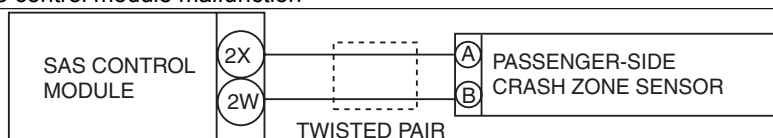


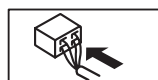
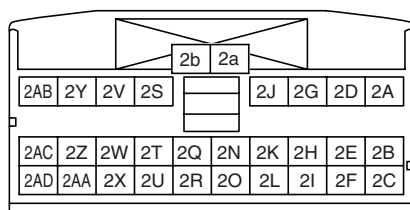
DTC B1417:11/B1417:13/B1417:87/B1417:96

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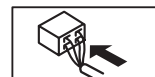
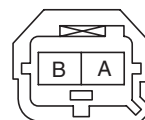
System malfunction location	<ul style="list-style-type: none"> • B1417:11: Passenger-side crash zone sensor circuit short to body ground • B1417:13: Passenger-side crash zone sensor circuit open circuit or short to power supply • B1417:87: Signal reception error from passenger-side crash zone sensor • B1417:96: Passenger-side crash zone sensor internal malfunction
Detection condition	<p>Warning</p> <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • Wiring harness between the passenger-side crash zone sensor and SAS control module has a malfunction • Passenger-side crash zone sensor has a malfunction
Fail-safe	—
Possible cause	<ul style="list-style-type: none"> • Passenger-side crash zone sensor connector malfunction • Short circuit to power supply or body ground in the wiring harness between the passenger-side crash zone sensor and SAS control module • Open circuit in the wiring harness between the passenger-side crash zone sensor and SAS control module • Passenger-side crash zone sensor malfunction • SAS control module malfunction



SAS CONTROL MODULE WIRING HARNESS-SIDE CONNECTOR



PASSENGER-SIDE CRASH ZONE SENSOR WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection	Action	
1	INSPECT PASSENGER-SIDE CRASH ZONE SENSOR CONNECTOR Warning <ul style="list-style-type: none"> 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.) <ul style="list-style-type: none"> Switch the ignition to off. Disconnect the negative battery cable and wait for 1 min or more. (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].) Remove the front bumper. (See FRONT BUMPER REMOVAL/INSTALLATION.) Disconnect the passenger-side crash zone sensor connector. (See CRASH ZONE SENSOR REMOVAL/INSTALLATION.) Inspect the passenger-side crash zone sensor connector. (Corrosion, damage, and disconnected pins) Is there any malfunction of the passenger-side crash zone sensor connector? 	Yes	Replace the malfunctioning part, then go to Step 5.
		No	Go to the next step.

Step	Inspection	Action	
2	INSPECT PASSENGER-SIDE CRASH ZONE SENSOR CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none">Remove the column cover. (See COLUMN COVER REMOVAL/INSTALLATION.)Disconnect the clock spring connector. (See CLOCK SPRING REMOVAL/INSTALLATION.)Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/INSTALLATION.)Disconnect the passenger-side air bag module connector. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.)Disconnect the driver and passenger-side front seat connector. (See FRONT SEAT REMOVAL/INSTALLATION.)Remove the headliner. (See HEADLINER REMOVAL/INSTALLATION.)Disconnect the driver and passenger-side curtain air bag module connector. (See CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.)Remove the B-pillar lower trim. (See B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.)Disconnect the driver and passenger-side pretensioner seat belt connector. (See FRONT SEAT BELT REMOVAL/INSTALLATION.)Remove the rear console. (See REAR CONSOLE REMOVAL/INSTALLATION.)Disconnect the all SAS control module connectors. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)Inspect for continuity between the following terminals (wiring harness-side) and body ground:<ul style="list-style-type: none">SAS control module terminal 2XSAS control module terminal 2W <p>Note</p> <ul style="list-style-type: none">Inspect for continuity while shaking the wiring harness between the SAS control module and passenger-side crash zone sensor. <p>• Is there continuity?</p>	Yes	Replace the wiring harness for a possible short to ground, then go to Step 5.
		No	Go to the next step.
3	INSPECT PASSENGER-SIDE CRASH ZONE SENSOR CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none">Passenger-side crash zone sensor and SAS control module connectors are disconnected.Inspect for continuity between the following terminals (wiring harness-side):<ul style="list-style-type: none">Passenger-side crash zone sensor terminal A—SAS control module terminal 2XPassenger-side crash zone sensor terminal B—SAS control module terminal 2W <p>Note</p> <ul style="list-style-type: none">Inspect for continuity while shaking the wiring harness between the SAS control module and passenger-side crash zone sensor. <p>• Is there continuity?</p>	Yes	Go to the next step.
		No	Replace the wiring harness for a possible open circuit, then go to Step 5.

Step	Inspection	Action
4	INSPECT PASSENGER-SIDE CRASH ZONE SENSOR CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Passenger-side crash zone sensor and SAS control module connectors are disconnected. • 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].) • Switch the ignition ON (engine off or on). • Measure the voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> — SAS control module terminal 2X — SAS control module terminal 2W <p>Note</p> <ul style="list-style-type: none"> • Measure the voltage while shaking the wiring harness between the SAS control module and passenger-side crash zone sensor. 	Yes
		No
	<ul style="list-style-type: none"> • Is the voltage 0V? 	<p>Replace the passenger-side crash zone sensor, then go to the next step. (See CRASH ZONE SENSOR REMOVAL/INSTALLATION.)</p> <p>Replace the wiring harness for a possible short to power supply, then go to the next step.</p>

Step	Inspection	Action	
5	PERFORM SAS CONTROL MODULE DTC INSPECTION <ul style="list-style-type: none">• Switch the ignition to off.• Disconnect the negative battery cable and wait for 1min or more. (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].)• Connect the SAS control module connectors.• Reconnect all disconnected connectors.• 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].)• Switch the ignition ON (engine off or on).• Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.)• Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.)• Are the same DTCs present?	Yes	Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
		No	DTC troubleshooting completed.