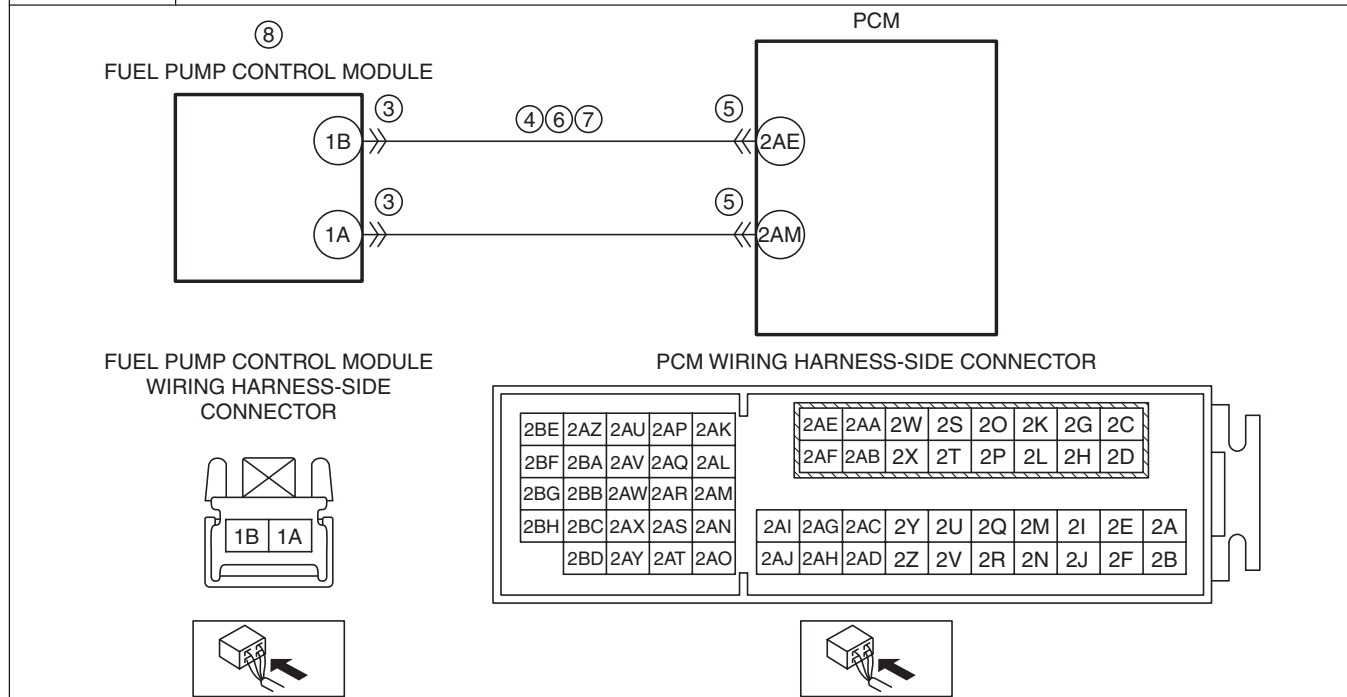


# DTC P025B:00 [SKYACTIV-G 2.0]

id0102h1312600

<b>DTC P025B:00</b>	<b>Fuel pump control module circuit range/performance problem</b>
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>When any of the following conditions is met: <ul style="list-style-type: none"> <li>Engine overheating is detected.</li> <li>Output duty ratio signal received from PCM is in error.</li> <li>Output signal from fuel pump control module is erratic (noise overlap).</li> </ul> </li> </ul> <p><b>Diagnostic support note</b></p> <ul style="list-style-type: none"> <li>This is a continuous monitor (CCM).</li> <li>The check engine light illuminates if the PCM detects the above malfunction condition during the first drive cycle.</li> <li>FREEZE FRAME DATA (Mode 2)/Snapshot data is available.</li> <li>The DTC is stored in the PCM memory.</li> </ul>
<b>FAIL-SAFE FUNCTION</b>	<ul style="list-style-type: none"> <li>Stops the fuel pump control (overheat detected).</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>Fuel pump control module connector or terminals malfunction</li> <li>Short to ground in wiring harness between fuel pump control module terminal 1B and PCM terminal 2AE</li> <li>PCM connector or terminals malfunction</li> <li>Short to power supply in wiring harness between fuel pump control module terminal 1B and PCM terminal 2AE</li> <li>Open circuit in wiring harness between fuel pump control module terminal 1B and PCM terminal 2AE</li> <li>Fuel pump control module malfunction</li> <li>PCM malfunction</li> </ul>



## Diagnostic Procedure

STEP	INSPECTION	ACTION
1	<b>VERIFY FREEZE FRAME DATA (MODE 2)/SNAPSHOT DATA HAS BEEN RECORDED</b> <ul style="list-style-type: none"> <li>Has the FREEZE FRAME DATA (Mode 2)/snapshot data been recorded?</li> </ul>	Yes: Go to the next step. No: Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.
2	<b>VERIFY RELATED SERVICE INFORMATION AVAILABILITY</b> <ul style="list-style-type: none"> <li>Verify related Service Information availability.</li> <li>Is any related Service Information available?</li> </ul>	Yes: Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step. No: Go to the next step.

STEP	INSPECTION		ACTION
3	<b>INSPECT FUEL PUMP CONTROL MODULE CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition to off.</li> <li>Disconnect the fuel pump control module connector.</li> <li>Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>Is there any malfunction?</li> </ul>	Yes	Repair or replace the connector and/or terminals, then go to Step 9.
		No	Go to the next step.
4	<b>INSPECT FUEL PUMP CONTROL MODULE SIGNAL CIRCUIT FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>Verify that the fuel pump control module connector is disconnected.</li> <li>Inspect for continuity between fuel pump control module terminal 1B (wiring harness-side) and body ground.</li> <li>Is there continuity?</li> </ul>	Yes	If the short to ground circuit could be detected in the wiring harness: <ul style="list-style-type: none"> <li>Repair or replace the wiring harness for a possible short to ground.</li> </ul> If the short to ground circuit could not be detected in the wiring harness: <ul style="list-style-type: none"> <li>Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)</li> </ul> Go to Step 9.
		No	Go to the next step.
5	<b>INSPECT PCM CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Disconnect the PCM connector.</li> <li>Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>Is there any malfunction?</li> </ul>	Yes	Repair or replace the connector and/or terminals, then go to Step 9.
		No	Go to the next step.
6	<b>INSPECT FUEL PUMP CONTROL MODULE SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>Verify that the fuel pump control module and PCM connectors are disconnected.</li> <li>Switch the ignition ON (engine off or on).</li> <li>Measure the voltage at the fuel pump control module terminal 1B (wiring harness-side).</li> <li>Is the voltage 0 V?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible short to power supply, then go to Step 9.
7	<b>INSPECT FUEL PUMP CONTROL MODULE SIGNAL CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>Verify that the fuel pump control module and PCM connectors are disconnected.</li> <li>Switch the ignition to off.</li> <li>Inspect for continuity between fuel pump control module terminal 1B (wiring harness-side) and PCM terminal 2AE (wiring harness-side).</li> <li>Is there continuity?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 9.
8	<b>INSPECT FUEL PUMP CONTROL MODULE</b> <ul style="list-style-type: none"> <li>Reconnect all disconnected connectors.</li> <li>Inspect the fuel pump control module. (See FUEL PUMP CONTROL MODULE INSPECTION [SKYACTIV-G 2.0].)</li> <li>Is there any malfunction?</li> </ul>	Yes	Replace the fuel pump control module, then go to the next step. (See FUEL PUMP CONTROL MODULE REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)
		No	Go to the next step.
9	<b>VERIFY DTC TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>Make sure to reconnect all disconnected connectors.</li> <li>Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].)</li> <li>Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0].)</li> <li>Is the same DTC present?</li> </ul>	Yes	Repeat the inspection from Step 1. <ul style="list-style-type: none"> <li>If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)</li> </ul> Go to the next step.
		No	Go to the next step.

---

STEP	INSPECTION		ACTION
10	<b>VERIFY AFTER REPAIR PROCEDURE</b> • Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].)
		No	DTC troubleshooting completed.