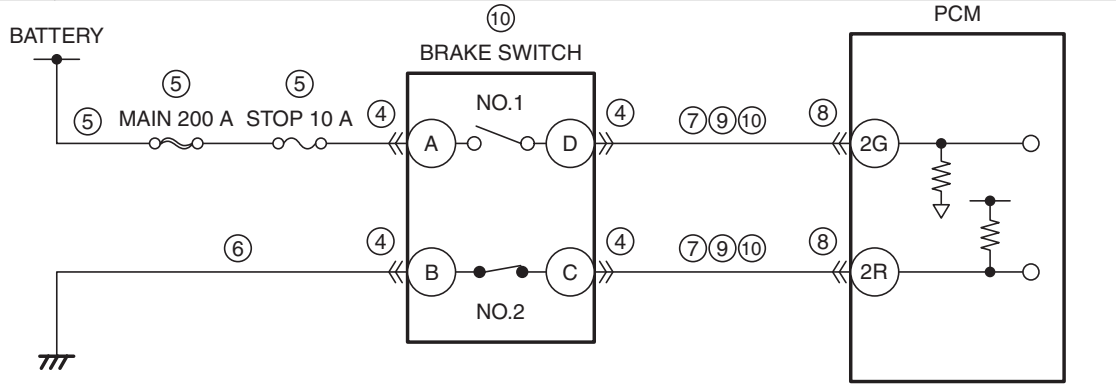
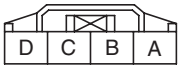
DTC P0571:00 [SKYACTIV-G 2.0]

id0102h1705500

DTC P0571:00	Brake switch circuit problem
DETECTION CONDITION	• The PCM monitors switching in conjunction with brake switches No.1 and No.2. If either No.1 or No.2 do not switch for a continuous five times even though either No.1 or No.2 is switched from off to on or from on to off, P0571:00 is detected. **Diagnostic support note** • This is a continuous monitor (other). • 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 not available. • The DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	—
POSSIBLE CAUSE	**Caution** **• 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.** • Brake switch connector or terminals malfunction • Short to ground or open circuit in brake switch No.1 power supply circuit — Short to ground in wiring harness between MAIN 200 A fuse and brake switch terminal A — MAIN 200 A fuse and/or STOP 10 A fuse malfunction — Open circuit in wiring harness between battery positive terminal and brake switch terminal A • Open circuit in wiring harness between brake switch terminal B and body ground • Short to ground in wiring harness between the following terminals: — Brake switch terminal D—PCM terminal 2G — Brake switch terminal C—PCM terminal 2R • PCM connector or terminals malfunction • Short to power supply in wiring harness between the following terminals: — Brake switch terminal D—PCM terminal 2G — Brake switch terminal C—PCM terminal 2R • Open circuit in wiring harness between the following terminals: — Brake switch terminal D—PCM terminal 2G — Brake switch terminal C—PCM terminal 2R • Brake switch malfunction • PCM malfunction



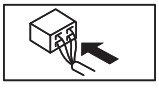
BRAKE SWITCH WIRING HARNESS-SIDE CONNECTOR

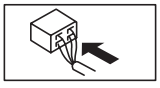


PCM WIRING HARNESS-SIDE CONNECTOR

2BE	2AZ	2AU	2AP	2AK
2BF	2BA	2AV	2AQ	2AL
2BG	2BB	2AW	2AR	2AM
2BH	2BC	2AX	2AS	2AN
	2BD	2AY	2AT	2AO

2AE	2AA	2W	2S	2O	2K	2G	2C		
2AF	2AB	2X	2T	2P	2L	2H	2D		
2AI	2AG	2AC	2Y	2U	2Q	2M	2I	2E	2A
2AJ	2AH	2AD	2Z	2V	2R	2N	2J	2F	2B





Diagnostic Procedure

STEP	INSPECTION		ACTION
1	**VERIFY FREEZE FRAME DATA (MODE 2)/SNAPSHOT DATA HAS BEEN RECORDED** • Has the FREEZE FRAME DATA (Mode 2)/snapshot data been recorded?	Yes	Go to the next step.
		No	Record the FREEZE FRAME DATA (Mode 2)/ snapshot data on the repair order, then go to the next step.
2	**VERIFY RELATED SERVICE INFORMATION AVAILABILITY** • Verify related Service Information availability. • Is any related Service Information available?	Yes	Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	**VERIFY RELATED PENDING CODE AND/OR DTC** • Switch the ignition to off, then to ON (engine off). • Perform the Pending Trouble Code Access Procedure and DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0].) • Is the PENDING CODE/DTC P0703:00 also present?	Yes	Go to the applicable PENDING CODE or DTC inspection. (See DTC P0703:00 [SKYACTIV-G 2.0].)
		No	Go to the next step.
4	**INSPECT BRAKE SWITCH CONNECTOR CONDITION** • Switch the ignition to off. • Disconnect the brake switch connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 11.
		No	Go to the next step.
5	**INSPECT BRAKE SWITCH NO.1 POWER SUPPLY CIRCUIT FOR SHORT TO GROUND OR OPEN CIRCUIT** • Verify that the brake switch connector is disconnected. • Measure the voltage at the brake switch terminal A (wiring harness-side). • Is the voltage **B+**?	Yes	Go to the next step.
		No	Inspect the MAIN 200 A fuse and STOP 10 A fuse. • If the fuse is blown: — Repair or replace the wiring harness for a possible short to ground. — Replace the malfunctioning fuse. • If the fuse is deteriorated: — Replace the malfunctioning fuse. • If all fuses are normal: — Repair or replace the wiring harness for a possible open circuit. Go to Step 11.
6	**INSPECT BRAKE SWITCH NO.2 GROUND CIRCUIT FOR OPEN CIRCUIT** • Verify that the brake switch connector is disconnected. • Inspect for continuity between brake switch terminal B (wiring harness-side) and body ground. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 11.
7	**INSPECT BRAKE SWITCH CIRCUIT FOR SHORT TO GROUND** • Verify that the brake switch connector is disconnected. • Inspect for continuity between the following terminals (wiring harness-side) and body ground: — Brake switch terminal D — Brake switch terminal C • Is there continuity?	Yes	If the short to ground circuit could be detected in the wiring harness: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected in the wiring harness: • Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0].) Go to Step 11.
		No	Go to the next step.
8	**INSPECT PCM CONNECTOR CONDITION** • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 11.
		No	Go to the next step.

STEP	INSPECTION		ACTION
9	**INSPECT BRAKE SWITCH CIRCUIT FOR SHORT TO POWER SUPPLY** • Verify that the brake switch and PCM connectors are disconnected. • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (wiring harness-side): — Brake switch terminal D — Brake switch terminal C • Is the voltage **0 V**?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible short to power supply, then go to Step 11.
10	**INSPECT BRAKE SWITCH CIRCUIT FOR OPEN CIRCUIT** • Verify that the brake switch and PCM connectors are disconnected. • Switch the ignition to off. • Inspect for continuity between the following terminals (wiring harness-side): — Brake switch terminal D—PCM terminal 2G — Brake switch terminal C—PCM terminal 2R • Is there continuity?	Yes	Replace the brake switch, then go to the next step. (See BRAKE PEDAL REMOVAL/INSTALLATION [R.H.D.].) (See BRAKE PEDAL REMOVAL/INSTALLATION [L.H.D.].)
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
11	**VERIFY DTC TROUBLESHOOTING COMPLETED** • Make sure to reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) • Switch the ignition ON (engine off or on). • Depress the brake pedal for **15 s** and release **more than 5 times**. • Perform the DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0].) • 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].) Go to the next step.
		No	Go to the next step.
12	**VERIFY AFTER REPAIR PROCEDURE** • Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0].)
		No	DTC troubleshooting completed.