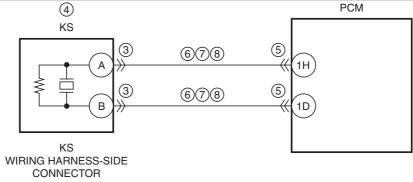
DTC P0328:00 [SKYACTIV-G 2.0]

id0102h1703100

DTC P0328:00	KS circuit high input			
DETECTION CONDITION	 The PCM monitors the input signal from the KS when the engine is running. If the input voltage is above 2.4 V for 5 s, the PCM determines that the KS circuit has a malfunction. Diagnostic support note 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	• Sets the knocking spark retard correction value of the ignition control to the tixed value			
POSSIBLE CAUSE	KS connector or terminals malfunction KS malfunction PCM connector or terminals malfunction Short to power supply in wiring harness between the following terminals: KS terminal A—PCM terminal 1H KS terminal B—PCM terminal 1D 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

1EE 1EA DW1DS1DO 1DK1DG 1DA1CW1CS1C	1CL 1CH 1CD 1BZ 1BS 1BN 1BI 1BD 1AY 1AT 1AO 1AJ	1AD 1Y 1T 10 1J 1E 1A 1AE 1Z 1U 1P 1K 1F 1B 1AF 1AA 1V 1Q 1L 1G 1C
	1CM 1CI 1CE 1CA1BW 1BU 1BP 1BK 1BF 1BA 1AV 1AQ 1AL	1AF 1AA 1V 1Q 1L 1G 1C 1AG 1AB 1W 1R 1M 1H 1D 1AH 1AC 1X 1S 1N 1I

Diagnostic Procedure

STEF	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 pine correction)		
	pulled-out pins, corrosion). • Is there any malfunction?		
4	INSPECT KS	Yes	Replace the KS, then go to Step 9.
-	• Inspect the KS.	103	(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 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?		
6	INSPECT KS CIRCUIT FOR SHORT TO POWER SUPPLY	Yes	Go to the next step.
	Verify that the KS and PCM connectors are	No	Repair or replace the wiring harness for a possible short to power supply, then go to Step 9.
	disconnected.		power supply, then go to step 9.
	Switch the ignition ON (engine off or on).		
	Measure the voltage at the following terminals		
	(wiring harness-side):		
	KS terminal A		
	KS terminal B		
	• Is the voltage 0 V ?		
7	INSPECT KS CIRCUITS FOR SHORT TO EACH OTHER	Yes	Repair or replace the wiring harness for a possible short to
	Verify that the KS and PCM connectors are	No	each other, then go to Step 9. Go to the next step.
	disconnected.	INO	Go to the next step.
	Switch the ignition to off.		
	• Inspect for continuity between KS terminals A and		
	B (wiring harness-side).		
	Is there continuity?		
8	INSPECT KS CIRCUIT FOR OPEN CIRCUIT	Yes	·
	Verify that the KS and PCM connectors are	No	Repair or replace the wiring harness for a possible open
	disconnected.		circuit, then go to the next step.
	Inspect for continuity between the following terminals (wiring barrage side):		
	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		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?		
			ı

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?		