DTC P0341:00	CMP sensor circuit range/performance problem			
DETECTION CONDITION	<ul> <li>CMP sensor signal is not input 5 times while the crankshaft rotates 10 times with the following conditions met:         MONITORING CONDITIONS         <ul> <li>Battery voltage: 8—20 V</li> <li>Engine speed: 700 rpm or more</li> </ul> </li> <li>Diagnostic support note         <ul> <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> </li> </ul>			
FAIL-SAFE	Inhibits engine-stop by operating the i-stop function.			
POSSIBLE CAUSE	<ul> <li>PCM restricts engine-transaxle integration control.</li> <li>Related wiring harness malfunction</li> <li>CMP sensor connector or terminals malfunction</li> <li>Improper installation of CMP sensor</li> <li>CMP sensor malfunction</li> <li>Deviation between camshaft and CMP sensor detection area</li> <li>Damage to detection area of CMP sensor</li> <li>PCM connector or terminals malfunction</li> <li>PCM malfunction</li> </ul>			
SYSTEM WIRING DIAGRAM	Not applicable			

**Diagnostic Procedure** 

	ostic Procedure		T
STEP	INSPECTION		ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/	Yes	Go to the next step.
	SNAPSHOT DATA HAS BEEN RECORDED	No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data
	Has the FREEZE FRAME DATA (Mode 2)/		on the repair order, then go to the next step.
	snapshot data been recorded?		
2	VERIFY RELATED SERVICE INFORMATION	Yes	Perform repair or diagnosis according to the available
	AVAILABILITY		Service Information.
	Verify related Service Information availability.		If the vehicle is not repaired, go to the next step.
	Is any related Service Information available?	No	Go to the next step.
3	VERIFY RELATED PENDING CODE AND/OR	Yes	Go to the applicable PENDING CODE or DTC inspection.
	DTC		(See DTC TABLE [SKYACTIV-D 2.2].)
	Switch the ignition off, then ON (engine off).	No	Go to the next step.
	Perform the Pending Trouble Code Access		
	Procedure and DTC Reading Procedure.		
	(See ON-BOARD DIAGNOSTIC TEST		
	[SKYACTIV-D 2.2].)		
	Are any other PENDING CODEs and/or DTCs		
	present?		
4	INSPECT CMP SENSOR CONNECTOR	Yes	Repair or replace the connector and/or terminals, then go to
	CONDITION		Step 8.
	• Switch the ignition off.	No	Go to the next step.
	Disconnect the CMP sensor connector.		
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	• Is there any malfunction?	Vaa	Install the CMD consequences, they as to Cton O
5	INSPECT CMP SENSOR INSTALLATION CONDITION	Yes	Install the CMP sensor properly, then go to Step 8.
	• Inspect for CMP sensor looseness.		(See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/ INSTALLATION [SKYACTIV-D 2.2].)
	• Is the CMP sensor loosen?	No	
6	INSPECT CMP SENSOR	No	Go to the next step.
0	• Inspect the CMP sensor.	Yes	Replace the CMP sensor, then go to Step 8. (See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/
	(See CAMSHAFT POSITION (CMP) SENSOR		
	INSPECTION [SKYACTIV-D 2.2].)	No	INSTALLATION [SKYACTIV-D 2.2].)
	• Is there any malfunction?	No	Go to the next step.
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STEP	INSPECTION		ACTION
7	INSPECT PCM CONNECTOR CONDITION  • Switch the ignition off.	Yes	71011011
	<ul> <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>	No	Go to the next step.
8	VERIFY DTC TROUBLESHOOTING COMPLETED  • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Perform the KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-D 2.2].) • Is the PENDING CODE for this DTC present?	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.  Go to the next step.
9	• Perform the "AFTER REPAIR PROCEDURE".  (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].)  • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].) DTC troubleshooting completed.