

Diagnostic Procedure

Step	Inspection		Action
1	INSPECT IG1 RELAY FOR MALFUNCTION	Yes	Go to the next step.
	Switch the ignition to off.	No	Replace the IG1 relay, then go to Step 4.
	Disconnect the negative battery cable.		(See RELAY LOCATION.)
	(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].)		
	Remove the IG1 relay.		
	(See RELAY LOCATION.)		
	Inspect the IG1 relay.		
	(See RELAY INSPECTION.)		
	• Is the IG1 relay normal?		

Step	Inspection		Action
	INSPECT START STOP UNIT CONNECTOR	Yes	Go to the next step.
	CONDITION	No	Repair or replace the connector, then go to Step 4.
	 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?		
3	INSPECT IG1 RELAY CIRCUIT FOR SHORT	Yes	Repair or replace the wiring harness which has a short to
	TO POWER SUPPLY		the power supply, then go to the next step.
	 Reconnect all the disconnected connectors. 	No	Go to the next step.
	 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].)		
	Measure the voltage at start stop unit terminal		
	2S (vehicle wiring harness side).		
	• Is the voltage 2.5 V or more?		
4	VERIFY THAT REPAIRS HAVE BEEN	Yes	Repeat the inspection from Step 1.
	COMPLETED		If the malfunction recurs, replace the start stop unit, then
	Reconnect all the disconnected connectors.		go to the next step.
	Reconnect the disconnected negative battery		(See START STOP UNIT REMOVAL/INSTALLATION.)
	cable.	No	Go to the next step.
	(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 DTC for the start stop unit using the M-		
	MDS.		
	(See CLEARING DTC [START STOP UNIT].)		
	• Switch the ignition to off and wait for 0.5 s or		
	more.		
	Perform the DTC inspection for the start stop		
	unit using the M-MDS.		
	(See DTC INSPECTION [START STOP		
	UNIT].)		
	• Is the DTC B10E7:12 displayed?		
5	VERIFY IF OTHER DTCs DISPLAYED	Yes	Repair the malfunctioning part according to the applicable
	Are any other DTCs displayed?		DTC troubleshooting.
			(See DTC TABLE [START STOP UNIT].)
		No	DTC troubleshooting completed.