



# INSTALLATION INSTRUCTIONS

## 3 1/8" ELECTRONIC SPEEDOMETER

### Street Rod Series

#### MODEL 1388, 1488, 1588, 1688, 1788, 1888, 1988



## General Information

This Auto Meter electronic speedometer is pre-calibrated for 16,000 pulses/mile hall effect senders. When converting from a cable driven speedometer, no further calibration is needed if:

1. The transmissions speedometer cable take-off is 1000 rpm at 60 mph. Most stock vehicles meet this requirement. If the vehicles tire size and/or differential ratio has been changed, the speedometer needs to be recalibrated.

2. The vehicle is equipped with a 16 pulse/revolution speedometer sender. **(See Speedo Senders below for available Auto Meter senders.)**
3. The automobile is equipped with a hall effect sender.

If the above conditions have not been met, the speedometer must be recalibrated (see Calibration section).

## Speedometer Senders

The speedometer is designed to operate with an electrical speed sender. The speed senders signal impulse range must be between 500 and 400,000 pulses/mile. Any speed sender or electronic module that meets the following two conditions can be used:

- Pulse rate generated proportional to vehicle speed.
- Output within the voltage ranges listed below:
  - 4.0 to 16 V peak (Square Wave), 3 wire
  - 2.0 to 120 V peak to peak (Sine Wave), 2 wire

Recommended Auto Meter senders:

5291	Standard 7/8-18 thread	Hall-Effect (Square Wave), 3 wire
5292	Ford, plug in	16 Pulse Per Revolution

## Mounting

### Front

1. Mount the speedometer in a 3.156" (3 1/2") dia. hole in the dashboard. (Be careful not to cut the hole too large.) It can also be mounted in standard after market street rod panels.
2. Cut a 3/8" dia. hole in the firewall for the speedometer wires. Place a rubber grommet in the hole and route the connector wires through the grommet to the engine compartment.
3. Connect the speedometer wires as shown in the Wiring Section.
4. Secure the speedometer to the dashboard using the provided bracket, thumbnuts and lockwashers.

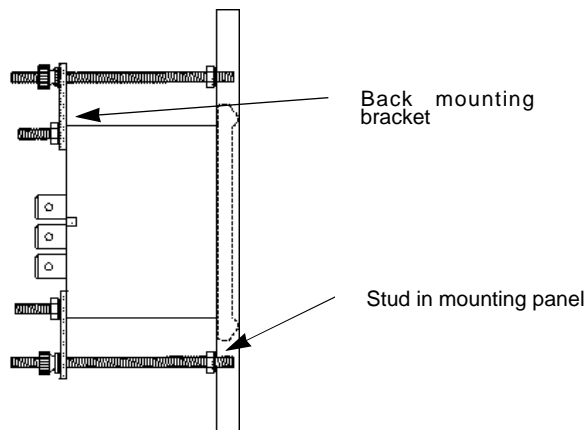
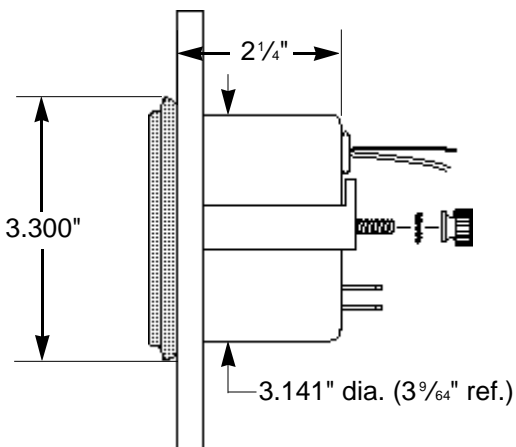
**NOTE:** With the ignition switch off, the speedometer pointer may not always rest at zero. This is normal. When engine is started, pointer will position correctly.

### WARNING

Incorrect hookup will damage speedometer and void warranty. Please read these instructions.

### Back

1. Place the back mounting bracket on the gauges mounting stud with a star washer and a nut.
2. Place the gauge on the back of the panel and mark where the hole for the stud is to be drilled.
3. Drill and tap the back of the panel for an 8 x 32 stud.
4. Thread the stud in the back of the panel and lock it down with a star washer and nut.
5. Slide the back mounting bracket over the stud in the mounting panel. Tighten the bracket down with a star washer and thumb nut.



## Lens Cleaning

The clear lens on your speedometer is made of acrylic plastic. To prevent scratching, caution must be used when cleaning. Use a mild, soapy solution and soft cloth to clean. Wipe lightly.



# Calibration

(Only needed if the conditions in General Information are not met.)

**Calibration Range:** 500 to 400,000 pulses/mile.

1. Speedometer and sender must be installed.
2. Connect the calibration button to "CAL" and "GND" on the back of the speedometer.
3. To initiate the calibration mode, press and hold the calibration button. Start engine. Release the calibration button. The pointer will move to full scale.
4. Go to the beginning of a known 2 mile distance and stop the vehicle. Press and release the calibration button again. The pointer will move to half scale. The speedometer is ready for calibration.

**NOTE:**Speedometer accuracy depends on the accuracy of the measured 2 mile distance.

5. Drive the 2 mile distance and stop. Press and release the calibration button again. The calibration mode will be exited and the pointer will return to zero.

**NOTE:**Calibration button can either be removed or left on for frequent re-calibration.

**Calibration is complete!**

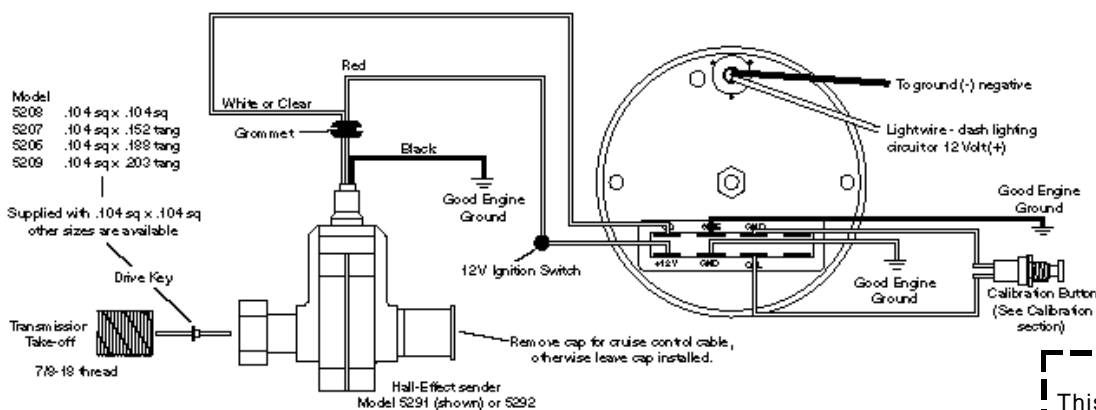
**This is a list of factors that affect speedometer accuracy and how to minimize them during calibration.**

1. Tires slightly increase in diameter as vehicle speed increases. To minimize this error, drive at an average speed during calibration (approx 45 mph for most street vehicles).
2. Tires slightly increase in diameter as tire air pressure is increased. To minimize this error, check the tires to ensure correct air pressure.
3. The diameter of tires change with vehicle load. Minimize this error by having an average load in the vehicle during calibration.
4. Tire slippage. Minimize this error by not breaking traction.
5. Accuracy of 2 mile distance driven during calibration. Minimize this error by verifying the distance.

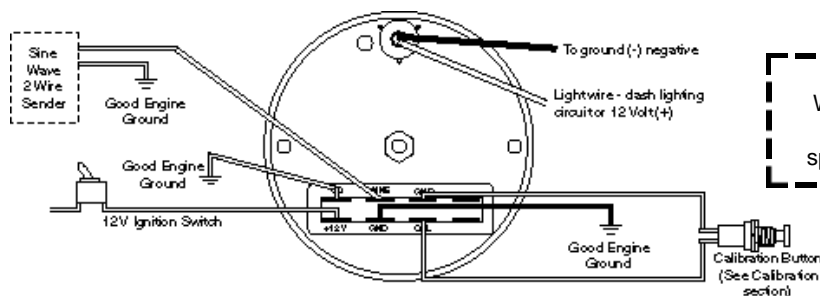
**NOTE:**Always re-calibrate speedo after any tire size or differential ratio change.

## Wiring

**Auto Meter Hall-Effect senders (Square Wave) - Models 5291 (standard 7/8-18 thread) & 5292 (Ford plug-in sender), 3 wire sender, cruise.**



**Most OEM style or Factory Installed, 2 wire senders (Sine Wave)**



### 12 MONTH LIMITED WARRANTY

Products that fail within this 12 month warranty period will be repaired or replaced at Auto Meter's option to the consumer, when it is determined by Auto Meter Products, Inc. that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts in the Auto Meter instruments. In no event shall this warranty exceed the original purchase price of the Auto Meter instruments nor shall Auto Meter Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of this product. Warranty claims to Auto Meter must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12 month warranty period. Breaking the instrument seal, improper use or installation, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. Auto Meter Products, Inc. disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by Auto Meter.

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