

C0253 Centering Error

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 C0253 00: Centering Error

Circuit/System Description

The electronic brake control module (EBCM) receive sserial data messages from the steering wheel position sensor identifying the position and direction of the steering wheel rotation.

Conditions for Running the DTC

Ignition ON.

Conditions for Setting the DTC

The calculated steering angle from the steering wheel position sensor does not correlate with the steering angle calculated from the yaw rate.

Action Taken When the DTC Sets

One or more of the following actions may occur:

- The EBCM disables the antilock brake system (ABS)/traction control system (TCS) and vehicle stability enhancement system (VSES) for the duration of the ignition cycle.
- The ABS indicator illuminates.
- The Stabilitrak indicator illuminates.

- The driver information center (DIC) displays All Wheel Drive Off/ Service Traction Control / Service Stabilitrak message.

Conditions for Clearing the DTC

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

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

- 1). Verify that DTC C0186, C0196, C0252, or C0710 is not set. If any of the

- DTCs are set, refer to Diagnostic Trouble Code (DTC) List - Vehicle
- 2). With the scan tool perform the Steering Angle Sensor Centering.
 - 3). Operate the vehicle within the conditions for setting, and verify the DTC does not reset. If the DTC sets, replace the EBCM.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the diagnostic procedure. Control Module References for EBCM replacement, setup, and programming

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