System malfunction location	Keyless antenna (interior, rear) circuit malfunction				
Detection	• The start stop unit detects an open circuit in the keyless antenna (interior, rear) or a short to ground with				
condition	the ignition switched off.				
Fail-safe	Inhibits the door lock/unlock control using the advanced keyless entry system.				
Possible cause	 Keyless antenna (interior, rear) connector or terminal malfunction LF control unit connector or terminal malfunction Short to ground in wiring harness between the following terminals: Between LF control unit terminal Z and keyless antenna (interior, rear) terminal B Between LF control unit terminal X and keyless antenna (interior, rear) terminal A 				
AA Y	LF CONTROL UNIT LF CONTROL UNIT WIRING HARNESS-SIDE CONNECTOR KEYLESS ANTENNA (INTERIOR, REAR) (INTERIOR, REAR) WIRING HARNESS-SIDE CONNECTOR				
AB Z	X V T R P N L J H F D B				

Diagnostic Procedure

Step	Step Inspection		Action
1	INSPECT KEYLESS ANTENNA (INTERIOR,	Yes	Go to the next step.
	REAR) CONNECTOR CONDITION	No	Repair or replace the connector, then go to Step 7.
	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 keyless antenna (interior, rear)		
	connector.		
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	for damage, deformation, corrosion, or		
	disconnection.		
	Is the connector normal?		

Step	ep Inspection Action				
2	INSPECT LF CONTROL UNIT CONNECTOR	Yes	Go to the next step.		
_	CONDITION	No	Repair or replace the connector, then go to Step 7.		
	Disconnect the LF control unit connector.	NO	Trepair of replace the confinector, then go to Step 7.		
	Inspect the connector engagement and				
	connection condition and inspect the terminals				
	for damage, deformation, corrosion, or				
	disconnection.				
	Is the connector normal?				
3	INSPECT KEYLESS ANTENNA (INTERIOR,	Yes	Repair or replace the wiring harness which is shorted to		
	REAR) CIRCUIT FOR SHORT TO GROUND		ground, then go to Step 7.		
	Verify that the LF control unit and keyless	No	Go to the next step.		
	antenna (interior, rear) connectors are		or to the next step.		
	disconnected.				
	Inspect for continuity between the following				
	terminals (vehicle wiring harness side) and				
	body ground.				
	Keyless antenna (interior, rear) terminal B				
	Keyless antenna (interior, rear) terminal A				
	Is there continuity?				
4	INSPECT KEYLESS ANTENNA (INTERIOR,	Yes	Go to the next step.		
	REAR) CIRCUIT FOR OPEN CIRCUIT	No	Repair or replace the wiring harness which has an open		
	Verify that the LF control unit and keyless		circuit, then go to Step 7.		
	antenna (interior, rear) connectors are				
	disconnected.				
	Inspect the wiring harness between the				
	following terminals (vehicle wiring harness side)				
	for continuity.				
	 Between LF control unit terminal Z and 				
	keyless antenna (interior, rear) terminal B				
	 Between LF control unit terminal X and 				
	keyless antenna (interior, rear) terminal A				
	Is there continuity?				
5	INSPECT LF CONTROL UNIT	Yes	Go to the next step.		
	Inspect the LF control unit.	No	Replace the LF control unit, then go to Step 7.		
	(See LF CONTROL UNIT INSPECTION.)		(See LF CONTROL UNIT REMOVAL/INSTALLATION.)		
	• Is the LF control unit normal?				
6	PERFORM DTC INSPECTION AND VERIFY IF	Yes	Replace the keyless antenna (interior, rear), then go to the		
	MALFUNCTIONING PART IS KEYLESS		next step.		
	ANTENNA (INTERIOR, REAR)	N. 1.	(See KEYLESS ANTENNA REMOVAL/INSTALLATION.)		
	Reconnect all the disconnected connectors.	No	Go to Step 8.		
	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 DTCs for the advanced keyless entry				
	system using the M-MDS.				
	(See CLEARING DTC [ADVANCED KEYLESS				
	ENTRY SYSTEM].)				
	Perform the advanced keyless entry system				
	DTC inspection using the M-MDS.				
	(See DTC INSPECTION [ADVANCED				
	KEYLESS ENTRY SYSTEM].)				
	Is DTC B10C7:1F displayed?				

Step	Inspection		Action
7 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 DTCs for the advanced keyless entry system using the M-MDS. (See CLEARING DTC [ADVANCED KEYLESS ENTRY SYSTEM].) • Perform the advanced keyless entry system DTC inspection using the M-MDS. (See DTC INSPECTION [ADVANCED KEYLESS ENTRY SYSTEM].) • Is DTC B10C7:1F displayed?	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.) Go to the next step.
8	• Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [ADVANCED KEYLESS ENTRY SYSTEM].) DTC troubleshooting completed.