

Product: Speedometer	Description CALIBRATION PROGRAM	Date Jan 06
Type: Electrical		Issue 2

CALIBRATION PROGRAM FOR HALL EFFECT SENDER

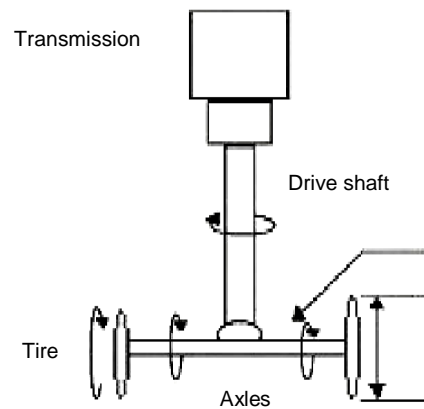
Known parameters are the following:

- a. 1 mile = 5280 feet
- b. Circumference of Tire (inches) = Tire Diameter (inches) X Π (3.14159)
- c. Circumference of Tire (feet) = circumference of Tires (inches) / 12
- d. Hall-effect sender produces 16 pulses per revolution.

Need to know => Gear ratio and the tire diameter (outside)

Computation Results:

- 1. Find the circumference of the Tire (inches):
=> Tire Diameter x Π (3.14159)
- 2. Find the Circumference of the Tire (feet):
=> Circumference of Tires (inches) / 12
- 3. Number of Tire Revolutions Per Mile
=> 5280 feet / Circumference of Tire (feet)
- 4. Revolution at transmission
=> Gear Ratio x Number of Tire Revolutions per Mile.
- 5. Speedometer pulse setting
=> Revolution at Transmission x 16 pulses



Example:

Given: Gear Ratio = 3.55 per one mile
Tire diameter = 23 inches

Circumference of Tire (inches) => 23 x 3.14159 = 72.25657 inches

Circumference of Tire (feet) => 72.25657 / 12 = 6.0214 feet

Number of revolutions per mile => 5280 / 6.0214 = 876.8725 rev / mile

Revolution at transmission => 3.55 x 876.8725 = 3112.90

Speedometer pulse setting => 3112.90 x 16 = 49806 pulses