

# —Racepak Technical Bulletin—

## Clutch Input Shaft Magnet and Sensor Installation



DATA ACQUISITION SYSTEMS AN MSD BRAND IGNITION

**Racepak / Competition Systems, Inc.**

30402 Esperanza, Rancho Santa Margarita, CA. 92688

Telephone (949) 709-5555

Fax (949) 709-5556

[www.racepak.com](http://www.racepak.com)

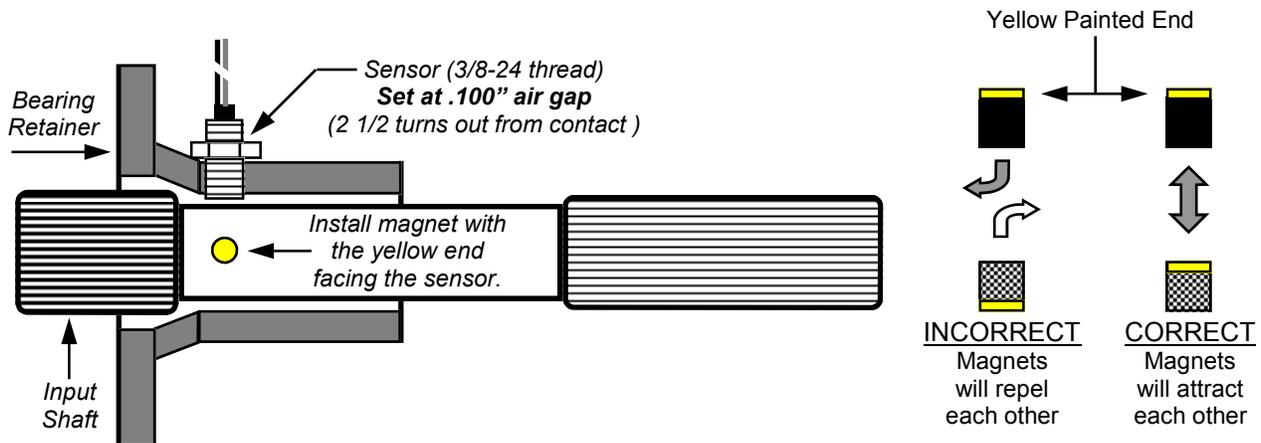
This bulletin has been issued to help you avoid a potential problem. The problem concerns the polarity of the magnet that is embedded in the transmission input shaft to record the clutch RPM.

Since mid-2000 the sensor that has been used to monitor clutch RPM has been polarity sensitive. The magnet that is monitored by this sensor must be mounted correctly or the sensor will not record properly. These sensors can be identified as being 3/8" in diameter. Instruction for properly mounting the magnet are included with all clutch sensors, but the problem seems to occur when a new sensor is mated to an older input shaft. A shaft that has a previously installed magnet. As is often the case, when the data recorder is installed by one person, and the drive train by another, the potential for error increases.

All new Racepak clutch magnets have one end color coded with a yellow ink. **The yellow end of the magnet must face the clutch sensor.**

If you have an input shaft with the magnet already installed there is a simple test to insure that the proper end of the magnet (the North end) is facing the sensor, even if the yellow ink has been worn off. This test can be performed using the new magnet that was included with the data recorder kit. Hold the new magnet directly aligned over the top of the magnet in the shaft. With the yellow end of the new magnet facing upward (away from the shaft magnet), the two magnets should attract each other. This will indicate that the magnet in the shaft is installed properly. If the two magnets repel each other the magnet in the shaft is mounted incorrectly and must be changed.

The illustration below should further explain this procedure.



If the magnet in the shaft is installed with the wrong polarity facing the sensor it will be necessary to remove it and install the new magnet correctly.