

# DTC B1127:11/B1127:12/B1127:13/B1127:19/B1127:1A

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<b>System malfunction location</b>	<ul style="list-style-type: none"> <li>B1127:11: Passenger-side side air bag module circuit short to body ground</li> <li>B1127:12: Passenger-side side air bag module circuit short to power supply</li> <li>B1127:13: Passenger-side side air bag module circuit open circuit or resistance high</li> <li>B1127:19: Short circuit to passenger-side side air bag module and other air bag module circuits</li> <li>B1127:1A: Passenger-side side air bag module circuit resistance low</li> </ul>
<b>Detection condition</b>	<p><b>Warning</b></p> <ul style="list-style-type: none"> <li>Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure.</li> </ul> <ul style="list-style-type: none"> <li>Resistance <b>other than 0.81–9.85 ohms</b> detected in passenger-side side air bag module circuit</li> <li>Wiring harness between the passenger-side side air bag module and SAS control module has a malfunction</li> </ul>
<b>Fail-safe</b>	—
<b>Possible cause</b>	<ul style="list-style-type: none"> <li>Passenger-side side air bag module connector malfunction</li> <li>Short circuit to power supply or body ground in the wiring harness between the passenger-side side air bag module and SAS control module</li> <li>Open circuit in the wiring harness between the passenger-side side air bag module and SAS control module</li> <li>Passenger-side side air bag module malfunction</li> <li>SAS control module malfunction</li> </ul>
<div> <div> <p>SAS CONTROL MODULE</p> <p>PASSENGER-SIDE SIDE AIR BAG MODULE</p> </div> <div> <p>SAS CONTROL MODULE HARNESS-SIDE CONNECTOR</p> </div> <div> <p>PASSENGER-SIDE SIDE AIR BAG MODULE HARNESS-SIDE CONNECTOR</p> </div> </div>	

## Diagnostic Procedure

Step	Inspection	Action	
1	<b>INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE CONNECTOR</b>  <b>Warning</b> <ul style="list-style-type: none"><li>• Handling the component parts improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings/cautions and the workshop manual before handling the air bag system components. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM SERVICE CAUTIONS.)</li></ul> <ul style="list-style-type: none"><li>• Switch the ignition to off.</li><li>• Disconnect the negative battery cable and wait for <b>1 min or more</b>. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li><li>• Disconnect the passenger-side side air bag module connector installed to the lower side of the seat cushion of the front seat. (See FRONT SEAT REMOVAL/INSTALLATION.)</li><li>• Inspect the passenger-side side air bag module connector. (Corrosion, damage, and disconnected pins)</li><li>• Is there any malfunction of the passenger-side side air bag module connector?</li></ul>	Yes	Replace the malfunctioning part, then go to Step 6.
		No	Go to the next step.

Step	Inspection	Action	
2	<b>INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE CIRCUIT FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>Remove the column cover. (See COLUMN COVER REMOVAL/INSTALLATION.)</li> <li>Disconnect the clock spring connector. (See CLOCK SPRING REMOVAL/INSTALLATION.)</li> <li>Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/INSTALLATION.)</li> <li>Disconnect the passenger-side air bag module connector. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)</li> <li>Disconnect the driver-side front seat connector. (See FRONT SEAT REMOVAL/INSTALLATION.)</li> <li>Remove the headliner. (See HEADLINER REMOVAL/INSTALLATION.)</li> <li>Disconnect the driver and passenger-side curtain air bag module connectors. (See CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.)</li> <li>Remove the B-pillar lower trim. (See B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.)</li> <li>Disconnect the driver and passenger-side pretensioner seat belt connectors. (See FRONT SEAT BELT REMOVAL/INSTALLATION.)</li> <li>Remove the rear console. (See REAR CONSOLE REMOVAL/INSTALLATION.)</li> <li>Disconnect the all SAS control module connectors. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)</li> <li>Inspect for continuity between the following terminals (wiring harness-side) and body ground: <ul style="list-style-type: none"> <li>SAS control module terminal 1G</li> <li>SAS control module terminal 1J</li> </ul> </li> </ul> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>Inspect for continuity while shaking the wiring harness between the SAS control module and the passenger-side side air bag module.</li> </ul>	Yes	Replace the wiring harness for a possible short to ground, then go to Step 6.
		No	Go to the next step.
3	<b>INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>Passenger-side side air bag module and SAS control module connectors are disconnected.</li> <li>Inspect for continuity between the following terminals (wiring harness-side): <ul style="list-style-type: none"> <li>Passenger-side side air bag module terminal A—SAS control module terminal 1J</li> <li>Passenger-side side air bag module terminal B—SAS control module terminal 1G</li> </ul> </li> </ul> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>Inspect for continuity while shaking the wiring harness between the SAS control module and passenger-side side air bag module.</li> </ul>	Yes	Go to the next step.
		No	Replace the wiring harness for a possible open circuit, then go to Step 6.
	<ul style="list-style-type: none"> <li>Is there continuity?</li> </ul>		

Step	Inspection	Action
4	<b>INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE CIRCUIT FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Passenger-side side air bag module and SAS control module connectors are disconnected.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off or on).</li> <li>• Measure the voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> <li>— SAS control module terminal 1G</li> <li>— SAS control module terminal 1J</li> </ul> </li> </ul> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• Measure the voltage while shaking the wiring harness between the SAS control module and passenger-side side air bag module.</li> </ul>	Yes Go to the next step.
		No Replace the wiring harness for a possible short to power supply, then go to Step 6.
	• Is the voltage <b>0V</b> ?	

Step	Inspection	Action
5	<b>INSPECT PASSENGER-SIDE SIDE AIR BAG MODULE</b> <ul style="list-style-type: none"> <li>• Switch the ignition to off.</li> <li>• Disconnect the negative battery cable and wait for <b>1 min or more</b>. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Connect the SAS control module connectors.</li> <li>• Except for the passenger-side side air bag module connector, reconnect all disconnected connectors.</li> <li>• Connect the <b>SST (Fuel and thermometer checker)</b> or apply <b>2 ohms</b> resistance to the passenger-side side air bag module connector terminals A and B.</li> <li>• Set the <b>SST (Fuel and thermometer checker)</b> to <b>2 ohms</b>.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off or on).</li> <li>• Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.)</li> <li>• Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.)</li> <li>• Are the same DTCs present?</li> </ul>	Yes Go to the next step.
		No Replace the passenger-side side air bag module. (See SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) Then go to the next step.

Step	Inspection	Action	
6	<b>PERFORM SAS CONTROL MODULE DTC INSPECTION</b> <ul style="list-style-type: none"><li>• Switch the ignition to off.</li><li>• Disconnect the negative battery cable and wait for <b>1 min or more</b>. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li><li>• Disconnect the <b>SST (Fuel and thermometer checker)</b> or the <b>2 ohms</b> resistance.</li><li>• Connect the passenger-side side air bag module connector.</li><li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li><li>• Switch the ignition ON (engine off or on).</li><li>• Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.)</li><li>• Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.)</li><li>• Are the same DTCs present?</li></ul>	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.