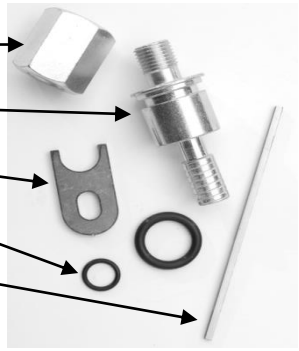
SEN-01-2
Ford Transmission Sender Package

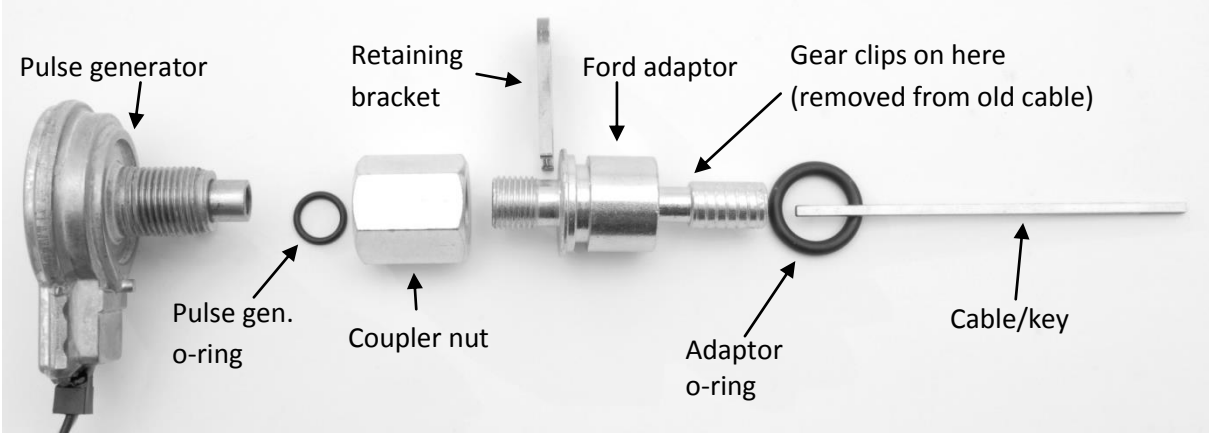
The kit includes the following parts:
Speed pulse generator (8000 ppm)

Coupler nut
Ford adaptor
Retaining bracket
O-rings (trans and sensor side)
Center cable/"key"

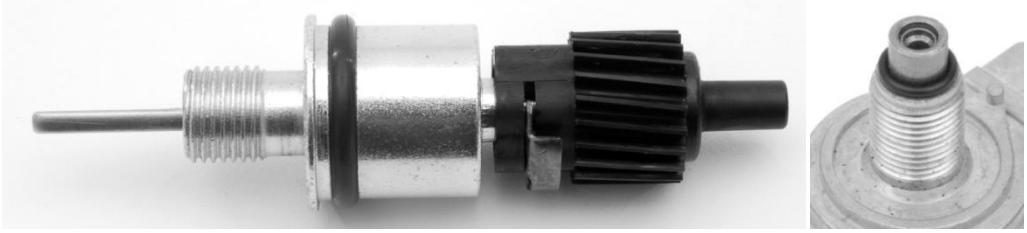


Installing the sensor to the transmission:

- Remove old speedometer cable and gear from transmission by removing the retaining clips
- Place the larger o-ring onto the transmission adaptor and install the transmission gear onto the adaptor using the clip and gear removed from the old cable
- Insert adaptor and gear into transmission and secure with the supplied retaining bracket onto the transmission
- Seat the cable/key into the adaptor
- Place the smaller o-ring onto the pulse generator over the brass tip flat with the threads
- To complete, the coupler nut will thread onto the transmission adaptor and the pulse generator. The coupler nut has left hand threads so just start those on to the transmission adaptor and then start the speed sensor on the other side. Spin the coupler nut and tighten both the pulse generator and the adaptor together.



"Exploded" view of sensor install



Properly installed o-rings

The completed assembly should look like the photo at the right. The adaptor should be bolted into the transmission with the retaining bracket before threading on the coupler nut and speed sensor; this assembly photo is for reference only.

Wiring

The sensor will generate an AC voltage that's frequency and voltage level will vary with the drive speed. Typical wiring for Dakota Digital products is:

Black (black twisted pair) Ground (to the gauge)

White (gray twisted pair) Speed signal (to the speed input)

NOTE: the wires have been extended at the factory with a black and gray twisted pair that can be cut to length as needed

Since the signal generated by pulse generators are susceptible to electrical interference, it is best to route speed signal wires away from alternators, coils, spark plug wires, ignition boxes, and other high current carrying wires to avoid erratic speed readings. It is also best to extend both wires from the speed sensor up to the gauge/control box with a twisted pair of wires to provide some shielding of the speed signal (this has been done at Dakota Digital with a gray and black twisted pair).

Testing

Failure of this speed sensor is very uncommon. To test, disconnect the wires of the sensor from the gauge/control box and clip the positive lead of a voltmeter (set to read AC volts) to the white wire and the negative lead to the black wire on the speed. Remove the sensor and drive key/cable from the trans. Attach the cable to a drill and use a drill to spin the pulse generator, simulating what the trans is doing. As the RPM of the drill increases so should the voltage on the voltmeter. You should see voltages above 1 VAC increasing with speed as you spin the pulse generator.

Service and Repair

DAKOTA DIGITAL offers complete service and repair of its product line. In addition, technical consultation is available to help you work through any questions or problems you may be having installing one of our products. Please read through the Troubleshooting Guide. There, you will find the solution to most problems. **Should you ever need to send the unit back for repairs, please call our technical support line, (605) 332-6513, to request a Return Merchandise Authorization number.** Package the product in a good quality box along with plenty of packing material. Ship the product by UPS or insured Parcel Post. Be sure to include the RMA number on the package, and include a complete description of the problem with RMA number, your full name and address (street address preferred), and a telephone number where you can be reached during the day. Any returns for warranty work must include a copy of the dated sales receipt from your place of purchase. Send no money. We will bill you after repair.

Dakota Digital 24 Month Warranty

DAKOTA DIGITAL warrants to the ORIGINAL PURCHASER of this product that should it, under normal use and condition, be proven defective in material or workmanship within 24 MONTHS FROM THE DATE OF PURCHASE, such defect(s) will be repaired or replaced at Dakota Digital's option.
This warranty does not cover nor extend to damage to the vehicle's systems, and does not cover removal or reinstallation of the product. This Warranty does not apply to any product or part thereof which in the opinion of the Company has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident.
This Warranty is in lieu of all other expressed warranties or liabilities. Any implied warranties, including any implied warranty of merchantability, shall be limited to the duration of this written warranty. Any action for breach of any warranty hereunder, including any implied warranty of merchantability, must be brought within a period of 24 months from date of original purchase. No person or representative is authorized to assume, for Dakota Digital, any liability other than expressed herein in connection with the sale of this product.

⚠**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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