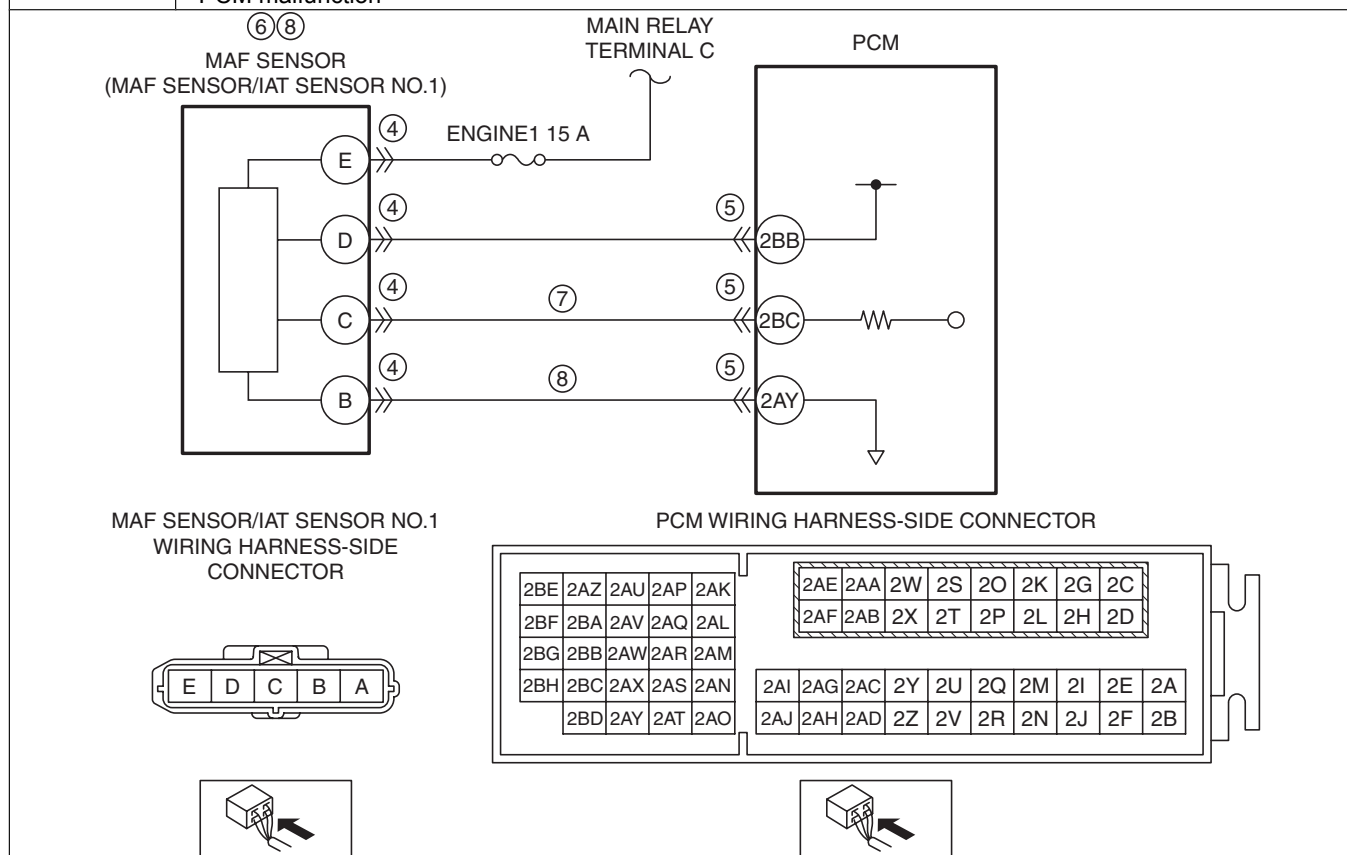


DTC P0103:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

id0102h4701000

DTC P0103:00	MAF sensor circuit high input
DETECTION CONDITION	<ul style="list-style-type: none"> The PCM monitors the input voltage from the MAF sensor when the engine is running. If the input voltage at the PCM terminal 2BC is above 4.94 V for 5 s, the PCM determines that the MAF sensor circuit has a malfunction. <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	<ul style="list-style-type: none"> Restricts the upper limit of the engine speed. Inhibits the evaporative purge control.
POSSIBLE CAUSE	<ul style="list-style-type: none"> MAF sensor/IAT sensor No.1 connector or terminals malfunction PCM connector or terminals malfunction MAF sensor malfunction Short to power supply in wiring harness between MAF sensor/IAT sensor No.1 terminal C and PCM terminal 2BC Open circuit in wiring harness between MAF sensor/IAT sensor No.1 terminal B and PCM terminal 2AY PCM malfunction



Diagnostic Procedure

STEP	INSPECTION		ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED	Yes	Go to the next step.
	• Has the FREEZE FRAME DATA (Mode 2)/ snapshot data been recorded?	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	Yes	Perform repair or diagnosis according to the available Service Information.
	• Verify related Service Information availability. • Is any related Service Information available?	No	• If the vehicle is not repaired, go to the next step. Go to the next step.

STEP	INSPECTION	ACTION	
3	DETERMINE IF MAF SENSOR OR WIRING HARNESS MALFUNCTION <ul style="list-style-type: none"> Access the MAF PID using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Verify the MAF PID value. Is the MAF PID value 5 V or B+? 	Yes	Go to Step 7.
		No	Go to the next step.
4	INSPECT MAF SENSOR/IAT SENSOR NO.1 CONNECTOR CONDITION <ul style="list-style-type: none"> Switch the ignition off. Disconnect the MAF sensor/IAT sensor No.1 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 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.
6	INSPECT MAF SENSOR <ul style="list-style-type: none"> Inspect the MAF sensor. (See MASS AIR FLOW (MAF) SENSOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Is there any malfunction? 	Yes	Replace the MAF sensor/IAT sensor No.1, then go to Step 9. (See MASS AIR FLOW (MAF) SENSOR/INTAKE AIR TEMPERATURE (IAT) SENSOR NO.1 REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	Go to Step 9.
7	INSPECT MAF SENSOR SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> Switch the ignition off. Disconnect the MAF sensor/IAT sensor No.1 connector. Access the MAF PID using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Verify the MAF PID value. Is the MAF PID value 5 V or B+? 	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to Step 9.
		No	Go to the next step.
8	INSPECT MAF SENSOR GROUND CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> Verify that the MAF sensor/IAT sensor No.1 connector is disconnected. Switch the ignition off. Disconnect the PCM connector. Inspect for continuity between MAF sensor/IAT sensor No.1 terminal B (wiring harness-side) and PCM terminal 2AY (wiring harness-side). Is there continuity? 	Yes	Replace the MAF sensor/IAT sensor No.1, then go to the next step. (See MASS AIR FLOW (MAF) SENSOR/INTAKE AIR TEMPERATURE (IAT) SENSOR NO.1 REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
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 and warm it up completely. 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.