

DTC P0203:00	Fuel injector circuit/open cylinder No.3
DETECTION CONDITION	<ul style="list-style-type: none">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. <p>MONITORING CONDITIONS</p> <ul style="list-style-type: none">The following conditions are met:<ul style="list-style-type: none">Battery voltage: 10.5 V or moreFuel injection control: except during fuel cut <p>Diagnostic support note</p> <ul style="list-style-type: none">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	Not applicable
POSSIBLE CAUSE	<ul style="list-style-type: none">Fuel injector No.3 connector or terminals malfunctionPCM connector or terminals malfunctionShort to ground in wiring harness between the following terminals:<ul style="list-style-type: none">Fuel injector No.3 terminal B—PCM terminal 1EBFuel injector No.3 terminal A—PCM terminal 1EAShort to power supply in wiring harness between fuel injector No.3 terminal A and PCM terminal 1EAOpen circuit in wiring harness between the following terminals:<ul style="list-style-type: none">Fuel injector No.3 terminal B—PCM terminal 1EBFuel injector No.3 terminal A—PCM terminal 1EAFuel injector No.3 malfunctionPCM malfunction

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FUEL INJECTOR NO.3

FUEL INJECTOR NO.3
WIRING HARNESS-SIDE
CONNECTOR

PCM

PCM WIRING HARNESS-SIDE CONNECTOR

1EE	1EA	1DW	1DS	1DO	1DK	1DG
1EF	1EB	1DX	1DT	1DP	1DL	1DH

1DA	1CW	1CS	1CO	1CK	1CG	1CC	1BY
1DB	1CX	1CT	1CP	1CL	1CH	1CD	1BZ

1BR	1BM	1BH	1BC	1AX	1AS	1AN	1AI
1BS	1BN	1BI	1BD	1AY	1AT	1AO	1AJ
1BT	1BO	1BJ	1BE	1AZ	1AU	1AP	1AK
1BU	1BP	1BK	1BF	1BA	1AV	1AQ	1AL
1BV	1BQ	1BL	1BG	1BB	1AW	1AR	1AM

1AD	1Y	1T	1O	1J	1E	1A
1AE	1Z	1U	1P	1K	1F	1B
1AF	1AA	1V	1Q	1L	1G	1C
1AG	1AB	1W	1R	1M	1H	1D
1AH	1AC	1X	1S	1N	1I	

Diagnostic Procedure

STEP	INSPECTION		ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED <ul style="list-style-type: none"> Has the FREEZE FRAME DATA (Mode 2)/ snapshot data been recorded? 	Yes	Go to the next step.
		No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.
2	VERIFY RELATED SERVICE INFORMATION AVAILABILITY <ul style="list-style-type: none"> Verify related Service Information availability. Is any related Service Information available? 	Yes	Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	INSPECT FUEL INJECTOR NO.3 CONNECTOR CONDITION <ul style="list-style-type: none"> Switch the ignition off. Disconnect the fuel injector No.3 connector. Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). Is there any malfunction? 	Yes	Repair or replace the connector and/or terminals, then go to Step 9.
		No	Go to the next step.
4	INSPECT PCM CONNECTOR CONDITION <ul style="list-style-type: none"> Disconnect the PCM connector. Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). Is there any malfunction? 	Yes	Repair or replace the connector and/or terminals, then go to Step 9.
		No	Go to the next step.
5	INSPECT FUEL INJECTOR NO.3 CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> Verify that the fuel injector No.3 and PCM connectors are disconnected. Inspect for continuity between the following terminals (wiring harness-side) and body ground: <ul style="list-style-type: none"> Fuel injector No.3 terminal B Fuel injector No.3 terminal A Is there continuity? 	Yes	Repair or replace the wiring harness for a possible short to ground, then go to Step 9.
		No	Go to the next step.
6	INSPECT FUEL INJECTOR NO.3 CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> Verify that the fuel injector No.3 and PCM connectors are disconnected. Switch the ignition ON (engine off). <p>Note</p> <ul style="list-style-type: none"> Another DTC may be stored by the PCM detecting an open circuit. Measure the voltage at the fuel injector No.3 terminal A (wiring harness-side). Is the voltage 0 V? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible short to power supply, then go to Step 9.
7	INSPECT FUEL INJECTOR NO.3 CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> Verify that the fuel injector No.3 and PCM connectors are disconnected. Switch the ignition off. Inspect for continuity between the following terminals (wiring harness-side): <ul style="list-style-type: none"> Fuel injector No.3 terminal B—PCM terminal 1EB Fuel injector No.3 terminal A—PCM terminal 1EA Is there continuity? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 9.
8	INSPECT FUEL INJECTOR NO.3 <ul style="list-style-type: none"> Inspect the fuel injector No.3. (See FUEL INJECTOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Is there any malfunction? 	Yes	Replace the fuel injector No.3, then go to the next step. (See FUEL INJECTOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	Go to the next step.

STEP	INSPECTION		ACTION
9	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Start the engine. • Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • 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, SKYACTIV-G 2.5].) Go to the next step.
		No	Go to the next step.
10	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Are any DTCs present? 	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	DTC troubleshooting completed.