TECH TIPS

Testing Variable Inductance Crankshaft Sensor

Alternate Method of Testing Variable Inductance Crankshaft Sensors

While the method of testing variable inductance crankshaft sensors by measuring the resistance of the windings is an accurate method of testing for open or shorted windings, it does not test for a no signal condition due to a broken or weak magnet.

Rather than remove the sensor from the block to test magnetic strength, attach a DVOM set to measure AC voltage across the terminals of the sensor. With a cranking RPM of 100 @ 70 degrees for greater, experience indicates that most variable inductance crankshaft sensors will generate an AC voltage in the range of .7 to 1 volt. A voltage in this range or higher would generally indicate the sensor magnet is OK.

Distributor mounted magnetic pick-ups can also be tested using this method. Voltage is usually slightly higher.