System malfunction location	Start stop unit power supply voltage (+B1) low input				
Detection	• Start stop unit power supply circuit (+B1) voltage of 5V or more , less than 8.5 V is detected for 5 s or				
condition	more.				
Fail-safe	• Inhibits the door lock/unlock control using the advanced keyless entry system. (With advanced keyless entry system).				
Possible cause	DTCs are stored in the PCM. Battery malfunction Generator malfunction Start stop unit connector or terminal malfunction Start stop unit power supply circuit (+B1) malfunction Short to ground in the wiring harness between ROOM 15 A fuse and start stop unit terminal 1A ROOM 15 A fuse malfunction Open circuit in wiring harness between battery positive terminal and start stop unit terminal 1A Start stop unit malfunction				
BATTERY RELAY AND FUSE BLOCK ROOM 15 A 1A					
START STOP UNIT WIRING HARNESS-SIDE CONNECTOR					
1AE 1AC 1AA 1Y 1W 1U 1S 1Q 1O 1M 1K 1I 1G 1E 1C 1A 1AF 1AD 1AB 1Z 1X 1V 1T 1R 1P 1N 1L 1J 1H 1F 1D 1B					

Diagnostic Procedure

Diagnos Step	Inspection		Action
1	Perform the DTC inspection for the PCM using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST IN C 2.0. SKYACTIN C 2.5.)	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See DTC TABLE [SKYACTIV-D 2.2].)
	[SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the DTC displayed?	No	Go to the next step.
2	INSPECT BATTERY	Yes	Go to the next step.
	Inspect the battery. (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].) Is the battery normal?	No	Recharge or replace the battery, then go to Step 6. (See BATTERY RECHARGING [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See BATTERY RECHARGING [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See BATTERY RECHARGING [SKYACTIV-D 2.2].) (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

Step	Inspection		Action
3	INSPECT GENERATOR	Yes	Go to the next step.
	Inspect the generator. (See GENERATOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See GENERATOR INSPECTION [SKYACTIV-D 2.2].) Is the generator normal?	No	Replace the generator, then go to Step 6. (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
4	INSPECT START STOP UNIT CONNECTOR	Yes	Go to the next step.
	CONDITION Switch the ignition to off. Disconnect 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].) Disconnect the start stop unit connector. Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. Is the connector normal?	No	Repair or replace the connector, then go to Step 6.
5	INSPECT START STOP UNIT POWER	Yes	Go to the next step.
	SUPPLY CIRCUIT (+B1) Reconnect all the 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].) Display PID VPWR_B1 using the M-MDS. (See PID/DATA MONITOR INSPECTION [START STOP UNIT].) Is the voltage B+?	No	Inspect the ROOM 15 A fuse. If a fuse is burnt out: Repair or replace the wiring harness which is shorted to ground. Replace the fuse. If a fuse is damaged: Replace the fuse. If the fuse is normal: Repair or replace the wiring harness which has an open circuit. Go to the next step.

Step	Inspection		Action
6	Inspection VERIFY THAT REPAIRS HAVE BEEN COMPLETED Reconnect all the disconnected connectors. Reconnect the disconnected 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].) Clear DTC for the start stop unit using the M-MDS. (See CLEARING DTC [START STOP UNIT].) Switch the ignition ON (engine off or on) and wait for 5 s or more. Perform the DTC inspection for the start stop	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the start stop unit, then go to the next step. (See START STOP UNIT REMOVAL/INSTALLATION.) Go to the next step.
	unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].) • Is DTC U3003:16 displayed?		
7	• Are any other DTCs displayed?	Yes	DTC troubleshooting. (See DTC TABLE [START STOP UNIT].)
		No	DTC troubleshooting completed.