

## INSTALLATION INSTRUCTIONS

# HALL EFFECT ELECTRIC UNIVERSAL DRIVESHAFT SPEEDOMETER SENDER

2650-1634-00 Rev. A

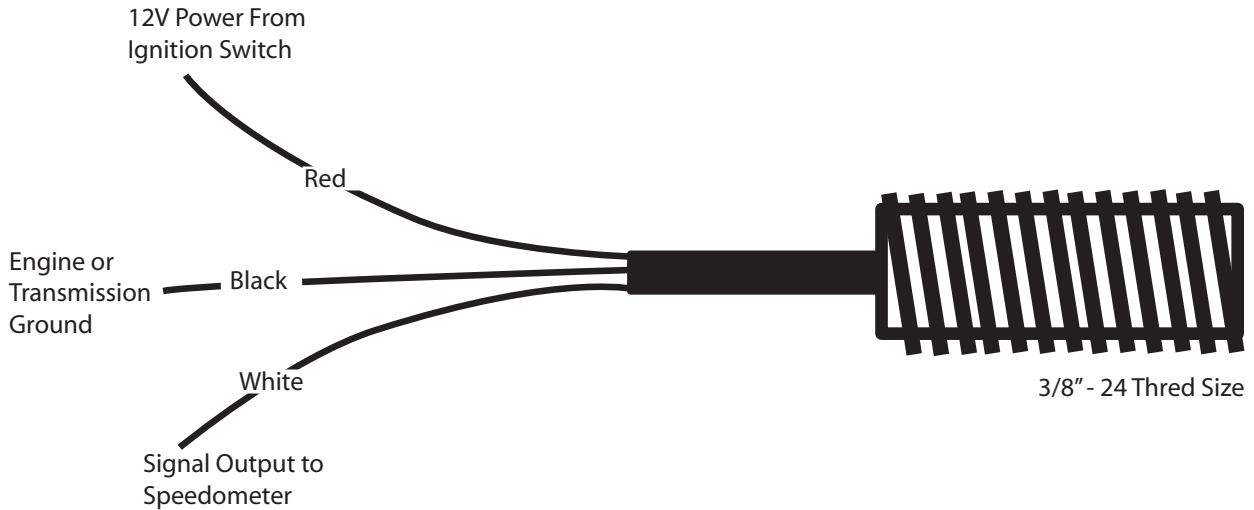


### QUESTIONS:

If after completely reading these instructions you have questions regarding the operation or installation of your instrument(s), please contact Auto Meter Technical Service at 866-248-6357.

You may also email us at [service@autometer.com](mailto:service@autometer.com).

Additional information can also be found at <http://www.autometer.com>



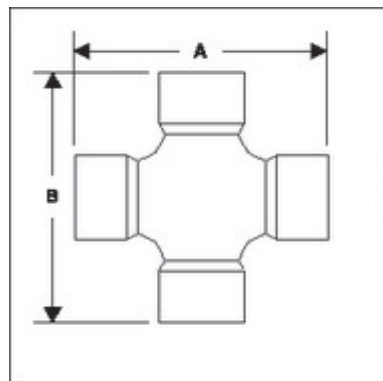
## Wiring

- RED:** Connect to a switched 12v ignition power. You may either splice into your existing speedometer power, or you may run an independent power for this speed sender. If you run an independent power for the speed sender, it is recommended to use a 1A fuse.
- BLACK:** Connect directly to the engine, or transmission ground. Do NOT connect to the differential housing or suspension components for ground.
- WHITE:** Connect to the speedometer input terminal/wire. On most Auto Meter speedometers, this is the SIG terminal.

## Magnet Installation

8 magnets are included in this kit. 4 are 1/2" long, and 4 are 1/4" long. Some U-joints are not the same dimension when measuring across cap to cap, compared to measuring the same U-joint cap to cap, across the other two caps. Referencing the chart below, dimension "A" can be different than dimension "B".

Therefore having 2 different heights of magnets can come in handy for helping to maintain the same distance between the sensor and the magnets.



**Note:** It may be necessary to grind magnets so the distance between sensor and magnet is consistent for all 4.

**Note:** An aluminum collar is available for some models to hold the magnets. Please call Auto Meter Products for further information.

1. Clean any surface rust (etc.) from bearing cap end with a wire brush attached to a bench grinder or drill.
2. Using the 80-grit emery paper supplied, roughen up the end of the bearing cap to improve epoxy adhesion.
3. Using a CLEAN rag, apply acetone or lacquer thinner to the rag. Wipe the bearing cap ends and magnets clean. Allow the cleaner to evaporate.

**NOTE:** The surfaces must be clean, and free of all residues to provide a strong bond with the epoxy.

4. Epoxy consists of two parts. Squeeze equal parts from each tube onto any clean disposable surface. Mix together thoroughly with a wooden stick.
5. Apply a small amount of epoxy onto the end of the bearing cap. (See Figure 2.)

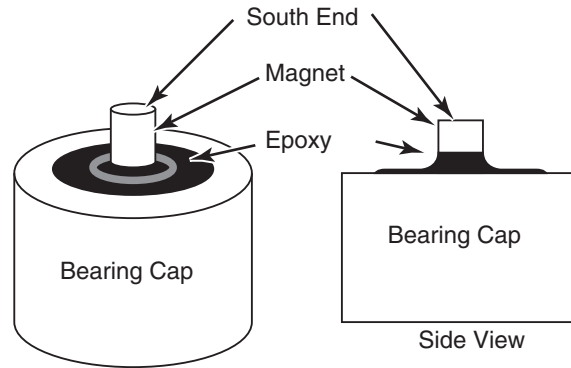


Figure 2

6. Tear off a thin piece of paper, and place it onto the 5/8" diameter steel slug. Place the paper and slug onto the end of the magnets as shown. (See Figure 3.)

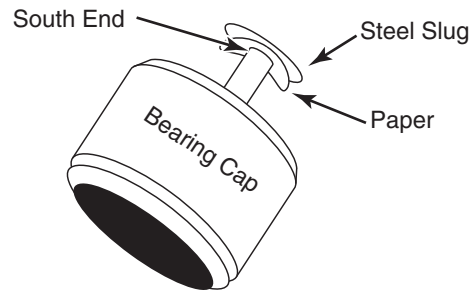


Figure 3

7. Apply a liberal amount of epoxy to form a cone shape as shown. (See Figure 4.)

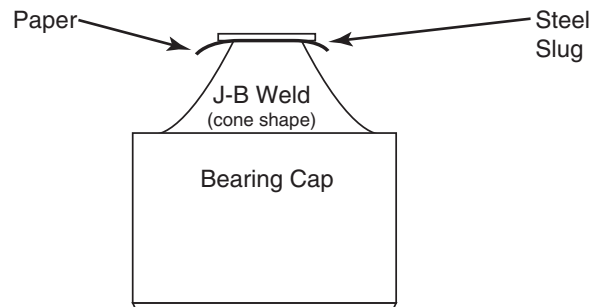


Figure 4

8. Allow the epoxy to cure for 24 hours before putting into use. Epoxy cures slower if used at temperatures below 60°F. After the epoxy has cured for 6 hours, a heat lamp or light bulb placed near the epoxy will speed up curing time in cooler temperatures. Do not apply heat before 6 hours of room temperature curing, as this may cause the epoxy to become brittle.

**NOTE:** In hot weather, let the epoxy set-up for about 2 to 3 minutes after mixing, this lets it thicken and prevents running or sagging.

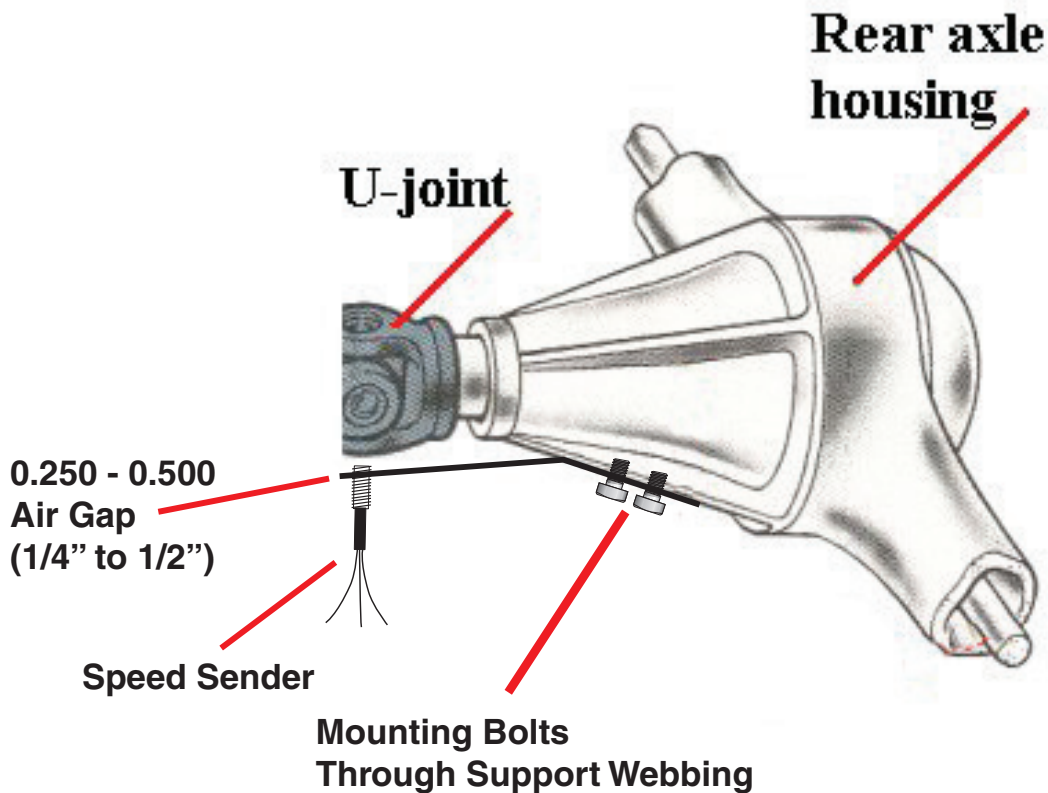
9. After the epoxy has cured, remove the steel slugs and paper. Make sure that no epoxy protrudes above the magnets, if so a file may be carefully used to remove the excess. Also be sure that the epoxy does not interfere with the bearing cap retainer tang on the end yoke.

## Speed Sender Mounting

This speed sender comes with a universal mounting strap that can be bent, cut, and shaped into what you need for most applications. You will need to find a suitable location to mount the sender that will maintain proper distance (**between 1/4" and 1/2"**) between it, and the magnets you are about to install. The most recommended location is the rear differential on most rear wheel drive vehicles. The differential and rear u-joint will move together resulting in a fixed distance between the sender and the magnets.

If your differential does not have a pinion bearing cap bolt that you can use, or some other near-by bolt, you may then consider drilling through the support webbing of the differential case and use two nuts & bolts to secure the universal strap, and to keep it from pivoting.

When you are finished, make sure the bracket is sturdy enough that it has little to no ability to move, keeping the sender from ever coming into contact with the magnets.



### SERVICE

For service send your product to Auto Meter in a well packed shipping carton. Please include a note explaining what the problem is along with your phone number. If you are sending product back for Warranty adjustment, you must include a copy (or original) of your sales receipt from the place of purchase.

### 12 MONTH LIMITED WARRANTY

AUTO METER Products, Inc. warrants to the consumer that all AUTO METER High Performance products purchased from an Authorized AUTO METER Reseller will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at AUTO METER's option, when determined by AUTO METER 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 High Performance product and the necessary labor done by AUTO METER to effect the repair or replacement of the AUTO METER High Performance product. In no event shall AUTO METER's cost to repair or replace an AUTO METER High Performance Product under this warranty exceed the original purchase price of the AUTO METER High Performance Product. Nor shall AUTO METER Products, Inc. be responsible for special, incidental or consequential damages or costs incurred due to the failure of an AUTO METER High Performance Product. This warranty applies only to the original purchaser of the AUTO METER High Performance Product and is non-transferable. This warranty also applies only to AUTO METER High Performance Products purchased from an Authorized AUTO METER Reseller. 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 disclaims any liability for consequential damages due to the breach of any written or implied warranty on all products manufactured by AUTO METER Products, Inc. For a comprehensive listing of Un-Authorized Auto Meter Resellers please visit [www.autometer.com/autometerlocator/index/unauthorized](http://www.autometer.com/autometerlocator/index/unauthorized).

FOR SERVICE SEND TO: AUTO METER PRODUCTS, INC. 413 W. Elm St., Sycamore, IL 60178 USA (866) 248-6357

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