



Crankshaft and Camshaft Reluctors

The crankshaft and camshaft reluctors are used to influence ignition and injection timing. Minute changes in the signal from the signal from the crankshaft sensor may indicate a cylinder misfire, which could also be stored as a diagnostic trouble code (DTC) by the vehicle's on board diagnostic system.

The number of teeth on the two reluctors differs between the D multipoint fuel injection system and the L multipoint fuel injection system. The additional teeth assist the ECM to shorten the time for cylinder discrimination and to improve the accuracy of misfire detection. This also helps to eliminate false misfire codes resulting from the driveline backlash that is common to all wheel drive vehicles.

Incorrect installation of components (swapping parts between D and L systems) will result in a no-start condition.

A sample of waveform of the D system multipoint fuel system crankshaft position sensor, taken at 700 rpm and 10 ms, is shown in the accompanying illustration.

