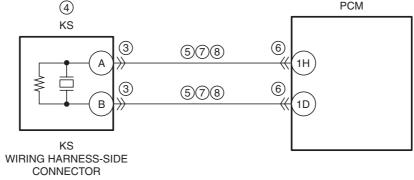
DTC P0327:00 [SKYACTIV-G 2.0]

id0102h1703000

DTC P0327:00	KS circuit low input				
	• The PCM monitors input signal from the KS when the engine is running. If the input voltage is below 1.1 V for 5 s , the PCM determines that the KS circuit has a malfunction.				
DETECTION CONDITION	 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. 				
FAIL-SAFE FUNCTION	• Sets the knocking spark retard correction value of the ignition control to the fixed value				
POSSIBLE CAUSE	KS connector or terminals malfunction KS malfunction Short to ground in wiring harness between the following terminals: KS terminal A—PCM terminal 1H KS terminal B—PCM terminal 1D PCM connector or terminals malfunction KS circuits are shorted to each other Open circuit in wiring harness between the following terminals: KS terminal A—PCM terminal 1H KS terminal B—PCM terminal 1D PCM malfunction				
	4 PCM				





PCM WIRING HARNESS-SIDE CONNECTOR

	<u> </u>
	01CK1CG1CC1BY
	1BT 1BO 1BJ 1BE 1AZ 1AU 1AP 1AK 1AF 1AA 1V 1Q 1L 1G 1C
\	Q1CM 1CI 1CE 1CA 1BW 1BU 1BP 1BK 1BF 1BA 1AV 1AQ 1AL 1AG 1AB 1W 1R 1M 1H 1D R1CN 1CJ 1CF 1CB 1BX 1BV 1BQ 1BL 1BG 1BB 1AW 1AR 1AM 1AG 1AB 1W 1R 1M 1H 1D
	7

Diagnostic Procedure

ST	ΓĒΡ	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		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 KS CONNECTOR CONDITION	Yes	Repair or replace the connector and/or terminals, then go to
	Switch the ignition to off.		Step 9.
	Disconnect the KS connector.	No	Go to the next step.
	Inspect for poor connection (such as damaged/		'
	pulled-out pins, corrosion).		
	Is there any malfunction?		
4	INSPECT KS	Yes	Replace the KS, then go to Step 9.
	Inspect the KS.		(See KNOCK SENSOR (KS) REMOVAL/INSTALLATION
	(See KNOCK SENSOR (KS) INSPECTION		[SKYACTIV-G 2.0].)
	[SKYACTIV-G 2.0].)	No	Go to the next step.
	Is there any malfunction?		
5	INSPECT KS CIRCUIT FOR SHORT TO GROUND	Yes	If the short to ground circuit could be detected in the wiring
	Verify that the KS connector is disconnected.		harness:
	Inspect for continuity between the following		• Repair or replace the wiring harness for a possible short to
	terminals (wiring harness-side) and body ground:		ground.
	KS terminal A		If the short to ground circuit could not be detected in the
	— KS terminal B		wiring harness:
	Is there continuity?		Replace the PCM (short to ground in the PCM internal circuit).
			(See PCM REMOVAL/INSTALLATION [SKYACTIV-G
			2.0].)
			Go to Step 9.
		No	Go to the next step.
6	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/	No	Go to the next step.
	pulled-out pins, corrosion).		·
	Is there any malfunction?		
7	INSPECT KS CIRCUITS FOR SHORT TO EACH	Yes	Repair or replace the wiring harness for a possible short to
	OTHER		each other, then go to Step 9.
	Verify that the KS and PCM connectors are	No	Go to the next step.
	disconnected.		
	Inspect for continuity between KS terminals A and (viring barness side)		
	B (wiring harness-side). • Is there continuity?		
8	INSPECT KS CIRCUIT FOR OPEN CIRCUIT	Yes	Go to the next step.
	Verify that the KS and PCM connectors are	No	Repair or replace the wiring harness for a possible open
	disconnected.	. 10	circuit, then go to the next step.
	Inspect for continuity between the following		,
	terminals (wiring harness-side):		
	KS terminal A—PCM terminal 1H		
	 KS terminal B—PCM terminal 1D 		
	Is there continuity?		
9	VERIFY DTC TROUBLESHOOTING	Yes	Repeat the inspection from Step 1.
	COMPLETED		• If the malfunction recurs, replace the PCM.
	Make sure to reconnect all disconnected		(See PCM REMOVAL/INSTALLATION [SKYACTIV-G
	connectors.		2.0].)
	Clear the DTC from the PCM memory using the	NJ-	Go to the next step.
	M-MDS.	No	Go to the next step.
	(See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].)		
	• Start the engine.		
	Perform the KOEO or KOER self test.		
	(See KOEO/KOER SELF TEST [SKYACTIV-G		
	2.0].)		
	• Is the same DTC present?		
	p		1

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].)
	(See AFTER REPAIR PROCEDURE	No	DTC troubleshooting completed.
	[SKYACTIV-G 2.0].)		
	Are any DTCs present?		