



## **R8906 Sensor Kit For Universal Application**

### INSTALLATION INSTRUCTIONS

- 1) Select a mounting location for the sensor assembly and the magnets according to the following:
  - a) The sensor assembly must be mounted such that the magnets pass within  $\frac{1}{8}$ " to  $\frac{1}{4}$ " of the end of the sensor as shown in the installation diagram on the back page.
  - b) The sensor assembly may be bolted directly in the appropriate location or may be bolted to another bracket as necessary.
  - c) Check the selected sensor location for interference from rotating parts as the engine turns.
  - d) The magnets must be glued to a pulley or damper that turns at engine speed.
  - e) Check the selected magnet locations for interference from stationary brackets, other sensors, etc. as the engine turns.
- 2) Scrape away the paint from two areas directly across from each other on the selected mounting surface. Roughen the bare metal with an emery cloth. Clean the magnets and bare metal on pulley or damper with alcohol to remove any oil or grease residue so that the glue will bond. Glue each magnet to the selected surface with the BLUE SIDE OUT (north pole) and with the magnets directly across ( $180^\circ$  apart) from each other to maintain balance.

#### *Suggested method for glue application:*

Apply the glue to the area on the pulley or damper 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 damper or pulley. Be sure to apply enough glue to fill the gap between pulley (or damper) 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.

- 3) Mount the sensor as previously determined. Drill a mounting hole in the sensor bracket as needed. Position the sensor so that there is approximately  $\frac{1}{8}$ " to  $\frac{1}{4}$ " clearance between the end of the sensor and the magnets.
- 4) Connect two #20 AWG or larger wires (not supplies with the kit) to the 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.) Connect wires to the tachometer as shown in the diagram on the back page. 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 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.**

