

DTC U3003:16 [REAR BODY CONTROL MODULE (RBCM)]

id0902p4015600

System malfunction location	Rear body control module (RBCM) power supply voltage (+B power supply) low input
Detection condition	• Rear body control module (RBCM) power supply circuit voltage of 5 V or more, less than 9 V is detected for 10 s or more .
Fail-safe	—
Possible cause	• Battery malfunction • Generator malfunction • Rear body control module (RBCM) connector or terminal malfunction • Malfunction between battery (+) terminal and rear body control module (RBCM) terminal 2P • Rear body control module (RBCM) malfunction

BATTERY

RELAY AND FUSE BLOCK

RBCM

RBCM WIRING HARNESS-SIDE CONNECTOR

Diagnostic Procedure

Diagnostic Procedure		Action	
Step	Inspection		
1	VERIFY REAR BODY CONTROL MODULE (RBCM) DTCs AGAIN <ul style="list-style-type: none">• Clear rear body control module (RBCM) DTCs using the M-MDS. (See CLEARING DTC [REAR BODY CONTROL MODULE (RBCM)].)• Switch the ignition ON (engine off or on) and wait for 10 s or more.• Perform the DTC inspection for the rear body control module (RBCM) using the M-MDS. (See DTC INSPECTION [REAR BODY CONTROL MODULE (RBCM)].)• Is DTC U3003:16 displayed?	Yes	Go to the next step.
		No	Go to Step 7.
2	INSPECT BATTERY <ul style="list-style-type: none">• 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?	Yes	Go to the next step.
		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 <ul style="list-style-type: none"> 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? 	Yes	Go to the next step.
		No	Replace the generator, then go to Step 6. (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
4	INSPECT REAR BODY CONTROL MODULE (RBCM) CONNECTOR CONDITION <ul style="list-style-type: none"> 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 rear body control module (RBCM) connector. Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. Is the connector normal? 	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 6.
5	VERIFY REAR BODY CONTROL MODULE (RBCM) POWER SUPPLY VOLTAGE <ul style="list-style-type: none"> 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_B_R using the M-MDS. (See PID/DATA MONITOR INSPECTION [REAR BODY CONTROL MODULE (RBCM)].) Is the voltage 5 V or more, 9 V or less? 	Yes	Go to the next step.
		No	Inspect wiring harness between battery (+) and rear body control module (RBCM) terminal 2P (vehicle wiring harness side). <ul style="list-style-type: none"> If there is any malfunction: <ul style="list-style-type: none"> If there is a malfunction, repair or replace the wiring harness, then go to the next step. If there is no malfunction: <ul style="list-style-type: none"> Go to the next step.

Step	Inspection	Action
6	VERIFY THAT REPAIRS HAVE BEEN COMPLETED <ul style="list-style-type: none"> • 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 rear body control module (RBCM) DTCs using the M-MDS. (See CLEARING DTC [REAR BODY CONTROL MODULE (RBCM)].) • Switch the ignition ON (engine off or on) and wait for 10 s or more. • Perform the DTC inspection for the rear body control module (RBCM) using the M-MDS. (See DTC INSPECTION [REAR BODY CONTROL MODULE (RBCM)].) • Is DTC U3003:16 displayed? 	Yes Repeat the inspection from Step 1. • If the malfunction recurs, replace the rear body control module (RBCM), then go to the next step. (See REAR BODY CONTROL MODULE (RBCM) REMOVAL/INSTALLATION.)
		No Go to the next step.
7	VERIFY IF OTHER DTCs DISPLAYED <ul style="list-style-type: none"> • Are any other DTCs displayed? 	Yes Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [REAR BODY CONTROL MODULE (RBCM)].)
		No DTC troubleshooting completed.