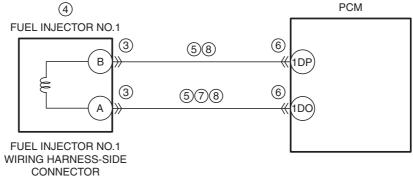
## DTC P0201:00 [SKYACTIV-G 2.0]

id0102h1147900

CONDITION  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.  Fulction  Fulction  Fulction No.1 connector or terminals malfunction  Fuel injector No.1 malfunction  Short to ground in wiring harness between the following terminals:  Fuel injector No.1 terminal B—PCM terminal 1DD  Fulction No.1 terminal A—PCM terminal 1DO  PCM connector or terminals malfunction  Short to power supply in wiring harness between fuel injector No.1 terminal A and PCM terminal 1DO  Open circuit in wiring harness between the following terminals:  Fuel injector No.1 terminal B—PCM terminal 1DP  Fuel injector No.1 terminal B—PCM terminal 1DP  Fuel injector No.1 terminal A—PCM terminal 1DP  PCM malfunction  PCM	DTC P0201:00	Fuel injector circuit/open cylinder No.1				
• The DTC is stored in the PCM memory.  FAIL-SAFE FUNCTION  • Fuel injector No.1 connector or terminals malfunction • Fuel injector No.1 malfunction • Short to ground in wiring harness between the following terminals:  — Fuel injector No.1 terminal B—PCM terminal 1DP  — Fuel injector No.1 terminal A—PCM terminal 1DO • PCM connector or terminals malfunction • Short to power supply in wiring harness between fuel injector No.1 terminal A and PCM terminal 1DO • Open circuit in wiring harness between the following terminals:  — Fuel injector No.1 terminal B—PCM terminal 1DP  — Fuel injector No.1 terminal A—PCM terminal 1DO • PCM malfunction   PCM  PCM	DETECTION CONDITION	fuel injector No.1, the PCM determines that there is an open circuit in the fuel injector No.1 control circ  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				
FUNCTION  Fuel injector No.1 connector or terminals malfunction Fuel injector No.1 malfunction Short to ground in wiring harness between the following terminals: Fuel injector No.1 terminal B—PCM terminal 1DP Fuel injector No.1 terminal A—PCM terminal 1DO PCM connector or terminals malfunction Short to power supply in wiring harness between fuel injector No.1 terminal A and PCM terminal 1DO Open circuit in wiring harness between the following terminals: Fuel injector No.1 terminal B—PCM terminal 1DP Fuel injector No.1 terminal A—PCM terminal 1DO PCM malfunction  PCM  PCM						
POSSIBLE CAUSE  • Fuel injector No.1 malfunction • Short to ground in wiring harness between the following terminals:  — Fuel injector No.1 terminal B—PCM terminal 1DP  — Fuel injector No.1 terminal A—PCM terminal 1DO • PCM connector or terminals malfunction • Short to power supply in wiring harness between fuel injector No.1 terminal A and PCM terminal 1DO • Open circuit in wiring harness between the following terminals:  — Fuel injector No.1 terminal B—PCM terminal 1DP  — Fuel injector No.1 terminal A—PCM terminal 1DO • PCM malfunction   PCM  PCM		_				
		<ul> <li>Fuel injector No.1 malfunction</li> <li>Short to ground in wiring harness between the following terminals:  — Fuel injector No.1 terminal B—PCM terminal 1DP  — Fuel injector No.1 terminal A—PCM terminal 1DO</li> <li>PCM connector or terminals malfunction</li> <li>Short to power supply in wiring harness between fuel injector No.1 terminal A and PCM terminal 1DO</li> <li>Open circuit in wiring harness between the following terminals:  — Fuel injector No.1 terminal B—PCM terminal 1DP  — Fuel injector No.1 terminal A—PCM terminal 1DO</li> </ul>				







## PCM WIRING HARNESS-SIDE CONNECTOR

1EE 1EA DW 1DS 1DO 1DK 1DG 1DA 1CV	1CS1CO1CK1CG1CC1BY	1BR 1BM 1BH 1BC 1AX 1AS 1AN 1AI	1AD 1Y 1T 1O 1J 1E 1A
	TCTTCPTCLTCHTCDTBZ	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 1EG1EC1DY1DU1DQ1DM1DI 1DE1DC1CY	1CU1CQ1CM 1CI 1CE1CA1BW	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
		_	

**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.1 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.1 connector.		
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	• Is there any malfunction?	1/1	Deliver the fortists to No. 4 the control of the O
4	INSPECT FUEL INJECTOR NO.1	Yes	Replace the fuel injector No.1, then go to Step 9.
	Inspect the fuel injector No.1.		(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?		
5	INSPECT FUEL INJECTOR NO.1 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.1 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.1 terminal B  Fuel injector No.1 terminal A		Replace the PCM (short to ground in the PCM internal
	— Fuel injector No.1 terminal A		circuit).
	Is there continuity?		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G
			2.0].)
		NIS	Go to Step 9. Go to the next step.
6	INCRECT DOM CONNECTOR CONDITION	No	·
6	INSPECT PCM CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to Step 9.
	<ul><li>Disconnect the PCM connector.</li><li>Inspect for poor connection (such as damaged/</li></ul>	No	Go to the next step.
	pulled-out pins, corrosion).	No	Go to the next step.
	• Is there any malfunction?		
7	INSPECT FUEL INJECTOR NO.1 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.1 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.1		
	terminal A (wiring harness-side).		
	• Is the voltage <b>0 V</b> ?		
8	INSPECT FUEL INJECTOR NO.1 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.1 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.1 terminal B—PCM terminal		
	1DP		
	Fuel injector No.1 terminal A—PCM terminal		
	1DO		
	• 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.