## DTC P0703:00 [SKYACTIV-G 2.0]

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DTC P0703:00	Brake switch input circuit problem				
DETECTION CONDITION	The PCM monitors the input signal from the brake switch No.1. If the input signal does not change while following decelerating 8 times, the PCM determines that there is a brake switch No.1 input circuit problem.  MONITORING CONDITIONS  Vehicle speed: from above 30 km/h {19 mph} to 30 km/h {19 mph} or less  Deceleration rate: exceeds 2.4 km/h {1.5 mph} per sec  Diagnostic support note				
FAIL-SAFE FUNCTION	_				
POSSIBLE	<ul> <li>Caution</li> <li>Inspect the brake switch with it installed to the brake pedal, otherwise the brake switch may not operate normally. If the brake switch is removed from the brake pedal, replace the brake switch with a new one.</li> <li>Brake switch connector or terminals malfunction</li> <li>Short to ground or open circuit in brake switch No.1 power supply circuit</li> <li>Short to ground in wiring harness between MAIN 200 A fuse and brake switch terminal A</li> <li>MAIN 200 A fuse and/or STOP 10 A fuse malfunction</li> <li>Open circuit in wiring harness between battery positive terminal and brake switch terminal A</li> <li>Short to ground in wiring harness between brake switch terminal D and PCM terminal 2G</li> <li>PCM connector or terminals malfunction</li> <li>Short to power supply in wiring harness between brake switch terminal D and PCM terminal 2G</li> <li>Open circuit in wiring harness between brake switch terminal D and PCM terminal 2G</li> <li>Brake switch No.1 malfunction</li> <li>PCM malfunction</li> </ul>				
BATTERY  BRAKE SWITCH NO.1  (BRAKE SWITCH)  (BRAKE SWITCH)					
WII	BRAKE SWITCH RING HARNESS-SIDE CONNECTOR  2BE 2AZ 2AU 2AP 2AK 2BF 2BA 2AV 2AQ 2AL 2BG 2BB 2AW 2AQ 2AL 2BG 2BB 2AW 2AR 2AM 2BD 2AY 2AT 2AO 2AI 2AG 2AC 2Y 2U 2Q 2M 2I 2E 2A 2BD 2AY 2AT 2AO 2AJ 2AH 2AD 2Z 2V 2R 2N 2J 2F 2B				

**Diagnostic Procedure** 

Diagnostio i roccaire					
STEP	EP 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 BRAKE SWITCH CONNECTOR	Yes	Repair or replace the connector and/or terminals, then go to
	CONDITION		Step 9.
	Switch the ignition to off.	No	Go to the next step.
	Disconnect the brake switch connector.	110	do to the flext step.
	Inspect for poor connection (such as damaged/		
	pulled-out pins, corrosion).		
	• Is there any malfunction?		
4	INSPECT BRAKE SWITCH NO.1 POWER	Yes	Go to the next step.
7	SUPPLY CIRCUIT FOR SHORT TO GROUND OR	No	Inspect the MAIN 200 A fuse and STOP 10 A fuse.
	OPEN CIRCUIT	110	• If the fuse is blown:
	Verify that the brake switch connector is		Repair or replace the wiring harness for a possible
	disconnected.		short to ground.
	Measure the voltage at the brake switch terminal		Replace the malfunctioning fuse.
	A (wiring harness-side).		If the fuse is deteriorated:
	• Is the voltage <b>B+</b> ?		Replace the malfunctioning fuse.
	' is the voltage b' !		Replace the mailurictioning luse.  If all fuses are normal:
			Repair or replace the wiring harness for a possible
			open circuit.
			Go to Step 9.
5	INSPECT BRAKE SWITCH NO.1 SIGNAL	Yes	If the short to ground circuit could be detected in the wiring
5	CIRCUIT FOR SHORT TO GROUND	165	harness:
	Verify that the brake switch connector is disconnected.		Repair or replace the wiring harness for a possible short to ground.
	Inspect for continuity between brake switch		If the short to ground circuit could not be detected in the
	terminal D (wiring harness-side) and body ground.		
	• Is there continuity?		wiring harness:
	s 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.	103	Step 9.
	Inspect for poor connection (such as damaged/	No	Go to the next step.
	pulled-out pins, corrosion).	110	Ob to the flext step.
	• Is there any malfunction?		
7	INSPECT BRAKE SWITCH NO.1 SIGNAL	Yes	Go to the next step.
'	CIRCUIT FOR SHORT TO POWER SUPPLY	No	Repair or replace the wiring harness for a possible short to
	Verify that the brake switch and PCM connectors	''	power supply, then go to Step 9.
	are disconnected.		
	Switch the ignition ON (engine off or on).		
	Measure the voltage at the brake switch terminal		
	D (wiring harness-side).		
	• Is the voltage <b>0 V</b> ?		
8	INSPECT BRAKE SWITCH NO.1 SIGNAL	Yes	Replace the brake switch, then go to the next step.
	CIRCUIT FOR OPEN CIRCUIT		(See BRAKE PEDAL REMOVAL/INSTALLATION [R.H.D.].)
	Verify that the brake switch and PCM connectors		(See BRAKE PEDAL REMOVAL/INSTALLATION [L.H.D.].)
	are disconnected.	No	Repair or replace the wiring harness for a possible open
	Switch the ignition to off.	-	circuit, then go to the next step.
	Inspect for continuity between brake switch		
	terminal D (wiring harness-side) and PCM		
	terminal 2G (wiring harness-side).		
	• Is there continuity?		
			ı

STEP	INSPECTION		ACTION		
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].)				
	Drive the vehicle.				
	Repeat deceleration 8 times under both of the				
	following conditions:				
	<ul><li>Vehicle speed: from above 30 km/h {19</li></ul>				
	mph} to 30 km/h {19 mph} or less				
	<ul> <li>Deceleration rate: exceeds 2.4 km/h {1.5</li> </ul>				
	mph} per sec				
	Perform the Pending Trouble Code Access				
	Procedure.				
	(See ON-BOARD DIAGNOSTIC TEST				
	[SKYACTIV-G 2.0].)				
	• Is the PENDING CODE for this DTC present?				
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?				