DTC C0131-C0139

DTC Descriptors

DTC C0131

Antilock Brake System (ABS) Pressure Circuit

DTC C0136

Base Brake System Pressure Circuit/Sensor

DTC C0138

Base Brake System Pressure Circuit/Sensor Low

DTC C0139

Base Brake System Pressure Circuit/Sensor High

Diagnostic Fault Information

Perform the Diagnostic System Check - Vehicle prior to using this diagnostic procedure. <u>See:</u> <u>Testing and Inspection/Initial Inspection and Diagnostic Overview/Diagnostic Starting Point - Vehicle</u>

Circuit	Short to Ground	Open/High Resistance	Short to Voltage	Signal Performance
Antilock Brake System (ABS) Pressure Circuit	C0131	C0131	C0131	C0131
Base Brake System Pressure Circuit/Sensor	C0136	C0136	C0136	C0136
Base Brake System Pressure Circuit/Sensor Low	C0138	C0138	-	C0138
Base Brake System Pressure Circuit/Sensor High			C0139	

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Circuit/System Description

The electronic brake control module (EBCM) uses an input from 2 brake fluid pressure sensors to enhance ABS braking and vehicle stability if equipped.

Conditions for Running the DTC

C0131

- The braking system is not performing an antilock or traction control event.
- No other brake pressure sensor DTCs are set.

C0136

- The ignition is ON for 1 second and greater than 8 volts.
- The 5-volt reference to the brake pressure sensor is in range.

C0138

- The ignition is ON for 1 second and greater than 8 volts.
- The 5-volt reference to the brake pressure sensor is in range.
- DTC C0136 is not set.

C0139

- The ignition is ON for 1 second and greater than 8 volts.
- The 5-volt reference to the brake pressure sensor is in range.
- DTC C0136 is not set.
- Vehicle speed is above 16 km/h (10 mph).

Conditions for Setting the DTC

C0131

The 2 master cylinder pressure sensors do not correlate.

C0136

- The brake fluid pressure sensor signal is greater than 4.9 volts.
- The brake fluid pressure sensor signal is less than 0.15 volt.

C0138

This DTC is set when the vehicle decelerates and the brake pressure signal does not increase. The criteria to set this DTC is listed below:

- The vehicle decelerates from 25 km/h (16 mph) to 10 km/h (6 mph).
- The vehicle decelerates at a rate of 8 km/h (5 mph) per second.
- No increase in the brake pressure sensor signal is detected.

C0139

This DTC is set when the vehicle accelerates and the brake pressure signal is high. The criteria to set this DTC is listed below:

- The vehicle exceeds 40 km/h (25 mph).
- The vehicle accelerates at a rate of **8 km/h (5 mph) per second.**
- The brake pressure sensor signal output is above 1034 kPa (150 psi).

Action Taken When the DTC Sets

If equipped, the following actions will occur:

- The EBCM disables the vehicle stability enhancement system (VSES) for the duration of the ignition cycle.
- The EBCM disables the traction control system (TCS) for the duration of the ignition cycle.
- The driver information center (DIC) displays the Service Stability System and Service Traction System message.

Conditions for Clearing the DTC

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

Diagnostic Aids

- The brake pressure sensor is mounted to the brake pressure modulator valve (BPMV) under the EBCM and cannot be diagnosed. If equipped, the brake pressure sensor 5-volt reference circuit and low reference circuit is shared with other components in the vehicle stability system. DTCs can set for other components that share circuits with the brake pressure sensor.
- DTC C0870 is set if the 5-volt reference voltage is out of range.

Reference Information

Schematic Reference

Antilock Brake System Schematics

Connector End View Reference

Antilock Brake System 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

Circuit/System Testing

Important: If DTC C0870 is set, diagnose it first.

Verify DTC C0131-C0139 is not set.

If DTC is set, replace the BPMV and verify DTC does not reset. If DTC resets replace the EBCM.

Repair Instructions

Perform the Diagnostic Repair Verification after completing the diagnostic procedure. <u>See:</u> <u>Verification Tests and Procedures</u>

- Brake Pressure Modulator Valve Replacement
- <u>Control Module</u> References for EBCM replacement, setup, and programming