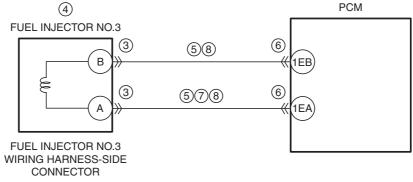
DTC P0203:00 [SKYACTIV-G 2.0]

id0102h1148100

DTC P0203:00	Fuel injector circuit/open cylinder No.3
DETECTION CONDITION	 If the fuel injection verification signal is not input at 25 times continuously even though the PCM drives the fuel injector No.3, the PCM determines that there is an open circuit in the fuel injector No.3 control circuit. MONITORING CONDITIONS — The following conditions are met: Battery voltage: 10.5 V or more Fuel injection control: except during fuel cut 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. The DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	_
POSSIBLE CAUSE	Fuel injector No.3 connector or terminals malfunction Fuel injector No.3 malfunction Short to ground in wiring harness between the following terminals: Fuel injector No.3 terminal B—PCM terminal 1EB Fuel injector No.3 terminal A—PCM terminal 1EA PCM connector or terminals malfunction Short to power supply in wiring harness between fuel injector No.3 terminal A and PCM terminal 1EA Open circuit in wiring harness between the following terminals: Fuel injector No.3 terminal B—PCM terminal 1EB Fuel injector No.3 terminal A—PCM terminal 1EA
	4 PCM





PCM WIRING HARNESS-SIDE CONNECTOR

)		
CONTROLLED AND AND AND AND AND AND AND AND AND AN			
1EE 1EA DW 1DS 1DO 1DK 1DG 1DA 1CW 1CS 1CC	1CK 1CG 1CC 1BY	1BR1BM1BH1BC1AX1AS1AN1AI	1AD 1Y 1T 1O 1J 1E 1A
N. = . I . = = I . = . I . = . I . = I . = I	1CL1CH1CD1BZ	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 1CC	1CM 1CI 1CE 1CA1BW	1BU 1BP 1BK 1BF 1BA 1AV 1AQ 1AL	1AG 1AB 1W 1R 1M 1H 1D
1EJ 1EH 1ED 1DZ 1DV 1DR 1DN 1DJ 1DF 1DD 1CZ 1CV 1CR	1CN 1CJ 1CF 1CB 1BX	1BV 1BQ 1BL 1BG 1BB 1AW 1AR 1AM	1AH 1AC 1X 1S 1N 1I
		<u> </u>	
)		
	1 / (8)		

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)/	110	on the repair order, then go to the next step.
	snapshot data been recorded?		on the repair order, their go to the next step.
2	VERIFY RELATED SERVICE INFORMATION	Voc	Perform repair or diagnosis according to the available
2	AVAILABILITY	Yes	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 FUEL INJECTOR NO.3 CONNECTOR	Yes	Repair or replace the connector and/or terminals, then go to
	CONDITION		Step 9.
	Switch the ignition to off.	No	Go to the next step.
	Disconnect the fuel injector No.3 connector.		
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	• Is there any malfunction?	1/1	Deliver the fortists to No. 0 the control of the O
4	INSPECT FUEL INJECTOR NO.3	Yes	Replace the fuel injector No.3, then go to Step 9.
	• Inspect the fuel injector No.3.		(See FUEL INJECTOR REMOVAL/INSTALLATION
	(See FUEL INJECTOR INSPECTION		[SKYACTIV-G 2.0].)
	[SKYACTIV-G 2.0].)	No	Go to the next step.
	• Is there any malfunction?	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	If the about to present the transfer of the tr
5	INSPECT FUEL INJECTOR NO.3 CIRCUIT FOR	Yes	If the short to ground circuit could be detected in the wiring
	SHORT TO GROUND		harness:
	Verify that the fuel injector No.3 connector is		Repair or replace the wiring harness for a possible short to
	disconnected.		ground.
	Inspect for continuity between the following		If the short to ground circuit could not be detected in the
	terminals (wiring harness-side) and body ground:		wiring harness:
	— Fuel injector No.3 terminal B		• Replace the PCM (short to ground in the PCM internal
	— Fuel injector No.3 terminal A		circuit).
	Is there continuity?		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G
			2.0].)
		NIS	Go to Step 9.
6	INCRECT DOM CONNECTOR CONDITION	No	Go to the next step.
6	INSPECT PCM CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to Step 9.
	Disconnect the PCM connector. Inspect for page connection (such as demaged).	Nia	<u>'</u>
	Inspect for poor connection (such as damaged/ pulled out pine correction)	No	Go to the next step.
	pulled-out pins, corrosion). • Is there any malfunction?		
7	INSPECT FUEL INJECTOR NO.3 CIRCUIT FOR	Yes	Go to the next step.
'	SHORT TO POWER SUPPLY	No	Repair or replace the wiring harness for a possible short to
	Verify that the fuel injector No.3 and PCM	INO	power supply, then go to Step 9.
	connectors are disconnected.		power suppry, then go to step a.
	Switch the ignition ON (engine off or on).		
	Measure the voltage at the fuel injector No.3		
	terminal A (wiring harness-side).		
	• Is the voltage 0 V ?		
8	INSPECT FUEL INJECTOR NO.3 CIRCUIT FOR	Yes	Go to the next step.
	OPEN CIRCUIT	No	Repair or replace the wiring harness for a possible open
	Verify that the fuel injector No.3 and PCM	110	circuit, then go to the next step.
	connectors are disconnected.		on out, then go to the next step.
	Inspect for continuity between the following		
	terminals (wiring harness-side):		
	Fuel injector No.3 terminal B—PCM terminal		
	1EB		
	Fuel injector No.3 terminal A—PCM terminal		
	1EA		
	• Is there continuity?		

STEP	INSPECTION		ACTION
9	VERIFY DTC TROUBLESHOOTING COMPLETED • Make sure to reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) • Start the engine. • Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0].) • Is the same DTC present?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].) Go to the next step. Go to the next step.
10	• Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) • Are any DTCs present?	Yes No	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].) DTC troubleshooting completed.