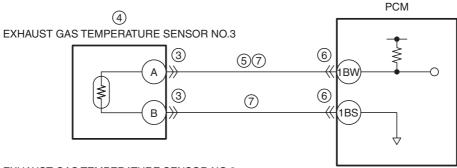
DTC P242C:00 [SKYACTIV-D 2.2]

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DTC P242C: 00	Exhaust gas temperature sensor No.3 circuit low input
DETECTION CONDITION	 The PCM monitors the exhaust gas temperature sensor No.3 signal. If the PCM detects that the exhaust gas temperature sensor No.3 voltage at the PCM terminal 1BW is below 0.24 V for 1 s, the PCM determines that the exhaust gas temperature sensor No.3 circuit has a malfunction. MONITORING CONDITIONS — Battery voltage: 8—20 V Diagnostic support note 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 FUNCTION	 PCM restricts engine torque. Inhibits the EGR control. Inhibits the diesel particulate filter regeneration control. Inhibits engine-stop by operating the i-stop function. PCM restricts engine-transaxle integration control.
POSSIBLE CAUSE	 Exhaust gas temperature sensor No.3 connector or terminals malfunction Exhaust gas temperature sensor No.3 malfunction Short to ground in wiring harness between exhaust gas temperature sensor No.3 terminal A and PCM terminal 1BW PCM connector or terminals malfunction Exhaust gas temperature sensor No.3 signal circuit and ground circuit are shorted to each other PCM malfunction
	PCM



EXHAUST GAS TEMPERATURE SENSOR NO.3 WIRING HARNESS-SIDE CONNECTOR



PCM WIRING HARNESS-SIDE CONNECTOR

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								1DH	1 1	1DB	-		-			-		3	1B	S 1BN	1BI	1BD	1AY	1AT	1AO	1AJ	1.4	\E 12	Z 1 L	J 1F	1K	1F	1B
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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 order, then go to the next step.
2	VERIFY RELATED SERVICE INFORMATION	Yes	Perform repair or diagnosis according to the available
	AVAILABILITY	103	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 EXHAUST GAS TEMPERATURE	Yes	Repair or replace the connector and/or terminals, then go to Step 8.
	SENSOR NO.3 CONNECTOR CONDITION	NIa	'
	Switch the ignition off. Disconnect the exhaust reactemperature concern.	No	Go to the next step.
	Disconnect the exhaust gas temperature sensor No.3 connector.		
	 Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). 		
4	• Is there any malfunction?	Vaa	Deplete the exhaust was town every use consequence.
4	INSPECT EXHAUST GAS TEMPERATURE SENSOR NO.3	Yes	Replace the exhaust gas temperature sensor No.3, then go
			to Step 8.
	• Inspect the exhaust gas temperature sensor No.		(See EXHAUST GAS TEMPERATURE SENSOR
	3.	N.L.	REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
	(See EXHAUST GAS TEMPERATURE SENSOR	No	Go to the next step.
	INSPECTION [SKYACTIV-D 2.2].)		
	• Is there any malfunction?	V	If the abort to ground circuit equid he detected in the control
5	INSPECT EXHAUST GAS TEMPERATURE	Yes	If the short to ground circuit could be detected in the wiring
	SENSOR NO.3 SIGNAL CIRCUIT FOR SHORT		harness:
	TO GROUND		Repair or replace the wiring harness for a possible short to
	Verify that the exhaust gas temperature sensor		ground.
	No.3 connector is disconnected.		If the short to ground circuit could not be detected in the
	• Inspect for continuity between exhaust gas		wiring harness:
	temperature sensor No.3 terminal A (wiring		Replace the PCM (short to ground in the PCM internal aircuit)
	harness-side) and body ground.		circuit).
	Is there continuity?		(See PCM REMOVAL/INSTALLATION [SKYACTIV-D
			2.2].)
		No	Go to Step 8. Go to the next step.
6	INSPECT PCM CONNECTOR CONDITION	No	·
0	Disconnect the PCM connector.	Yes	Repair or replace the connector and/or terminals, then go to Step 8.
	Inspect for poor connection (such as damaged/	No	Go to the next step.
	pulled-out pins, corrosion).	INO	Go to the flext step.
	• Is there any malfunction?		
7	INSPECT EXHAUST GAS TEMPERATURE	Yes	Repair or replace the wiring harness for a possible short to
'	SENSOR NO.3 SIGNAL CIRCUIT AND GROUND	163	each other, then go to the next step.
	CIRCUIT FOR SHORT TO EACH OTHER	No	Go to the next step.
	Verify that the exhaust gas temperature sensor	INO	Go to the next step.
	No.3 and PCM connectors are disconnected.		
	Inspect for continuity between exhaust gas		
	temperature sensor No.3 terminals A and B		
	(wiring harness-side).		
	• Is there continuity?		
8	VERIFY DTC TROUBLESHOOTING	Yes	Repeat the inspection from Step 1.
0	COMPLETED	165	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.		Go to the next step.
	(See AFTER REPAIR PROCEDURE	No	· · · · · · · · · · · · · · · · · · ·
	SKYACTIV-D 2.2].)	INU	Go to the next step.
	Perform the KOEO or KOER self test.		
	(See KOEO/KOER SELF TEST [SKYACTIV-D		
	2.2].)		
	Is the same DTC present?		
1			

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?		