Only has power when Ignition switch is ON) to red wire on instrument for 12VDC negative ground systems.
- [+] For 24V DC negative ground systems, connect the red wire to the bottom of the resistor (green cylinder) then connect vehicles ignition voltage wire to the top of the resistor terminal stud.
- Black Wire: Ground wire and one sensor wire (attach one sensor output wire to same ground).
- Blue Wire: Speedometer sensor signal input.
- White Wire: Dashboard illumination.

Operation

Turn ignition to ON. If the unit is first installed, the calibration number will be displayed for two seconds.

Pressing the trip reset button for less than 2 seconds will switch the display between trip and total vehicle miles. If the trip reset button is pressed for longer than 2 seconds, the trip display will reset.

The calibration number, trip and total mile numbers will be stored in memory for at least 5 years, even if the battery is disconnected.

