DTC P0555:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

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DTC P0555:00	Power brake unit vacuum sensor circuit problem				
DETECTION CONDITION	• The PCM monitors the power brake unit vacuum sensor signal voltage while the ignition switch is ON. If the PCM detects the power brake unit vacuum sensor voltage is below 0.15 V or above 4.8 V for 5 s , the PCM determines that the power brake unit vacuum sensor circuit has problem.				
FAIL-SAFE FUNCTION	• Flashes the i-stop warning light (amber) and inhibits engine-stop by operating the i-stop function.				
POSSIBLE CAUSE	 Power brake unit vacuum sensor connector or terminals malfunction Short to ground in wiring harness between the following terminals: — Power brake unit vacuum sensor terminal C—PCM terminal 2BG — Power brake unit vacuum sensor terminal B—PCM terminal 2Q PCM connector or terminals malfunction Short to power supply in wiring harness between power brake unit vacuum sensor terminal B and PCM terminal 2Q Power brake unit vacuum sensor circuits are shorted to each other Open circuit in wiring harness between the following terminals: — Power brake unit vacuum sensor terminal C—PCM terminal 2BG — Power brake unit vacuum sensor terminal B—PCM terminal 2Q — Power brake unit vacuum sensor terminal A—PCM terminal 2AH Power brake unit vacuum sensor malfunction PCM malfunction 				
	PCM				
POWER E	BRAKE UNIT VACUUM SENSOR				
	(C) (3) (4) (7) (8) (5) (2) (2) (8) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1				
	PCM WIRING HARNESS-SIDE CONNECTOR PCM WIRING HARNESS-SIDE CONNECTOR 2BE 2AZ 2AU 2AP 2AK 2BF 2BA 2AV 2AQ 2AL 2BG 2BB 2AW 2AR 2AM 2BH 2BC 2AX 2AS 2AN 2BD 2AY 2AT 2AO 2AI 2AG 2AC 2Y 2U 2Q 2M 2I 2E 2A 2AJ 2AH 2AD 2Z 2V 2R 2N 2J 2F 2B				

Diagnostic Procedure

Diagnostio i roccatic					
STEP	INSPECTION		ACTION		
1	VERIFY RELATED SERVICE INFORMATION	Yes	Perform repair or diagnosis according to the available		
	AVAILABILITY		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.		

STEP	INSPECTION		ACTION
2	VERIFY RELATED PENDING CODE AND/OR	Yes	Go to the applicable PENDING CODE or DTC inspection.
_	DTC		(See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
	Switch the ignition off, then ON (engine off).	No	Go to the next step.
	Perform the Pending Trouble Code Access		
	Procedure and DTC Reading Procedure.		
	(See ON-BOARD DIAGNOSTIC TEST		
	[SKYACTIV-G 2.0, SKYACTIV-G 2.5].)		
	Are any other PENDING CODEs and/or DTCs		
	present?		
3	INSPECT POWER BRAKE UNIT VACUUM	Yes	Repair or replace the connector and/or terminals, then go to
	SENSOR CONNECTOR CONDITION		Step 10.
	Switch the ignition off.	No	Go to the next step.
	Disconnect the power brake unit vacuum sensor		'
	connector.		
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	• Is there any malfunction?		
4	INSPECT POWER BRAKE UNIT VACUUM	Yes	If the short to ground circuit could be detected in the wiring
	SENSOR CIRCUIT FOR SHORT TO GROUND		harness:
	Verify that the power brake unit vacuum sensor		• Repair or replace the wiring harness for a possible short to
	connector is 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:
	 Power brake unit vacuum sensor terminal C 		Replace the PCM (short to ground in the PCM internal
	 Power brake unit vacuum sensor terminal B 		circuit).
	Is there continuity?		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0,
			SKYACTIV-G 2.5].)
			Go to Step 10.
		No	Go to the next step.
5	INSPECT PCM CONNECTOR CONDITION • Disconnect the PCM connector.	Yes	Repair or replace the connector and/or terminals, then go to Step 10.
	Inspect for poor connection (such as damaged/	No	Go to the next step.
	pulled-out pins, corrosion).		- Co to the mark otap.
	• Is there any malfunction?		
6	INSPECT POWER BRAKE UNIT VACUUM	Yes	Go to the next step.
	SENSOR SIGNAL CIRCUIT FOR SHORT TO	No	Repair or replace the wiring harness for a possible short to
	POWER SUPPLY		power supply, then go to Step 10.
	Verify that the power brake unit vacuum sensor		
	and PCM connectors are disconnected.		
	Switch the ignition ON (engine off).		
	Measure the voltage at the power brake unit		
	vacuum sensor terminal B (wiring harness-side).		
	• Is the voltage 0 V ?		
7	INSPECT POWER BRAKE UNIT VACUUM	Yes	Repair or replace the wiring harness for a possible short to
	SENSOR CIRCUITS FOR SHORT TO EACH		each other, then go to Step 10.
	OTHER	No	Go to the next step.
	Verify that the power brake unit vacuum sensor		
	and PCM connectors are disconnected.		
	Switch the ignition off.		
	Inspect for continuity between power brake unit		
	vacuum sensor terminals C, B and A (wiring		
	harness-side).		
	Is there continuity?		

STEP	INSPECTION		ACTION
8	INSPECT POWER BRAKE UNIT VACUUM	Yes	Go to the next step.
	SENSOR CIRCUIT FOR OPEN CIRCUIT Verify that the power brake unit vacuum sensor and PCM connectors are disconnected. Inspect for continuity between the following terminals (wiring harness-side): Power brake unit vacuum sensor terminal C PCM terminal 2BG Power brake unit vacuum sensor terminal B PCM terminal 2Q Power brake unit vacuum sensor terminal A PCM terminal 2AH Is there continuity?	No	Repair or replace the wiring harness for a possible open circuit, then go to Step 10.
9	INSPECT POWER BRAKE UNIT VACUUM SENSOR Inspect the power brake unit vacuum sensor. (See POWER BRAKE UNIT VACUUM SENSOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Is there any malfunction?	Yes	Replace the power brake unit vacuum sensor, then go to the next step. (See POWER BRAKE UNIT VACUUM SENSOR REMOVAL/INSTALLATION.) Go to the next step.
10	VERIFY DTC TROUBLESHOOTING COMPLETED • 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].) • Perform the 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. Go to the next step.
11	VERIFY AFTER REPAIR PROCEDURE • Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Are any DTCs present?	Yes No	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) DTC troubleshooting completed.