DTC B10AF:12 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2007600

System malfunction location	Blower relay circuit malfunction				
Detection	• The front body control module (FBCM) detects a short to power supply in the blower relay circuit with the				
condition	ignition switched ON (engine off or on).				
Fail-safe	_				
Possible cause	 Blower relay malfunction Front body control module (FBCM) connector or terminal malfunction Short to power supply in the wiring harness between blower relay terminal D and front body control module (FBCM) terminal 2Z Front body control module (FBCM) malfunction 				
BATTERY	BLOWER RELAY				
(i) (i) (ii) (ii) (iii)	MAIN 200 A HEATER 40 A B W 2Z				
	BLOWER RELAY FBCM (RELAY AND FUSE BLOCK) WIRING HARNESS-SIDE CONNECTOR				
	D B FRONT 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	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 B10AF:12 displayed?			

Step	Inspection		Action
2	INSPECT BLOWER RELAY FOR	Yes	Go to the next step.
	MALFUNCTION	No	Replace the blower relay, then go to Step 5.
	Switch the ignition to off.		5 to 1 to
	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 blower relay. I happen the blower relay. I happen the blower relay.		
	• Inspect the blower relay.		
	(See RELAY INSPECTION.)		
	Is the blower relay normal?	.,	
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		
	(FBCM) connector.		
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	for damage, deformation, corrosion, or		
	disconnection.		
	Is the connector normal?		
4	INSPECT BLOWER RELAY CONTROL	Yes	Go to the next step.
	CIRCUIT FOR SHORT TO POWER SUPPLY	No	Repair or replace the wiring harness and go to the next
	Verify that the blower relay is removed.		step.
	Verify that the front body control module		
	(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 body control		
	module (FBCM) terminal 2Z (vehicle wiring		
	harness side).		
	Harriess side).	l	

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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 using the M-MDS. (See CLEARING DTC [FRONT BODY	Yes	Action 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	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 B10AF: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.	