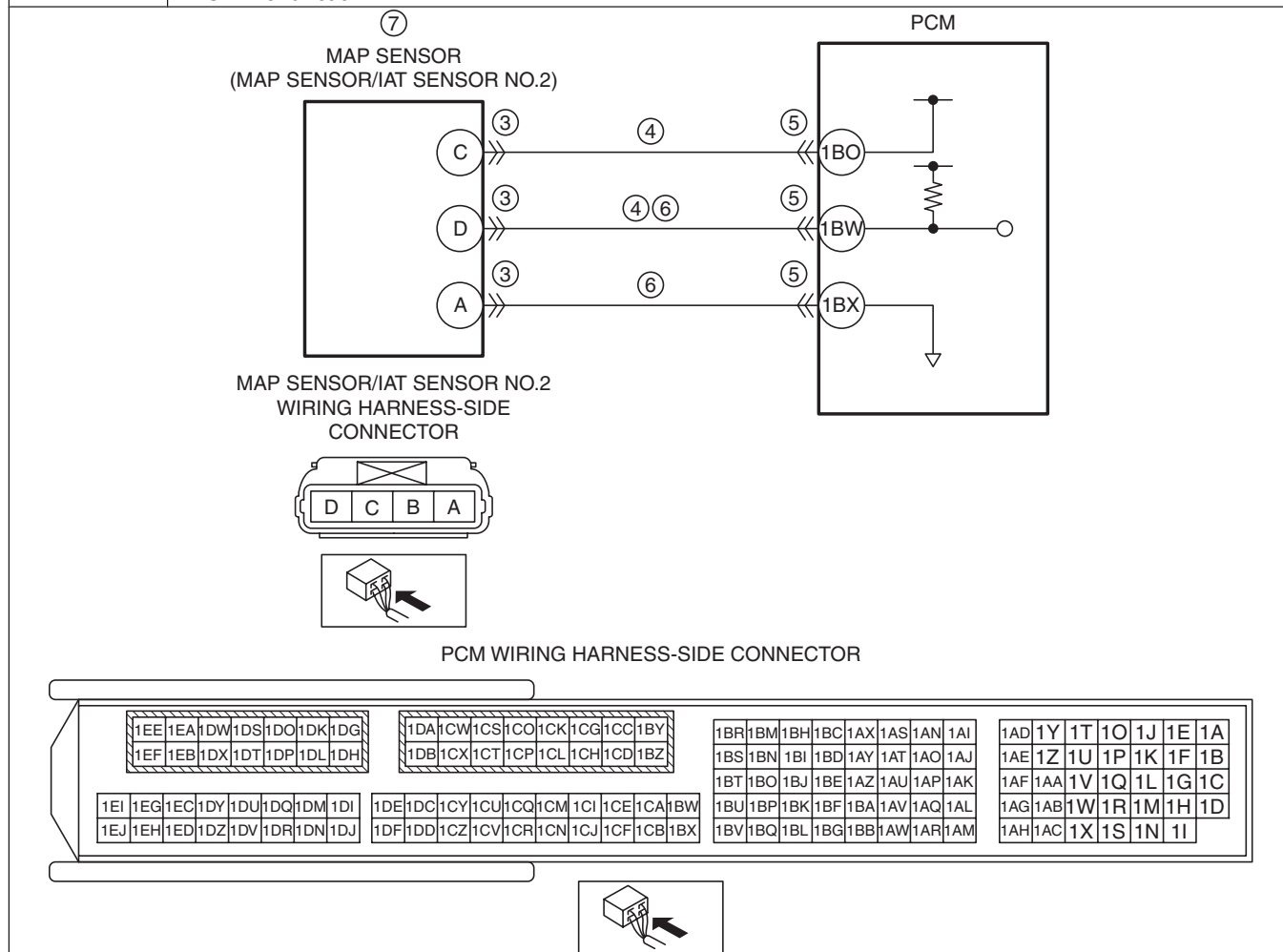


DTC P0107:00	MAP sensor circuit low input
DETECTION CONDITION	<ul style="list-style-type: none"> The PCM monitors the input voltage from the MAP sensor. If the input voltage at the PCM terminal 1BW is below 0.08 V for 5 s, the PCM determines that the MAP sensor circuit has a malfunction. <p>Diagnostic 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. The DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> Estimates MAP using MAF sensor and engine speed. Restricts the upper limit of the engine speed. Inhibits the evaporative purge control.
POSSIBLE CAUSE	<ul style="list-style-type: none"> MAP sensor/IAT sensor No.2 connector or terminals malfunction Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> MAP sensor/IAT sensor No.2 terminal C—PCM terminal 1BO MAP sensor/IAT sensor No.2 terminal D—PCM terminal 1BW PCM connector or terminals malfunction MAP sensor signal circuit and ground circuit are shorted to each other MAP sensor malfunction PCM malfunction

**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 No	Go to the next step. Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.

STEP	INSPECTION		ACTION
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 MAP SENSOR/IAT SENSOR NO.2 CONNECTOR CONDITION <ul style="list-style-type: none"> • Switch the ignition to off. • Disconnect the MAP sensor/IAT sensor No.2 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 8.
		No	Go to the next step.
4	INSPECT MAP SENSOR CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the MAP sensor/IAT sensor No.2 connector is disconnected. • Inspect for continuity between the following terminals (wiring harness-side) and body ground: <ul style="list-style-type: none"> — MAP sensor/IAT sensor No.2 terminal C — MAP sensor/IAT sensor No.2 terminal D • Is there continuity? 	Yes	If the short to ground circuit could be detected in the wiring harness: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected in the wiring harness: • Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].) Go to Step 8.
		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 8.
		No	Go to the next step.
6	INSPECT MAP SENSOR SIGNAL CIRCUIT AND GROUND CIRCUIT FOR SHORT TO EACH OTHER <ul style="list-style-type: none"> • Verify that the MAP sensor/IAT sensor No.2 and PCM connectors are disconnected. • Inspect for continuity between MAP sensor/IAT sensor No.2 terminals D and A (wiring harness-side). • Is there continuity? 	Yes	Repair or replace the wiring harness for a possible short to each other, then go to Step 8.
		No	Go to the next step.
7	INSPECT MAP SENSOR <ul style="list-style-type: none"> • Reconnect all disconnected connectors. • Inspect the MAP sensor. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR INSPECTION [SKYACTIV-G 2.0].) • Is there any malfunction? 	Yes	Replace the MAP sensor/IAT sensor No.2, then go to the next step. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR/INTAKE AIR TEMPERATURE (IAT) SENSOR NO.2 REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)
		No	Go to the next step.
8	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> • 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 and warm it up completely. • 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.
		No	Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) • Are any DTCs present? 	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].)
		No	DTC troubleshooting completed.