Subject
Throttle Position Sensor- Improved Circuit Technology

Application
Various gas and diesel vehicle applications

Overview
Throttle position sensors with a high failure rate that have been re-engineered for increased quality and longevity

Procedure
Most OE manufactures use a resistance type potentiometer circuit design in their throttle position sensors. This type of sensor circuit requires a circuit board with mechanical contacts to return a variable voltage signal. While this type of sensor operates effectively, the issue with this design is friction. Friction causes heat between the contacts as well as wear within the moving parts causing premature sensor failure. Our re-engineered sensors are a non-contact Hall effect design that eliminates the mechanical contact points. These sensors use an integrated non-contact circuit for more accurate and consistent electrical output which achieves a much greater performance and service life.

While physical dimensions and appearance remain similar in part applications and the replacement procedure does not differ between sensor types, circuit testing may require a different diagnostic method. Sensor testing with an ohm meter has not been the most effective way to test this sensor, monitoring voltage on the return circuit has always been the most effective test method and is the required test method on this improved circuit type.

Be sure to read and follow the replacement procedure from a repair resource as some vehicle applications may require a system calibration whenever the throttle position sensor is replaced. For questions or further information on re-engineered Hall effect type sensors or specific application details call our Technical Support team Monday through Friday 7:30 am to 6:00 pm Central time.