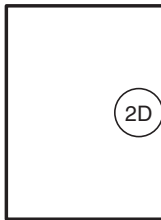


DTC B1143:13 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2007800

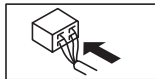
System malfunction location	IG2 power supply control circuit malfunction
Detection condition	• The front body control module (FBCM) detects an open circuit in the start stop unit circuit for 2 s or more with the ignition switched ON (engine off or on).
Fail-safe	—
Possible cause	• Start stop unit connector or terminal malfunction • Start stop unit malfunction • Front body control module (FBCM) connector or terminal malfunction • Open circuit in the wiring harness between start stop unit terminal 2D and front body control module (FBCM) terminal 2U • Front body control module (FBCM) malfunction

START STOP UNIT

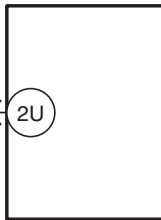


START STOP UNIT
WIRING HARNESS-SIDE
CONNECTOR

2W	2U	2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
2X	2V	2T	2R	2P	2N	2L	2J	2H	2F	2D	2B

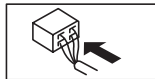


FBCM



FBCM
WIRING HARNESS-SIDE
CONNECTOR

2AA	2Y	2W	2U	2S	2Q	2O	2M	2K	2I	2G	2E	2C	2A
2AB	2Z	2X	2V	2T	2R	2P	2N	2L	2J	2H	2F	2D	2B



Diagnostic Procedure

Step	Inspection	Action
1	VERIFY FRONT BODY CONTROL MODULE (FBCM) DTCs AGAIN <ul style="list-style-type: none"> 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 2 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 B1143:13 displayed? 	<div>Yes</div> Go to the next step. <div>No</div> Go to Step 7.

Step	Inspection	Action	
2	INSPECT START STOP UNIT 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 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? 	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 6.
3	INSPECT START STOP UNIT <ul style="list-style-type: none"> • Inspect the start stop unit. (See START STOP UNIT INSPECTION.) • Is the start stop unit normal? 	Yes	Go to the next step.
		No	Replace the start stop unit, then go to Step 6. (See START STOP UNIT REMOVAL/INSTALLATION.)
4	INSPECT FRONT BODY CONTROL MODULE (FBCM) CONNECTOR CONDITION <ul style="list-style-type: none"> • 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 6.
5	INSPECT FRONT BODY CONTROL MODULE (FBCM) IG2 POWER SUPPLY CONTROL CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> • Verify that the start stop unit and front body control module (FBCM) connectors are disconnected. • Inspect the wiring harness for continuity between start stop unit terminal 2D (vehicle wiring harness side) and front body control module (FBCM) terminal 2U (vehicle wiring harness side). • Is there continuity? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness and 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 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 2 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 B1143:13 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.
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 [FRONT BODY CONTROL MODULE (FBCM)].)
		No DTC troubleshooting completed.