

# DTC P0471:00 [SKYACTIV-D 2.2]

id0102s4212400

<b>DTC P0471:00</b>	<b>Exhaust gas pressure sensor No.1 circuit range/performance problem</b>
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>The following conditions remain for a continuous specified time when the battery voltage is <b>8 V or more</b>: <ul style="list-style-type: none"> <li>Difference between barometric pressure and exhaust gas pressure: Specified value (kPa {kgf/cm<sup>2</sup>, psi}) or more</li> <li>Difference between air charging pressure and exhaust gas pressure: Specified value (kPa {kgf/cm<sup>2</sup>, psi}) or more</li> <li>Difference between manifold absolute pressure and exhaust gas pressure: Specified value (kPa {kgf/cm<sup>2</sup>, psi}) or more</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 in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM.</li> <li>PENDING CODE is available 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>DTC is stored in the PCM memory.</li> </ul>
<b>FAIL-SAFE FUNCTION</b>	<ul style="list-style-type: none"> <li>Inhibits the EGR control.</li> <li>Inhibits engine-stop by operating the i-stop function.</li> <li>PCM restricts engine-transaxle integration control.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>Exhaust gas pressure sensor No.1 connector or terminals malfunction</li> <li>PCM connector or terminals malfunction</li> <li>Exhaust gas pressure sensor No.1 malfunction</li> <li>PCM malfunction</li> </ul>
<b>SYSTEM WIRING DIAGRAM</b>	Not applicable

## Diagnostic Procedure

STEP	INSPECTION		ACTION
1	<b>VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED</b> • Has the FREEZE FRAME DATA (Mode 2)/ snapshot data been recorded?	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> • Verify related Service Information availability. • Is any related Service Information available?	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.
3	<b>INSPECT EXHAUST GAS PRESSURE SENSOR NO.1 CONNECTOR CONDITION</b> • Switch the ignition off. • Disconnect the exhaust gas pressure sensor No. 1 connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 6.
		No	Go to the next step.
4	<b>INSPECT PCM CONNECTOR CONDITION</b> • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 6.
		No	Go to the next step.
5	<b>INSPECT EXHAUST GAS PRESSURE SENSOR NO.1</b> • Reconnect all disconnected connectors. • Inspect the exhaust gas pressure sensor No.1. (See EXHAUST GAS PRESSURE SENSOR INSPECTION [SKYACTIV-D 2.2].) • Is there any malfunction?	Yes	Replace the exhaust gas pressure sensor No.1, then go to the next step. (See EXHAUST GAS PRESSURE SENSOR REMOVAL/ INSTALLATION [SKYACTIV-D 2.2].)
		No	Go to the next step.

STEP	INSPECTION		ACTION
6	<b>VERIFY DTC TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>• Always reconnect all disconnected connectors.</li> <li>• Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].)</li> <li>• Start the engine and let it idle.</li> <li>• Switch the ignition off and wait for <b>10 s</b>.</li> <li>• Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].)</li> <li>• Is the PENDING CODE for this 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-D 2.2].)</li> </ul> Go to the next step.
		No	Go to the next step.
7	<b>VERIFY AFTER REPAIR PROCEDURE</b> <ul style="list-style-type: none"> <li>• Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].)</li> <li>• Are any DTCs present?</li> </ul>	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	DTC troubleshooting completed.