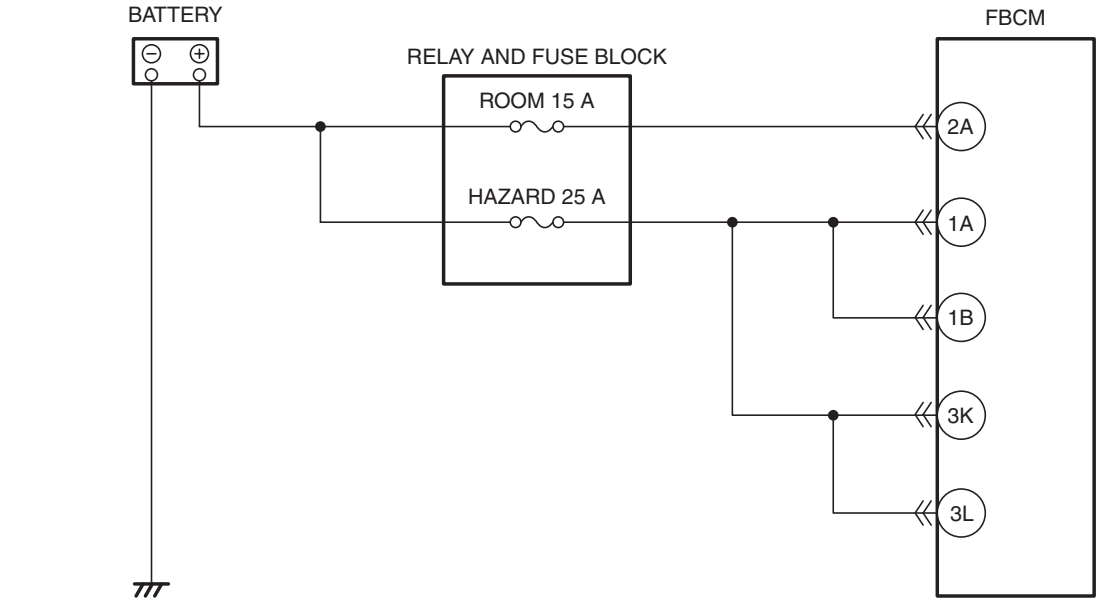
DTC U3003:16 [FRONT BODY CONTROL MODULE (FBCM)]

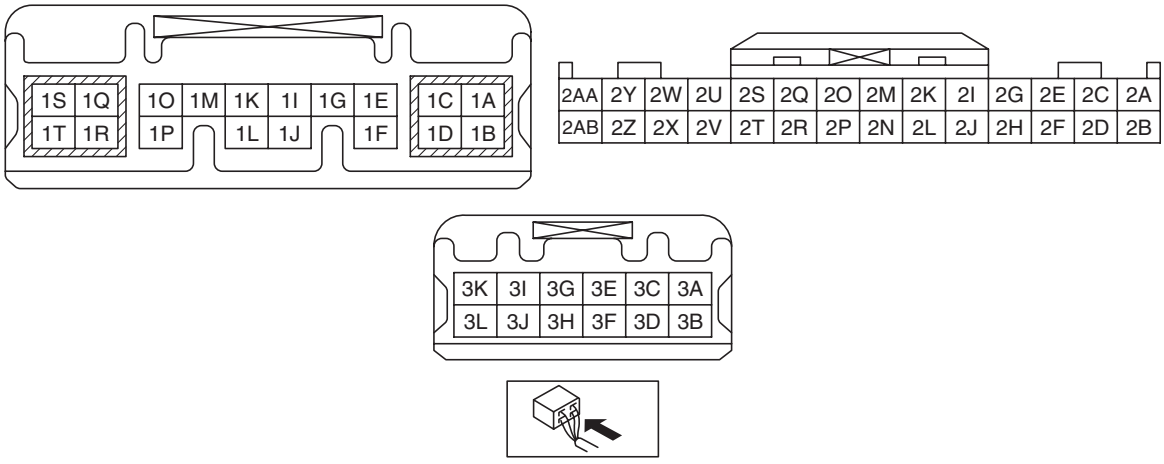
id0902p2011600

System malfunction location	**Front body control module (FBCM) power supply voltage (+B power supply) low input**
Detection condition	• Front body control module (FBCM) power supply circuit voltage of **8.8 V or less** is detected for **10 s or more** with the ignition switched ON (engine off or on).
Fail-safe	—
Possible cause	• DTCs are stored in the PCM. • Battery malfunction • Generator malfunction • Front body control module (FBCM) connector or terminal malfunction • Front body control module (FBCM) power supply circuit malfunction — Short to ground in the wiring harness between ROOM 15 A fuse and front body control module (FBCM) terminal 2A — Short to ground in the wiring harness between HAZARD 25 A fuse and front body control module (FBCM) terminal 1A — Short to ground in the wiring harness between HAZARD 25 A fuse and front body control module (FBCM) terminal 1B — Short to ground in the wiring harness between HAZARD 25 A fuse and front body control module (FBCM) terminal 3K — Short to ground in the wiring harness between HAZARD 25 A fuse and front body control module (FBCM) terminal 3L — ROOM 15 A fuse malfunction — HAZARD 25 A fuse malfunction — Open circuit in wiring harness between battery positive terminal and front body control module (FBCM) terminal 2A — Open circuit in wiring harness between battery positive terminal and front body control module (FBCM) terminal 1A — Open circuit in wiring harness between battery positive terminal and front body control module (FBCM) terminal 1B — Open circuit in wiring harness between battery positive terminal and front body control module (FBCM) terminal 3K — Open circuit in wiring harness between battery positive terminal and front body control module (FBCM) terminal 3L • Front body control module (FBCM) malfunction

System malfunction location	Front body control module (FBCM) power supply voltage (+B power supply) low input



FBCM WIRING HARNESS-SIDE CONNECTOR



Diagnostic Procedure

Step	Inspection		Action
1	**VERIFY FRONT BODY CONTROL MODULE (FBCM) DTCs AGAIN** • Clear front body control module (FBCM) DTCs using the M-MDS. (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].) • Switch the ignition ON (engine off or on) and wait for **10 s or more**. • Perform the front body control module (FBCM) DTC inspection using the M-MDS. (See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].) • Is DTC U3003:16 displayed?	Yes	Go to the next step.
		No	Go to Step 8.

Step	Inspection		Action
2	**VERIFY PCM DTCs** • Perform the DTC inspection for the PCM using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the DTC displayed?	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].)
		No	Go to the next step.
3	**INSPECT BATTERY** • 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 7. (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].)
4	**INSPECT GENERATOR** • 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 7. (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
5	**INSPECT FRONT BODY CONTROL MODULE (FBCM) CONNECTOR 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 front body control module (FBCM) 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 7.

Step	Inspection		Action
6	**VERIFY FRONT BODY CONTROL MODULE (FBCM) POWER SUPPLY VOLTAGE** • 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 using the M-MDS. (See PID/DATA MONITOR INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].) • Is the voltage B+?	Yes	Go to the next step.
		No	Inspect the ROOM 15 A, and HAZARD 25 A fuses. • If a fuse is burnt out: — Repair or replace the wiring harness which is shorted to ground. — Replace the burnt out fuse. • If a fuse is damaged: — Replace the damaged fuse. • All fuses are normal: — Repair or replace the wiring harness which has an open circuit. Go to the next step.
7	**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 front body control module (FBCM) DTCs using the M-MDS. (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].) • Switch the ignition ON (engine off or on) and wait for **10 s or more**. • Perform the front body control module (FBCM) DTC inspection using the M-MDS. (See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].) • Is DTC U3003:16 displayed?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the front body control module (FBCM), then go to the next step. (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.)
		No	Go to the next step.
8	**VERIFY IF OTHER DTCs DISPLAYED** • Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [FRONT BODY CONTROL MODULE (FBCM)].)
		No	DTC troubleshooting completed.