

# DTC P009F:00 [SKYACTIV-D 2.2]

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<b>DTC P009F:00</b>	<b>Fuel pressure relief valve malfunction (stuck close)</b>
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>When the following condition is met, the pressure reduction amount during the fuel pressure relief valve operation is insufficient for several seconds continuously:</li> </ul> <p><b>MONITORING CONDITIONS</b></p> <ul style="list-style-type: none"> <li>Battery voltage: <b>10—16 V</b></li> </ul> <p><b>Diagnostic support note</b></p> <ul style="list-style-type: none"> <li>This is an intermittent monitor (fuel system).</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>DTC is stored in the PCM memory.</li> </ul>
<b>FAIL-SAFE FUNCTION</b>	<ul style="list-style-type: none"> <li>PCM restricts engine torque.</li> <li>PCM restricts fuel pressure. (high pressure side)</li> <li>Inhibits engine-stop by operating the i-stop function.</li> </ul>
<b>POSSIBLE CAUSE</b>	<ul style="list-style-type: none"> <li>Fuel pressure relief valve malfunction</li> <li>Suction control valve 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 AND DIAGNOSTIC MONITORING TEST RESULTS HAVE BEEN RECORDED</b> <ul style="list-style-type: none"> <li>Have the FREEZE FRAME DATA (Mode 2)/snapshot data and DIAGNOSTIC MONITORING TEST RESULTS (fuel system related) been recorded?</li> </ul>	Yes	Go to the next step.
		No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data and DIAGNOSTIC MONITORING TEST RESULTS 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.
		No	Go to the next step.
3	<b>VERIFY RELATED PENDING CODE AND/OR DTC</b> <ul style="list-style-type: none"> <li>Switch the ignition off, then ON (engine off).</li> <li>Perform the Pending Trouble Code Access Procedure and DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].)</li> <li>Are any other PENDING CODEs and/or DTCs present?</li> </ul>	Yes	Go to the applicable PENDING CODE or DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	Go to the next step.
4	<b>INSPECT FUEL PRESSURE RELIEF VALVE</b> <ul style="list-style-type: none"> <li>Inspect the fuel pressure relief valve. (See FUEL PRESSURE RELIEF VALVE INSPECTION [SKYACTIV-D 2.2].)</li> <li>Is there any malfunction?</li> </ul>	Yes	Replace the common rail, then go to Step 6. (See COMMON RAIL REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
		No	Go to the next step.
5	<b>INSPECT SUCTION CONTROL VALVE</b> <ul style="list-style-type: none"> <li>Inspect the suction control valve. (See SUCTION CONTROL VALVE INSPECTION [SKYACTIV-D 2.2].)</li> <li>Is there any malfunction?</li> </ul>	Yes	Replace the suction control valve, then go to the next step. (See SUCTION CONTROL VALVE 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>• Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].)</li> <li>• Start the engine.</li> <li>• Repeat deceleration ten times using engine braking after accelerating the vehicle speed to <b>60 km/h {37 mph}</b>.</li> <li>• Perform the DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].)</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-D 2.2].) 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.