## DTC U1007:68 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2011000

System malfunction location	Communication error with current sensor					
Detection condition	• The front body control module (FBCM) detects communication error with the current sensor for <b>5 s</b> .					
Fail-safe	_					
Malfunction in communication line between front body control module (FBCM) and current sensor     Current sensor connector or terminal malfunction     Short to ground or open circuit in current sensor power supply circuit     Short to ground in wiring harness between battery positive terminal and current sensor terminal A     MAIN 200 A fuse malfunction     ENG.+B 7.5 A fuse malfunction     Open circuit in wiring harness between battery positive terminal and current sensor terminal A     Front body control module (FBCM) connector or terminal malfunction     Short to ground in wiring harness between current sensor terminal B and front body control module (FBCM) terminal 2E     Open circuit in wiring harness between current sensor terminal B and front body control module (FBCM) terminal 2E     Current sensor malfunction     Front body control module (FBCM) malfunction						
BATTE	RY FBCM					
CURRENT SENSOR  MAIN 200 A ENG.+B 7.5 A  (A)  B  W  2E						
	CURRENT SENSOR FBCM WIRING HARNESS-SIDE WIRING HARNESS-SIDE CONNECTOR CONNECTOR					
	2AA 2Y 2W 2U 2S 2Q 2O 2M 2K 2I 2G 2E 2C 2A 2AB 2Z 2X 2V 2T 2R 2P 2N 2L 2J 2H 2F 2D 2B					

**Diagnostic Procedure** 

Step	Inspection		Action	
1	VERIFY FRONT BODY CONTROL MODULE Y	Yes	Go to the next step.	
	(FBCM) DTCs AGAIN	No	Go to Step 9.	
	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) and			
	wait for <b>5 s or more</b> .			
	• Perform the front body control module (FBCM)			
	DTC inspection using the M-MDS.			
	(See DTC INSPECTION [FRONT BODY			
	CONTROL MODULE (FBCM)].)			
	• Is DTC U1007:68 displayed?			

Step	Inspection		Action
2	INSPECT CURRENT SENSOR CONNECTOR	Yes	Go to the next step.
2	INSPECT CURRENT SENSOR CONNECTOR  • Switch the ignition to off.  • Disconnect the current sensor connector.  • 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].)  • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection.  • Is the connector normal?	No	Go to the next step.  Repair or replace the connector, then go to Step 8.
3	INSPECT CURRENT SENSOR POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT OR SHORT TO GROUND  • Verify that the current sensor 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].)  • Measure the voltage at current sensor terminal A (vehicle wiring harness side).  • Is the voltage B+?	Yes No	Go to the next step.  INSPECT MAIN 200 A FUSE AND ENG.+B 7.5 A FUSE  • If a fuse is burnt out:  — Repair or replace the wiring harness which is shorted to ground.  — Replace the burnt out fuse.  • If a fuse is damaged:  — Replace the damaged fuse.  • All fuses are normal:  — Repair or replace the wiring harness which has an open circuit.  Go to Step 8.
4	INSPECT FRONT BODY CONTROL MODULE (FBCM) CONNECTOR CONDITION  • 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 body control module (FBCM) connector.  • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection.  • Is the connector normal?	Yes No	Go to the next step.  Repair or replace the connector, then go to Step 8.

Step	Inspection		Action
5	INSPECT CURRENT SENSOR LIN	Yes	Repair or replace the wiring harness, then go to Step 8.
	COMMUNICATION CIRCUIT FOR SHORT TO	No	Go to the next step.
	GROUND		- Contractor
	Verify that the current sensor and front body		
	control module (FBCM) connectors are		
	disconnected.		
	Inspect for continuity between current sensor		
	terminal B (vehicle wiring harness) and body		
	ground.		
	• Is there continuity?		
6	INSPECT CURRENT SENSOR LIN	Yes	Go to the next step.
	COMMUNICATION CIRCUIT FOR OPEN	No	Repair or replace the wiring harness, then go to Step 8.
	CIRCUIT	'*0	Trepair of replace the wiring harness, their go to clep o.
	Verify that the current sensor and front body		
	control module (FBCM) connectors are		
	disconnected.		
	Inspect the wiring harness for continuity		
	between current sensor terminal B (vehicle		
	wiring harness side) and front body control		
	module (FBCM) terminal 2E (vehicle wiring		
	harness side).		
	• Is there continuity?		
7	INSPECT CURRENT SENSOR	Yes	Co to the poyt step
,	• Inspect the current sensor.	No	Go to the next step.  Replace the current sensor, then go to the next step.
	(See CURRENT SENSOR INSPECTION	INO	
	[SKYACTIV-G 2.0, SKYACTIV-G 2.5].)		(See CURRENT SENSOR REMOVAL/INSTALLATION
	(See CURRENT SENSOR INSPECTION		[SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
			(See CURRENT SENSOR REMOVAL/INSTALLATION
	[SKYACTIV-D 2.2].) • Is the current sensor normal?		[SKYACTIV-D 2.2].)
8		Voc	Deposit the inequation from Stan 1
0	VERIFY THAT REPAIRS HAVE BEEN COMPLETED	Yes	Repeat the inspection from Step 1.  • If the malfunction recurs, replace the front body control
	• Reconnect all the disconnected connectors.		module (FBCM), then go to the next step.
	Reconnect the disconnected negative battery		(See FRONT BODY CONTROL MODULE (FBCM)
	cable.		REMOVAL/INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Go to the next step.
	DISCONNECTION/CONNECTION	INO	Go to the next step.
	[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		
	using the M-MDS.		
	(See CLEARING DTC [FRONT BODY		
	CONTROL MODULE (FBCM)].)		
	Switch the ignition ON (engine off or on) and		
	wait for <b>5</b> s or more.		
	Perform the front body control module (FBCM)		
	DTC inspection using the M-MDS.		
	(See DTC INSPECTION [FRONT BODY		
	CONTROL MODULE (FBCM)].)		
	• Is DTC U1007:68 displayed?		
9	VERIFY IF OTHER DTCs DISPLAYED	Yes	Repair the malfunctioning part according to the applicable
Э	• Are any other DTCs displayed?	res	DTC troubleshooting.
	Are any other DTCs displayed?		(See DTC TABLE [FRONT BODY CONTROL MODULE
	The state of the s	I	(FBCM)].)
		No	DTC troubleshooting completed.