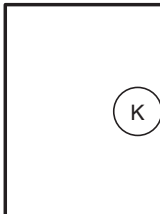
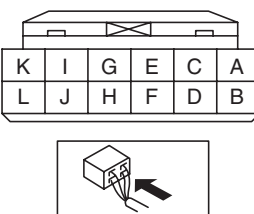
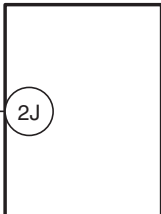
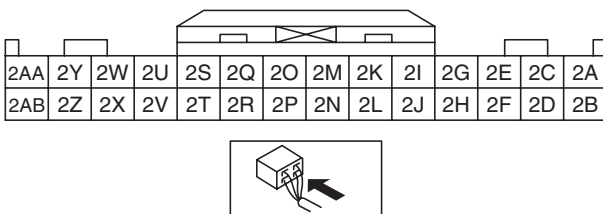


DTC U0164:68 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2010200

System malfunction location	Communication error between climate control unit
Detection condition	<ul style="list-style-type: none"> The front body control module (FBCM) could not receive signals from the climate control unit for 5 s or more with the ignition switched ON (engine off or on).
Fail-safe	—
Possible cause	<ul style="list-style-type: none"> Climate control unit connector or terminal malfunction Front body control module (FBCM) connector or terminal malfunction Short to ground in wiring harness between climate control unit terminal K and front body control module (FBCM) terminal 2J Short to power supply in wiring harness between climate control unit terminal K and front body control module (FBCM) terminal 2J Open circuit in wiring harness between climate control unit terminal K and front body control module (FBCM) terminal 2J Climate control unit malfunction Front body control module (FBCM) malfunction
<div> <div> <p>CLIMATE CONTROL UNIT</p>  <p>CLIMATE CONTROL UNIT WIRING HARNESS-SIDE CONNECTOR</p>  </div> <div> <p>FBCM</p>  <p>FBCM WIRING HARNESS-SIDE CONNECTOR</p>  </div> </div>	

Diagnostic Procedure

Step	Inspection	Action
1	<p>VERIFY FRONT BODY CONTROL MODULE (FBCM) DTCs AGAIN</p> <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 5 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 the DTC U0164:68 displayed? 	<p>Yes</p> <p>Go to the next step.</p> <p>No</p> <p>Go to Step 9.</p>

Step	Inspection	Action	
2	INSPECT CLIMATE CONTROL 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 climate control 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 8.
3	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 8.
4	INSPECT CLIMATE CONTROL UNIT CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the climate control unit and front body control module (FBCM) connectors are disconnected. • Inspect for continuity between front body control module (FBCM) terminal 2J (vehicle wiring harness side) and body ground. • Is there continuity? 	Yes	Repair or replace the wiring harness which is shorted to ground, then go to Step 8.
		No	Go to the next step.
5	INSPECT CLIMATE CONTROL UNIT CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Verify that the climate control unit and front body control module (FBCM) connectors are disconnected. • 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). • Measure the voltage at front body control module (FBCM) terminal 2J (vehicle wiring harness side). • Is the voltage 0 V? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness which is shorted to power supply, then go to Step 8.

Step	Inspection	Action
6	INSPECT CLIMATE CONTROL UNIT CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> • Verify that the climate control unit and front body control module (FBCM) connectors are disconnected. • 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].) • Inspect the wiring harness for continuity between climate control unit terminal K (vehicle wiring harness side) and front body control module (FBCM) terminal 2J (vehicle wiring harness side). • Is there continuity? 	Yes Go to the next step.
		No Repair or replace the wiring harness which has an open circuit, then go to Step 8.
7	PERFORM DTC INSPECTION AND VERIFY IF MALFUNCTIONING PART IS CLIMATE CONTROL UNIT <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 5 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 the DTC U0164:68 displayed? 	Yes Replace the climate control unit, then go to the next step. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [MANUAL AIR CONDITIONER].)
		No Go to Step 9.

Step	Inspection	Action	
8	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 5 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 the DTC U0164:68 displayed? 	Yes	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.
9	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.