

# DTC P0520:00 [SKYACTIV-G 2.0]

id0102h1008800

DTC P0520:00	Oil pressure switch circuit problem
DETECTION CONDITION	<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>• The DTC is stored in the PCM memory.</li></ul>
FAIL-SAFE FUNCTION	—
POSSIBLE CAUSE	<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>

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OIL PRESSURE SWITCH

OIL PRESSURE SWITCH  
WIRING HARNESS-SIDE  
CONNECTOR

PCM

PCM WIRING HARNESS-SIDE CONNECTOR

1EE1EA1DW1DS1DO1DK1DG	1DA1CW1CS1CO1CK1CG1CC1BY	1BR1BM1BH1BC1AX1AS1AN1AI	1AD1Y1T1O1J1E1A
1EF1EB1DX1DT1DP1DL1DH	1DB1CX1CT1CP1CL1CH1CD1BZ	1BS1BN1BI1BD1AY1AT1AO1AJ	1AE1Z1U1P1K1F1B
1EI1EG1EC1DY1DU1DQ1DM1DI	1DE1DC1CY1CU1CQ1CM1CI1CE1CA1BW	1BT1BO1BJ1BE1AZ1AU1AP1AK	1AF1AA1V1Q1L1G1C
1EJ1EH1ED1DZ1DV1DR1DN1DJ	1DF1DD1CZ1CV1CR1CN1CJ1CF1CB1BX	1BU1BP1BK1BF1BA1AV1AQ1AL	1AG1AB1W1R1M1H1D
		1BV1BQ1BL1BG1BB1AW1AR1AM	1AH1AC1X1S1N1I

## 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.
		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 to 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>• Inspect the oil pressure switch. (See OIL PRESSURE SWITCH INSPECTION.)</li> <li>• Is there any malfunction?</li> </ul>	Yes	Replace the oil pressure switch, then go to the next step. (See ENGINE OIL SOLENOID VALVE REMOVAL/ INSTALLATION [SKYACTIV-G 2.0].)
		No	Go to the next step.
6	<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 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. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].) 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].)</li> <li>• Are any DTCs present?</li> </ul>	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].)
		No	DTC troubleshooting completed.