



R8905 Sensor Kit - For Isuzu Diesel Engine Using R8504 Tachometer

INSTALLATION INSTRUCTIONS

- 1) Block the vehicle, elevate it and remove the splash pan so that the engine pulley can be reached from under the vehicle. Locate the step on the inside rim of the pulley (see diagram; back side of this page). Scrape away the paint from two areas directly opposite from each other on the step of the front of the pulley. Roughen the bare metal with an emery cloth. Clean the magnets and bare metal on pulley with alcohol to remove any oil or grease so that the glue will bond. Glue each magnet to the selected surface of the pulley with the BLUE SIDE OUT (north pole) and with the magnets directly across (180° apart) from each other to maintain balance.

Suggested method for glue application:

Apply the glue to the area on the pulley where the magnet will set, then apply the accelerant (crush tube) to the magnet face (non-blue side), then apply the magnet to glue area on pulley. Be sure to apply enough glue to fill the gap between pulley and magnet. Repeat for other magnet. Let glue set for 10-15 minutes. Follow the instructions on the glue packet enclosed in your kit to allow the proper glue curing time before starting the engine.

- 2) Attach the Sensor Assembly to the Mounting Bracket as shown. Use a thread sealer to secure the bolts. Locate and remove the two bracket mounting bolts on the front of the engine (see back page) and install the sensor and mounting bracket assembly. The magnets should pass within $\frac{1}{8}$ " to $\frac{1}{4}$ " of the sensor when it is installed.
- 3) Connect two #20 AWG or larger wires (not supplied with kit) to the two sensor wires and route them into the cab to the tachometer. Locate wires away from starter cables, electric motor wires, etc. Secure the wires along as necessary. (See NOTE below)
- 4) Replace splash pan.
- 5) Mount the R8504 Tachometer (5000 rpm) in the desired location using the optional bracket or other mounting device. Connect the wires coming from the 3 wire cable as follows:
 - a) White wire to one of the sensor wires.
 - b) Black wire to the other sensor wire. Ground this connection as close as practical to the tachometer head.
 - c) Red wire to a fused ignition-switched +12 VDC source.
- 6) Connect the wires from the tachometer light as follows:
 - a) One wire to the vehicle dash light circuit.
 - b) Other wire to clean ground.
- 7) Start the engine after double-checking all connections and clearances. The tachometer should now read the engine RPM. No calibration is necessary.

NOTE: If only half the engine RPM is being displayed, check to make sure that two magnets were installed and that both magnets are lined up with the center of the sensor. Also check that both magnets were installed with the same pole out by comparing them to a third magnet. Both magnets should repel the same pole of the third magnet. If a flicker or other interference is noted on the tachometer, reroute the extended sensor wires. This should remove the interference. In severe interference cases, it may be necessary to use 2-wire shielded cable for the sensor wire extensions. Be sure to ground the shield at one end only.

!! BEFORE GLUING MAGNETS !!

1. SCRAPE AWAY PAINT.
2. ROUGHEN PULLEY SURFACE WITH COARSE SANDPAPER.
3. CLEAN MAGNET & PULLEY SURFACES WITH ALCOHOL.

**INSTALLATION DIAGRAM R8504 2 1/16" TACHOMETER
 ISUZU DIESEL ENGINE
 USING: R8905 SENSOR KIT**

