DTC B1C84:12 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2009300

System malfunction location	Rear window defroster circuit malfunction		
Detection	• The front body control module (FBCM) detects a short to power supply in the rear window defroster relay		
condition	circuit with the ignition switched ON (engine off or on).		
Fail-safe		_	
Possible cause	Rear window defroster relay malfunction Front body control module (FBCM) connector or terminal malfunction Short to power supply in wiring harness between rear window defroster relay terminal E and front body control module (FBCM) terminal 1P Front body control module (FBCM) malfunction		
BATTERY	MAIN 200 A DEFOG 40 A A A E	FBCM TIP	
<i>,,,</i>	REAR WINDOW DEFROSTER RELAY (RELAY AND FUSE BLOCK)	FBCM WIRING HARNESS-SIDE CONNECTOR	
	D FRONT	1S 1Q 10 1M 1K 1I 1G 1E 1C 1A 1T 1R 1P 1L 1J 1F 1D 1B	

Diagnostic Procedure

Step	p Inspection		Action	
1	VERIFY FRONT BODY CONTROL MODULE	Yes	Go to the next step.	
	(FBCM) DTCs AGAIN	No	Go to Step 6.	
	Clear front body control module (FBCM) DTCs			
	using the M-MDS.			
	(See CLEARING DTC [FRONT BODY			
	CONTROL MODULE (FBCM)].)			
	Switch the ignition ON (engine off or on).			
	 Perform the front body control module (FBCM) 			
	DTC inspection using the M-MDS.			
	(See DTC INSPECTION [FRONT BODY			
	CONTROL MODULE (FBCM)].)			
	• Is DTC B1C84:12 displayed?			

Step	Inspection		Action
2	INSPECT REAR WINDOW DEFROSTER	Yes	Go to the next step.
_	RELAY FOR MALFUNCTION	No	Replace the rear window defroster relay, then go to Step
	Switch the ignition to off.	110	5.
	Disconnect the negative battery cable.		0.
	(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 rear window defroster relay.		
	• Inspect the rear window defroster relay.		
	(See RELAY INSPECTION.)		
	• Is the rear window defroster relay normal?	\/	On to the most stars
3	INSPECT FRONT BODY CONTROL MODULE	Yes	Go to the next step.
	(FBCM) CONNECTOR CONDITION	No	Repair or replace the connector, then go to Step 5.
	Disconnect the front body control module (FROM) assessed to the first body control module		
	(FBCM) connector.		
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	for damage, deformation, corrosion, or		
	disconnection.		
4	• Is the connector normal?	Vaa	Co to the next stee
4	INSPECT REAR WINDOW DEFROSTER RELAY CONTROL CIRCUIT FOR SHORT TO	Yes	Go to the next step. Repair or replace the wiring harness and go to the next
	POWER SUPPLY	No	
			step.
	Verify that the rear window defroster relay is		
	removed.		
	Verify that the front body control module (FROM) connector is disconnected.		
	(FBCM) connector is disconnected.		
	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].)		
	Switch the ignition ON (engine off or on). Measure the voltage at front bady central.		
	Measure the voltage at front body control module (FRCM) terminal 4B (vehicle wiring)		
	module (FBCM) terminal 1P (vehicle wiring		
	harness side). • Is the voltage 0 V ?		
	· is the voltage u v ?		

Step	Inspection		Action	
Step 5	Inspection 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 front body control module (FBCM) DTCs	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the front body control module (FBCM), then go to the next step. (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.) Go to the next step.	
6	using the M-MDS. (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].) • Switch the ignition ON (engine off or on). • Operate the rear window defroster by pushing rear window defroster switch. • Perform the front body control module (FBCM) DTC inspection using the M-MDS. (See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].) • Is DTC B1C84:12 displayed? VERIFY IF OTHER DTCs DISPLAYED • Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [FRONT BODY CONTROL MODULE (FBCM)].) DTC troubleshooting completed.	