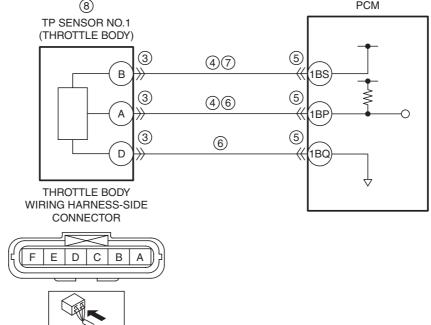
DTC P0122:00	TP sensor No.1 circuit low input
DETECTION CONDITION	<ul> <li>If the PCM detects that the TP sensor No.1 voltage at the PCM terminal 1BP is below 0.1 V, the PCM determines that the TP sensor No.1 circuit has a malfunction.</li> <li>Diagnostic support note</li> <li>This is a continuous monitor (CCM).</li> <li>The check engine light illuminates if the PCM detects the above malfunction condition during the first drive cycle.</li> <li>FREEZE FRAME DATA (Mode 2)/Snapshot data is available.</li> <li>DTC is stored in the PCM memory.</li> </ul>
FAIL-SAFE FUNCTION	Restricts the upper limit of the engine speed.
POSSIBLE CAUSE	Throttle body connector or terminals malfunction Short to ground in wiring harness between the following terminals:  Throttle body terminal B—PCM terminal 1BS  Throttle body terminal A—PCM terminal 1BP PCM connector or terminals malfunction TP sensor No.1 signal circuit and ground circuit are shorted to each other Open circuit in wiring harness between throttle body terminal B and PCM terminal 1BS TP sensor No.1 malfunction PCM malfunction
	(8) PCM



## PCM WIRING HARNESS-SIDE CONNECTOR

	<u> </u>	
/	1EE 1EA DWIDS 1DO 1DK 1DG 1DA CWICS 1CO 1CK 1CG 1CC 1BY 1EF 1EB 1DX 1DT 1DP 1DL 1DH 1DB 1CX 1CT 1CP 1CL 1CH 1CD 1BZ	1BR   1BM   1BH   1BC   1AX   1AS   1AN   1AI     1AD   1Y   1T   1O   1J   1E   1A   1BS   1BN   1BI   1BD   1AY   1AT   1AO   1AJ   1AE   1Z   1U   1P   1K   1F   1B
	Tel heghech by hour body and h	1BT 1BO 1BJ 1BE 1AZ 1AU 1AP 1AK 1AF 1AA 1V 1Q 1L 1G 1C 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 1AC 1X 1S 1N 1I
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**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)/		on the repair order, then go to the next step.
	snapshot data been recorded?		

STEP	INSPECTION		ACTION
2	VERIFY RELATED SERVICE INFORMATION	Yes	Perform repair or diagnosis according to the available
	AVAILABILITY	100	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 THROTTLE BODY CONNECTOR	Yes	Repair or replace the connector and/or terminals, then go to
	CONDITION		Step 9.
	Switch the ignition off.	No	Go to the next step.
	Disconnect the throttle body connector.		·
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	Is there any malfunction?		
4	INSPECT TP SENSOR NO.1 CIRCUIT FOR	Yes	If the short to ground circuit could be detected in the wiring
	SHORT TO GROUND		harness:
	Verify that the throttle body connector is		• Repair or replace the wiring harness for a possible short to
	disconnected.		ground.
	<ul> <li>Inspect for continuity between the following terminals (wiring harness-side) and body ground:</li> </ul>		If the short to ground circuit could not be detected in the
	Throttle body terminal B		wiring harness:  • Replace the PCM (short to ground in the PCM internal
	Throttle body terminal A		circuit).
	Is there continuity?		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0,
	io arono continuity.		SKYACTIV-G 2.5].)
			Go to Step 9.
		No	Go to the next step.
5	INSPECT PCM CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to
	Disconnect the PCM connector.		Step 9.
	Inspect for poor connection (such as damaged/      Inspect for poor connection)	No	Go to the next step.
	pulled-out pins, corrosion).  • Is there any malfunction?		
6	INSPECT TP SENSOR NO.1 SIGNAL CIRCUIT	Yes	Repair or replace the wiring harness for a possible short to
0	AND GROUND CIRCUIT FOR SHORT TO EACH	165	each other, then go to Step 9.
	OTHER	No	Go to the next step.
	Verify that the throttle body and PCM connectors	110	Go to the next step.
	are disconnected.		
	Inspect for continuity between throttle body		
	terminals A and D (wiring harness-side).		
	Is there continuity?		
7	INSPECT TP SENSOR NO.1 POWER SUPPLY	Yes	Go to the next step.
	CIRCUIT FOR OPEN CIRCUIT	No	Repair or replace the wiring harness for a possible open
	Verify that the throttle body and PCM connectors		circuit, then go to Step 9.
	are disconnected.		
	Inspect for continuity between throttle body terminal B (wiring harness-side) and PCM		
	terminal 1BS (wiring harness-side).		
	• Is there continuity?		
8	INSPECT TP SENSOR NO.1	Yes	Replace the throttle body, then go to the next step.
	Reconnect all disconnected connectors.		(See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION
	Inspect the TP sensor No.1.		[SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
	(See THROTTLE POSITION (TP) SENSOR	No	Go to the next step.
	INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G		
	2.5].)		
	Is there any malfunction?		
9	VERIFY DTC TROUBLESHOOTING	Yes	Repeat the inspection from Step 1.
	COMPLETED		• If the malfunction recurs, replace the PCM.
	Always reconnect all disconnected connectors.     Clear the DTC from the DCM memory using the		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0,
	<ul> <li>Clear the DTC from the PCM memory using the M-MDS.</li> </ul>		SKYACTIV-G 2.5].) Go to the next step.
	(See AFTER REPAIR PROCEDURE	No	Go to the next step.
	[SKYACTIV-G 2.0, SKYACTIV-G 2.5].)	INU	Outo the heat step.
	• 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?		
			!

STEP	INSPECTION		ACTION
10	VERIFY AFTER REPAIR PROCEDURE	Yes	Go to the applicable DTC inspection.
	Perform the "AFTER REPAIR PROCEDURE".		(See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
	(See AFTER REPAIR PROCEDURE	No	DTC troubleshooting completed.
	[SKYACTIV-G 2.0, SKYACTIV-G 2.5].)		
	Are any DTCs present?		