

# DTC B10C9:1F [START STOP UNIT]

id0902p6019900

<b>System malfunction location</b>	<b>Keyless antenna (interior, center) circuit malfunction</b>
<b>Detection condition</b>	<ul style="list-style-type: none"> <li>The start stop unit detects an open circuit in the keyless antenna (interior, center) or a short to ground with the ignition switched off.</li> </ul>
<b>Fail-safe</b>	—
<b>Possible cause</b>	<ul style="list-style-type: none"> <li>Keyless antenna (interior, center) connector or terminal malfunction</li> <li>Start stop unit connector or terminal malfunction</li> <li>Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> <li>Start stop unit terminal 2I and keyless antenna (interior, center) terminal B</li> <li>Start stop unit terminal 2K and keyless antenna (interior, center) terminal A</li> </ul> </li> <li>Open circuit in wiring harness between the following terminals: <ul style="list-style-type: none"> <li>Start stop unit terminal 2I and keyless antenna (interior, center) terminal B</li> <li>Start stop unit terminal 2K and keyless antenna (interior, center) terminal A</li> </ul> </li> <li>Keyless antenna (interior, center) malfunction</li> <li>Start stop unit malfunction</li> </ul>

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

KEYLESS AN TENNA (INTERIOR, CENTER)

KEYLESS AN TENNA (INTERIOR, CENTER) WIRING HARNESS-SIDE CONNECTOR

## Diagnostic Procedure

Step	Inspection	Action
1	<b>INSPECT KEYLESS ANTENNA (INTERIOR, CENTER) CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition to off.</li> <li>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].)</li> <li>Disconnect the keyless antenna (interior, center) connector.</li> <li>Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection.</li> <li>Is the connector normal?</li> </ul>	<div>Yes</div> <div>No</div> <div>Go to the next step.</div> <div>Repair or replace the connector, then go to Step 6.</div>

Step	Inspection	Action	
2	<b>INSPECT START STOP UNIT CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>• Disconnect the start stop unit connector.</li> <li>• Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection.</li> <li>• Is the connector normal?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 6.
3	<b>INSPECT KEYLESS ANTENNA (INTERIOR, CENTER) CIRCUIT FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>• Verify that the start stop unit and keyless antenna (interior, center) connectors are disconnected.</li> <li>• Inspect for continuity between the following terminals (vehicle wiring harness side) and body ground. <ul style="list-style-type: none"> <li>— Keyless antenna (interior, center) terminal B</li> <li>— Keyless antenna (interior, center) terminal A</li> </ul> </li> <li>• Is there continuity?</li> </ul>	Yes	Repair or replace the wiring harness which is shorted to ground, then go to Step 6.
		No	Go to the next step.
4	<b>INSPECT KEYLESS ANTENNA (INTERIOR, CENTER) CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Verify that the start stop unit and keyless antenna (interior, center) connectors are disconnected.</li> <li>• Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity. <ul style="list-style-type: none"> <li>— Start stop unit terminal 2I and keyless antenna (interior, center) terminal B</li> <li>— Start stop unit terminal 2K and keyless antenna (interior, center) terminal A</li> </ul> </li> <li>• Is there continuity?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness which has an open circuit, then go to Step 6.
5	<b>PERFORM DTC INSPECTION AND VERIFY IF MALFUNCTIONING PART IS KEYLESS ANTENNA (INTERIOR, CENTER)</b> <ul style="list-style-type: none"> <li>• Reconnect all the disconnected connectors.</li> <li>• 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].)</li> <li>• Clear DTC for the start stop unit using the M-MDS. (See CLEARING DTC [START STOP UNIT].)</li> <li>• Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].)</li> <li>• Is DTC B10C9:1F displayed?</li> </ul>	Yes	Replace the keyless antenna (interior, center), then go to the next step. (See KEYLESS ANTENNA REMOVAL/INSTALLATION.)
		No	Go to Step 7.

Step	Inspection	Action
6	<b>VERIFY THAT REPAIRS HAVE BEEN COMPLETED</b> <ul style="list-style-type: none"> <li>• Reconnect all the disconnected connectors.</li> <li>• 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].)</li> <li>• Clear DTC for the start stop unit using the M-MDS. (See CLEARING DTC [START STOP UNIT].)</li> <li>• Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].)</li> <li>• Is DTC B10C9:1F displayed?</li> </ul>	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.)
		No Go to the next step.
7	<b>VERIFY IF OTHER DTCs DISPLAYED</b> <ul style="list-style-type: none"> <li>• Are any other DTCs displayed?</li> </ul>	Yes Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [START STOP UNIT].)
		No DTC troubleshooting completed.