

# DTC P0520:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

id0102h4008800

<b>DTC P0520:00</b>	<b>Oil pressure switch circuit problem</b>
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>The oil pressure switch is off for a continuous <b>5 s</b> even though the engine is stopped.</li> </ul> <b>Diagnostic support note</b> <ul style="list-style-type: none"> <li>This is a continuous monitor (other).</li> <li>The check engine light does not illuminate.</li> <li>FREEZE FRAME DATA (Mode 2)/Snapshot data is not available.</li> <li>DTC is stored in the PCM memory.</li> </ul>
<b>FAIL-SAFE FUNCTION</b>	Not applicable
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>Oil pressure switch connector or terminals malfunction</li> <li>PCM connector or terminals malfunction</li> <li>Open circuit in wiring harness between oil pressure switch terminal A and PCM terminal 1P</li> <li>Oil pressure switch malfunction</li> <li>PCM malfunction</li> </ul>

## Diagnostic Procedure

STEP	INSPECTION	ACTION
1	<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.
2	<b>INSPECT OIL PRESSURE SWITCH CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition off.</li> <li>Disconnect the oil pressure switch 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 6. No: Go to the next step.
3	<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 6. No: Go to the next step.

STEP	INSPECTION	ACTION	
4	<b>INSPECT OIL PRESSURE SWITCH SIGNAL CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Verify that the oil pressure switch and PCM connectors are disconnected.</li> <li>• Inspect for continuity between oil pressure switch terminal A (wiring harness-side) and PCM terminal 1P (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 6.
5	<b>INSPECT OIL PRESSURE SWITCH</b> <ul style="list-style-type: none"> <li>• Verify that the oil pressure switch and PCM connectors are disconnected.</li> <li>• Inspect for continuity between oil pressure switch terminal A (part-side) and body ground.</li> <li>• Is there continuity?</li> </ul>	Yes	Go to the next step.
		No	Replace the oil pressure switch, then go to the next step. (See ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
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-G 2.0, SKYACTIV-G 2.5].)</li> <li>• Perform the KOEO self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)</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, SKYACTIV-G 2.5].)</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-G 2.0, SKYACTIV-G 2.5].)</li> <li>• Are any DTCs present?</li> </ul>	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	DTC troubleshooting completed.