

C0121 The EBCM controls the pump motor by grounding the control circuit.

Circuit Description

The system relay is energized when the ignition is ON. The system relay supplies voltage to the solenoid valves and the pump motor. This voltage is referred to as the system voltage. The EBCM controls each solenoid valve by grounding the solenoid. The EBCM controls the pump motor by grounding the control circuit. The pump serves 2 purposes:

- Transfers brake fluid from the brake calipers to the master cylinder reservoir during pressure decrease events.
- Transfers brake fluid from the master cylinder reservoir to the brake calipers during pressure increase events.

Conditions for Running the DTC

- The ignition voltage is greater than 10.5 volts.
- The system relay is commanded ON.

Conditions for Setting the DTC

The system voltage is less than 8 volts for 0.23 seconds.

Action Taken When the DTC Sets

If equipped, the following actions occur:

- The EBCM disables the DRP/ABS/TCS/VSES for the duration of the ignition cycle.
- The ABS indicator turns ON.
- The Traction Control indicator turns ON.
- The DIC displays the Service Stability System message.
- The EBCM will also set DTC C0281.
- The red Brake warning indicator turns ON.

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 system relay is integral to the EBCM. The relay is not serviceable.

Test Description

The number below refers to the step number on the diagnostic table.

2. Determines whether the DTC is current.

| Step | Action | Values | Yes | No |
|--|--|--------|--------------|---|
| Schematic Reference:ABS Schematics Connector End View Reference:ABS Connector End Views | | | | |
| 1 | Did you perform the Diagnostic System Check – ABS? | — | Go to Step 2 | Go to Diagnostic System Check -ABS |
| 2 | 1. Install a scan tool. 2. Turn ON the ignition, with the engine OFF. 3. Use the scan tool in order to clear the DTCs. 4. With the scan tool, perform the Automated Test. Does the DTC reset as a current DTC? | — | Go to Step 3 | Go to Testing for Intermittent and Poor Connections in Wiring Systems |
| 3 | 1. Disconnect the pump motor harness pigtail connector of the BPMV. 2. Measure the resistance between each pump motor control circuit and the housing of the BPMV at the pump motor harness pigtail connector of the BPMV. Does the DMM display the specified value? | OL | Go to Step 5 | Go to Step 4 |

| Step | Action | values | Yes | No |
|------|---|--------|--------------|-----------|
| 4 | Replace the EBCM and the BPMV. Refer to Electronic Brake Control Module (EBCM) Replacement and Brake Pressure Modulator Valve (BPMV) Replacement. Did you complete the repair? | — | Go to Step 6 | — |
| 5 | Replace the EBCM. Refer to Electronic Brake Control Module (EBCM) Replacement. Did you complete the repair? | — | Go to Step 6 | — |
| 6 | 1. Use the scan tool in order to clear the DTCs. 2. With the scan tool, perform the Automated Test. Does the DTC reset? | — | Go to Step 2 | System OK |

LAUNCH