C0245 Wheel Speed Sensor Frequency

Diagnostic Instructions

- Perform the Diagnostic System Check Vehicle prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions provides an overview of each diagnostic category.

DTC Descriptor

DTC C0245 00: Wheel Speed Sensor Frequency

Circuit/System Description

The wheel speed sensor receives ignition voltage from the electronic brake control module (EBCM) and provides an output signal to the EBCM. As the wheel spins, the wheel speed sensor sends the EBCM a DC square wave signal, and uses the frequency of the square wave signal to calculate the wheel speed.

Conditions for Running the DTC

- Ignition voltage is greater than 10 volts.
- No wheel speed sensor faults exist.
- Brake is not applied.
- Vehicle is not cornering.

Conditions for Setting the DTC

Wheel speed differences between one wheel and the others is greater than 25 percent.

Action Taken When the DTC Sets

- The EBCM disables the traction control system (TCS) and vehicle stability enhancement system (VSES) for the duration of the ignition cycle.
- A DIC message and/or a warning indicator may be displayed.

Conditions for Clearing the DTC

- The condition for setting the DTC is no longer present.
- The EBCM clears the history DTC when a current DTC is not detected in 100 consecutive drive cycles.

Diagnostic Aids

- Faulty wheel speed sensor will not set this DTC.
- A vehicle using a space saver spare will not set this code.

Reference Information

Schematic Reference

Antilock Brake System Schematics

Connector End View Reference

Component Connector End Views

Description and Operation

ABS Description and Operation

Electrical Information Reference

- Circuit Testing
- Connector Repairs
- Testing for Intermittent Conditions and Poor Connections
- Wiring Repairs.

Scan Tool Reference

Control Module References for scan tool information

Circuit/System Verification

Inspect for one tire that has improper air pressure or improper size.

