System malfunction location	Starter relay circuit malfunction						
Detection condition							
Fail-safe	_						
Possible cause	 Disconnect the start stop unit with the battery cables connected. Starter relay malfunction Start stop unit connector or terminal malfunction 						
BATTERY	RELAY AND FUSE BLOCK START STOP UNIT						
MAI	N FUSE N 200 A IG2 30 A D O C STARTER (1D) (2V)						
	STARTER RELAY START STOP UNIT						
	(RELAY AND FUSE BLOCK) WIRING HARNESS-SIDE CONNECTOR 1AE 1AC 1AA 1Y 1W 1U 1S 1Q 10 1M 1K 1I 1G 1E 1C 1A 1AF 1AD 1AB 1Z 1X 1V 1T 1R 1P 1N 1L 1J 1H 1F 1D 1B 2W 2U 2S 2Q 2O 2M 2K 2I 2G 2E 2C 2A 2X 2V 2T 2R 2P 2N 2L 2J 2H 2F 2D 2B						

Diagnostic Procedure

Step	Inspection	Action		
1	INSPECT STARTER RELAY FOR		Go to the next step.	
	MALFUNCTION	No	Replace the starter relay, then go to Step 4.	
	Switch the ignition to off.		(See RELAY LOCATION.)	
	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].)			
	Remove the starter relay.			
	(See RELAY LOCATION.)			
	Inspect the starter relay.			
	(See RELAY INSPECTION.)			
	Is the starter relay normal?			

Step	Inspection		Action
2	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 STARTER RELAY CIRCUIT FOR	Yes	Go to the next step.
	OPEN CIRCUIT	No	Repair or replace the wiring harness which has an open
	Verify that the starter relay is removed.		circuit, then go to the next step.
	Verify that the start stop unit connector is		
	disconnected.		
	Inspect the wiring harness between the following terminals (vehicle wiring harness side)		
	following terminals (vehicle wiring harness side) for continuity.		
	Starter relay terminal A and start stop unit		
	terminal 2V		
	Starter relay terminal E and start stop unit		
	terminal 1D		
	• Is there continuity?		
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 1 s or		
	more.		
	Perform the DTC inspection for the start stop		
	unit using the M-MDS.		
	(See DTC INSPECTION [START STOP		
	ÙNIT].)		
	• Is DTC P0615:13 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.