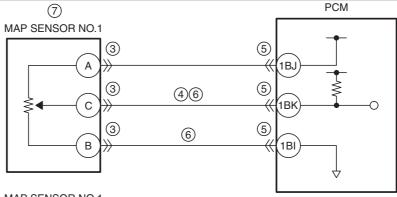
DTC P0237:00	MAP sensor No.1 circuit low input		
	• The PCM monitors the input voltage from the MAP sensor No.1. If the input voltage at the PCM terminal 1BK		
	is below 0.33 V for 4 s , the PCM determines that the MAP sensor No.1 circuit has a malfunction. MONITORING CONDITIONS		
	— Battery voltage: 8—20 V		
DETECTION Diagnostic support note			
CONDITION	This is a continuous monitor (CCM).		
	• The check engine light illuminates if the PCM detects the above malfunction condition during the first drive		
	cycle.		
	• FREEZE FRAME DATA (Mode 2)/Snapshot data is available.		
	DTC is stored in the PCM memory.		
FAIL-SAFE	Inhibits engine-stop by operating the i-stop function.		
FUNCTION	PCM restricts engine-transaxle integration control.		
MAP sensor No.1 connector or terminals malfunction			
	Short to ground in wiring harness between MAP sensor No.1 terminal C and PCM terminal 1BK		
POSSIBLE	PCM connector or terminals malfunction		
CAUSE	MAP sensor No.1 signal circuit and ground circuit are shorted to each other		
	MAP sensor No.1 malfunction		
	PCM malfunction		
	PCM		



MAP SENSOR NO.1 WIRING HARNESS-SIDE CONNECTOR



PCM WIRING HARNESS-SIDE CONNECTOR

	J		
1EE 1EA1DW1DS1DO1DK1DG	1DAICW1CS1CO1CK1CG1CC1BY	1BR 1BM 1BH 1BC 1AX 1AS 1AN 1AI 1AD 1Y 1T 1O 1J 1E 1	Ā
1EF 1EB 1DX 1DT 1DP 1DL 1DH	1DB1CX1CT1CP1CL1CH1CD1BZ	1BS 1BN 1BI 1BD 1AY 1AT 1AO 1AJ 1AE 1Z 1U 1P 1K 1F 1I	3
		1BT 1BO 1BJ 1BE 1AZ 1AU 1AP 1AK 1AF 1AA 1V 1Q 1L 1G 10	5]
1EI 1EG1EC1DY1DU1DQ1DM1DI	DE1DC1CY1CU1CQ1CM1CI1CE1CA1BW	1BU 1BP 1BK 1BF 1BA 1AV 1AQ 1AL 1AG 1AB 1W 1R 1M 1H 1I	5]
1EJ 1EH 1ED 1DZ 1DV 1DR 1DN 1DJ 1	DF 1DD 1CZ 1CV 1CR 1CN 1CJ 1CF 1CB 1BX	1BV 1BQ 1BL 1BG 1BB 1AW 1AR 1AM 1AH 1AC 1X 1S 1N 1I	_
_			

Diagnostic Procedure

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)/	140	on the repair order, then go to the next step.
	snapshot data been recorded?		on the repair erder, then go to the next step.
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	INSPECT MAP SENSOR NO.1 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 MAP sensor No.1 connector.		
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	Is there any malfunction?		
4	INSPECT MAP SENSOR NO.1 CIRCUIT FOR	Yes	If the short to ground circuit could be detected in the wiring
	SHORT TO GROUND		harness:
	Verify that the MAP sensor No.1 connector is		Repair or replace the wiring harness for a possible short to
	disconnected.		ground.
	Inspect for continuity between MAP sensor No.1 terminal C (wiring barness side) and body ground		If the short to ground circuit could not be detected in the
	terminal C (wiring harness-side) and body ground. • Is there continuity?		wiring harness: • Replace the PCM (short to ground in the PCM internal
	13 there continuity:		circuit).
			(See PCM REMOVAL/INSTALLATION [SKYACTIV-D
			2.2].)
			Go to Step 8.
		No	Go to the next step.
5	INSPECT PCM CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to
	Disconnect the PCM connector.		Step 8.
	Inspect for poor connection (such as damaged/	No	Go to the next step.
	pulled-out pins, corrosion).		
	Is there any malfunction?		
6	INSPECT MAP SENSOR NO.1 SIGNAL CIRCUIT	Yes	Repair or replace the wiring harness for a possible short to
	AND GROUND CIRCUIT FOR SHORT TO EACH	N. I.	each other, then go to Step 8.
	OTHER	No	Go to the next step.
	 Verify that the MAP sensor No.1 and PCM connectors are disconnected. 		
	Inspect for continuity between MAP sensor No.1		
	terminals C and B (wiring harness-side).		
	• Is there continuity?		
7	INSPECT MAP SENSOR NO.1	Yes	Replace the MAP sensor No.1, then go to the next step.
	Reconnect all disconnected connectors.		(See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR
	Inspect the MAP sensor No.1.		REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
	(See MANIFOLD ABSOLUTE PRESSURE (MAP)	No	Go to the next step.
	SENSOR INSPECTION [SKYACTIV-D 2.2].)		
	Is there any malfunction?		
8	VERIFY DTC TROUBLESHOOTING	Yes	Repeat the inspection from Step 1.
	COMPLETED		If the malfunction recurs, replace the PCM.
	Always reconnect all disconnected connectors.		(See PCM REMOVAL/INSTALLATION [SKYACTIV-D
	Clear the DTC from the PCM memory using the		2.2].)
	M-MDS.	Nic	Go to the next step.
	(See AFTER REPAIR PROCEDURE	No	Go to the next step.
	[SKYACTIV-D 2.2].) • Perform the KOEO or KOER self test.		
	(See KOEO/KOER SELF TEST [SKYACTIV-D		
	2.2].)		
	• Is the same DTC present?		
	io the sume bit o procent:		

STEP	INSPECTION		ACTION
9	VERIFY AFTER REPAIR PROCEDURE	Yes	Go to the applicable DTC inspection.
	Perform the "AFTER REPAIR PROCEDURE".		(See DTC TABLE [SKYACTIV-D 2.2].)
	(See AFTER REPAIR PROCEDURE	No	DTC troubleshooting completed.
	[SKYACTIV-D 2.2].)		
	Are any DTCs present?		