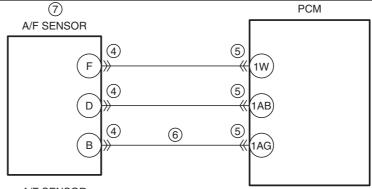
## DTC P2237:00 [SKYACTIV-G 2.0]

id0102h1851200

DTC P2237:00	A/F sensor positive current control circuit open
DETECTION CONDITION	<ul> <li>The PCM monitors A/F sensor positive current control circuit voltage. If the voltage is between 2.2 V and 2.4 V while the engine is running, the PCM determines that the A/F sensor positive current control circuit is open. Diagnostic support note</li> <li>This is a continuous monitor (A/F sensor, HO2S).</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 first drive cycle.</li> <li>FREEZE FRAME DATA (Mode 2)/Snapshot data is available.</li> <li>The DTC is stored in the PCM memory.</li> </ul>
FAIL-SAFE FUNCTION	Fixes the duty value of the A/F sensor heater.     Stops the fuel feedback control.
POSSIBLE CAUSE	<ul> <li>A/F sensor connector or terminals malfunction</li> <li>PCM connector or terminals malfunction</li> <li>Open circuit in wiring harness between A/F sensor terminal B and PCM terminal 1AG</li> <li>A/F sensor malfunction</li> <li>PCM malfunction</li> </ul>
	DCM



A/F SENSOR WIRING HARNESS-SIDE CONNECTOR





PCM WIRING HARNESS-SIDE CONNECTOR

	)	
/	TEETEARDWIDSTOOTDKTOOT TOATCOTCKTCGTCCTBY TIBETBMTBHTBCTAXTASTANTAL	1AD 1Y 1T 10 1J 1E 1A
	1EF 1EB DX 1DT 1DP 1DL 1DH 1DB 1CX 1CT 1CP 1CL 1CH 1CD 1BZ 1BS 1BN 1BI 1BD 1AY 1AT 1AO 1AJ	1AE 1Z 1U 1P 1K 1F 1B
	1BT   1BO   1BJ   1BE   1AZ   1AU   1AP   1AK	1AF 1AA 1V 1Q 1L 1G 1C
	1EI   1EG  1EC  1DY   1DU  1DQ  1DM   1DI   1DE  1DC   1CY   1CU  1CU  1CU   1CE   1CA  1BW   1BU   1BP   1BK   1BF   1BA   1AV   1AQ   1AL	1AG 1AB 1W 1R 1M 1H 1D
		1AH 1AC 1X 1S 1N 1I
	)	

**Diagnostic Procedure** 

	Diagnostic Procedure						
STEP	INSPECTION		ACTION				
1	IDENTIFY TRIGGER DTC FOR FREEZE FRAME	Yes	Go to the next step.				
	DATA (MODE 2)	No	Go to the troubleshooting procedure for DTC on FREEZE				
	Perform the Freeze Frame PID Data Access		FRAME DATA (Mode 2).				
	Procedure.		(See DTC TABLE [SKYACTIV-G 2.0].)				
	(See ON-BOARD DIAGNOSTIC TEST						
	[SKYACTIV-G 2.0].)						
	• Is the DTC P2237:00 on FREEZE FRAME DATA						
	(Mode 2)?						
2	VERIFY FREEZE FRAME DATA (MODE 2)/	Yes	Go to the next step.				
	SNAPSHOT DATA AND DIAGNOSTIC	No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data				
	MONITORING TEST RESULTS HAVE BEEN		and DIAGNOSTIC MONITORING TEST RESULTS on the				
	RECORDED		repair order, then go to the next step.				
	Have the FREEZE FRAME DATA (Mode 2)/		, ,				
	snapshot data and DIAGNOSTIC MONITORING						
	TEST RESULTS (A/F sensor, HO2S related)						
	been recorded?						
3	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.				
4	INSPECT A/F SENSOR CONNECTOR	Yes	Repair or replace the connector and/or terminals, then go to				
'	CONDITION	. 55	Step 8.				
	Switch the ignition to off.	No	Go to the next step.				
	Disconnect the A/F sensor connector.		- Co to the next etcp.				
	Inspect for poor connection (such as damaged/						
	pulled-out pins, corrosion).						
	• Is there any malfunction?						
5	INSPECT PCM CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to				
	Disconnect the PCM connector.	103	Step 8.				
	Inspect for poor connection (such as damaged/	No	Go to the next step.				
	pulled-out pins, corrosion).	110	Ob to the flext step.				
	• Is there any malfunction?						
6	INSPECT A/F SENSOR POSITIVE CURRENT	Yes	Go to the next step.				
	CONTROL CIRCUIT FOR OPEN CIRCUIT	No	Repair or replace the wiring harness for a possible open				
	Verify that the A/F sensor and PCM connectors	INO	circuit, then go to Step 8.				
	are disconnected.		circuit, then go to step o.				
	Inspect for continuity between A/F sensor terminal						
	B (wiring harness-side) and PCM terminal 1AG						
	(wiring harness-side).						
	• Is there continuity?						
7	INSPECT A/F SENSOR	Yes	Replace the A/F sensor, then go to the next step.				
'	Reconnect all disconnected connectors.	' ' ' '	(See AIR FUEL RATIO (A/F) SENSOR REMOVAL/				
	Inspect the A/F sensor.		INSTALLATION [SKYACTIV-G 2.0].)				
	(See AIR FUEL RATIO (A/F) SENSOR	No	Go to the next step.				
	INSPECTION [SKYACTIV-G 2.0].)	110	Oo to the flext step.				
	• Is there any malfunction?						
8	VERIFY DTC TROUBLESHOOTING	Yes	Repeat the inspection from Step 1.				
	COMPLETED	' 03	If the malfunction recurs, replace the PCM.				
	Make sure to reconnect all disconnected		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G				
	connectors.		2.0].)				
	Clear the DTC from the PCM memory using the		Go to the next step.				
	M-MDS.	No	Go to the next step.				
	(See AFTER REPAIR PROCEDURE	'10	So to the next step.				
	[SKYACTIV-G 2.0].)						
	Perform the KOER self test or Drive Mode 03						
	(Variable Valve Timing, A/F Sensor Heater, HO2S						
	Heater, A/F Sensor, HO2S and TWC Repair						
	Verification Drive Mode).						
	(See KOEO/KOER SELF TEST [SKYACTIV-G						
	2.0].)						
	(See OBD DRIVE MODE [SKYACTIV-G 2.0].)						
	• Is the PENDING CODE for this DTC present?						
	- 19 the LEMPHAG CODE IOI fills DTC bleselif.						

STEP	INSPECTION		ACTION
9	VERIFY AFTER REPAIR PROCEDURE	Yes	Go to the applicable DTC inspection.
	Perform the "AFTER REPAIR PROCEDURE".		(See DTC TABLE [SKYACTIV-G 2.0].)
	(See AFTER REPAIR PROCEDURE	No	DTC troubleshooting completed.
	[SKYACTIV-G 2.0].)		
	Are any DTCs present?		