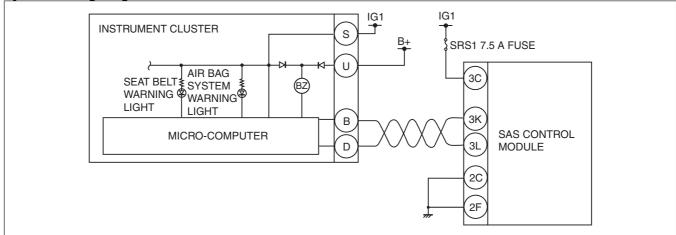
NO.2 AIR BAG SYSTEM WARNING LIGHT ILLUMINATES CONSTANTLY

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2	Air bag system warning light illuminates constantly			
DETECTION Air bag system warning light is illuminated constantly and remains illuminated after 6 CONDITION				
	Weak battery SAS control module malfunction			
POSSIBLE CAUSE	 SAS control module connectors are poorly connected Instrument cluster malfunction Instrument cluster connector is poorly connected 			
	Open circuit in wiring harness between instrument cluster and SAS control module			

System Wiring Diagram



ac5wzw00001566

Diagnostic Procedure

STEP	INSPECTION		ACTION
1	INSPECT BATTERY	Yes	Go to the next step.
	Measure the voltage of battery.	No	Battery is weak.
	• Is the voltage 8 V or more?		Inspect charge/discharge system, then go to Step 8.
			(See BATTERY INSPECTION [SKYACTIV-G 2.0,
			SKYACTIV-G 2.5].)
			(See BATTERY INSPECTION [SKYACTIV-G 2.0,
			SKYACTIV-G 2.5 (WITHOUT i-stop)].)
			(See BATTERY INSPECTION [SKYACTIV-D 2.2].)

STEP	INSPECTION		ACTION
2	VERIFY THAT SAS CONTROL MODULE	Yes	Go to the next step.
	CONNECTOR IS CONNECTED	No	Reconnect the connector properly, then go to Step 8.
			1 1 3/
	Warning		
	 Handling the air bag system components 		
	improperly can accidentally deploy the		
	air bag modules and pre-tensioner seat		
	belts, which may seriously injure you.		
	Read the air bag system service		
	warnings and cautions before handling		
	the air bag system components.		
	(See AIR BAG SYSTEM SERVICE		
	WARNINGS.)		
	(See AIR BAG SYSTEM SERVICE		
	CAUTIONS.)		
	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 rear console. (See REAR		
	CONSOLE REMOVAL/INSTALLATION.)		
	Are all SAS control module connectors securely		
	connected?		
3	INSPECT DTCS IN SAS CONTROL MODULE	Yes	Perform the applicable DTC inspection, then go to Step 8.
	Connect the negative battery cable.		(See DTC TABLE.)
	(See NEGATIVE BATTERY CABLE	No	Go to the next step.
	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].)		
	• Inspect the DTC for the SAS control module on-		
	board diagnostic system. (See DTC		
	INSPECTION.)		
	Have DTCs been recorded in memory?		
4	INSPECT DTCS IN INSTRUMENT CLUSTER	Yes	Perform the applicable DTC inspection, then go to Step 8.
	Inspect the DTC for the instrument cluster on-		(See DTC TABLE [INSTRUMENT CLUSTER].)
	board diagnostic system. (See DTC	No	Go to the next step.
	INSPECTION [INSTRUMENT CLUSTER].)		
	Have DTCs been recorded in memory?		
5	VERIFY WHERE MALFUNCTION IS IN	Yes	Go to the next step.
	WARNING LIGHTS INDICATION CIRCUIT OR	No	Repair the instrument cluster. (See INSTRUMENT
	ELSEWHERE		CLUSTER REMOVAL/INSTALLATION.)
	Turn on all warning lights and indicator lights		Then go to Step 8.
	using the instrument cluster PID WL+IL of		
	simulation function using the M-MDS. (See		
	ACTIVE COMMAND MODES INSPECTION		
	[INSTRUMENT CLUSTER].)		
	Do other warning and indicator lights illuminate?		

STEP	INSPECTION		ACTION
6	INSPECT POWER SUPPLY CIRCUIT OF SAS	Yes	Go to the next step.
	CONTROL MODULE (TERMINAL 3C)	No	Repair the wiring harnesses, then go to Step 8.
	Warning		
	 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.)		
	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 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 connectors. (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 pre-		
	tensioner seat belt connectors. (See FRONT		
	SEAT BELT REMOVAL/INSTALLATION.)		

STEP	INSPECTION		ACTION
	Disconnect all SAS control module connectors. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.) 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/CONNECTION [SKYACTIV-D 2.2].) Switch the ignition ON (engine off or on). Measure the voltage at SAS control module at wiring harness-side connector terminal 3C. Is the voltage 8 V—16 V?	Yes	
7	VERIFY THAT SAS CONTROL MODULE CONNECTOR TERMINAL 2C, 2F IS GROUND SAS control module connector disconnected. 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 2.0].) Inspect for continuity between the following terminals (wiring harness-side): SAS control module terminal 2C—body ground Note Inspect for continuity while shaking the wiring harness between the SAS control module and body ground.	No	Replace the SAS control module, then go to the next step. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.) Replace the wiring harnesses, then go to the next step.
	Is there continuity?		

STEP	INSPECTION		ACTION
8	CONFIRM THAT MALFUNCTION SYMPTOMS	Yes	Complete troubleshooting, then explain repairs to customer.
	DO NOT RECUR AFTER REPAIR	No	Recheck malfunction symptoms, then repeat from Step 1 if
	Connect the SAS control module connectors.		malfunction recurs.
	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).		
	Does the air bag system warning light illuminate		
	for approx. 6 s and turn off?		