

DTC B11FD:1F [ADVANCED KEYLESS ENTRY SYSTEM]

id0902p8026700

System malfunction location	Keyless antenna (exterior, LF) circuit malfunction
Detection condition	<ul style="list-style-type: none"> The start stop unit detects an open circuit in the keyless antenna (exterior, LF) or a short to ground with the ignition switched off.
Fail-safe	<ul style="list-style-type: none"> Inhibits the door lock/unlock using the advanced keyless entry system.
Possible cause	<ul style="list-style-type: none"> Front outer handle (LH) connector or terminal malfunction LF control unit connector or terminal malfunction Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> Between LF control unit terminal S and front outer handle (LH) terminal B Between LF control unit terminal U and front outer handle (LH) terminal E Open circuit in wiring harness between the following terminals: <ul style="list-style-type: none"> Between LF control unit terminal S and front outer handle (LH) terminal B Between LF control unit terminal U and front outer handle (LH) terminal E LF control unit malfunction Keyless antenna (exterior, LF) malfunction Start stop unit malfunction

LF CONTROL UNIT

LF CONTROL UNIT
WIRING HARNESS-SIDE CONNECTOR

KEYLESS ANTENNA
(EXTERIOR, LF)
(FRONT OUTER HANDLE (LH))

FRONT OUTER HANDLE (LH)
WIRING HARNESS-SIDE CONNECTOR

Diagnostic Procedure

Step	Inspection	Action
1	INSPECT FRONT OUTER HANDLE (LH) 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 front outer handle (LH) 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
2	INSPECT LF CONTROL UNIT CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the LF 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 7.
3	INSPECT KEYLESS ANTENNA (EXTERIOR, LF) CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Verify that the LF control unit and front outer handle (LH) connectors are disconnected. • Inspect for continuity between the following terminals (vehicle wiring harness side) and body ground. <ul style="list-style-type: none"> — Front outer handle (LH) terminal B — Front outer handle (LH) terminal E • Is there continuity? 	Yes Repair or replace the wiring harness which is shorted to ground, then go to Step 7.
		No Go to the next step.
4	INSPECT FRONT OUTER HANDLE (LH) CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> • Verify that the LF control unit and front outer handle (LH) connectors are disconnected. • Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity. <ul style="list-style-type: none"> — Between LF control unit terminal S and front outer handle (LH) terminal B — Between LF control unit terminal U and front outer handle (LH) terminal E • 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 7.
5	INSPECT LF CONTROL UNIT <ul style="list-style-type: none"> • Inspect the LF control unit. (See LF CONTROL UNIT INSPECTION.) • Is the LF control unit normal? 	Yes Go to the next step.
		No Replace the LF control unit, then go to Step 7. (See LF CONTROL UNIT REMOVAL/INSTALLATION.)
6	PERFORM DTC INSPECTION AND VERIFY IF MALFUNCTIONING PART IS KEYLESS ANTENNA (EXTERIOR, LF) <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 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 B11FD:1F displayed? 	Yes Replace the front outer handle (LH), then go to the next step. (See FRONT OUTER HANDLE REMOVAL/INSTALLATION.)
		No Go to Step 8.

Step	Inspection	Action
7	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 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 B11FD: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.)
		No Go to the next step.
8	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 [ADVANCED KEYLESS ENTRY SYSTEM].)
		No DTC troubleshooting completed.