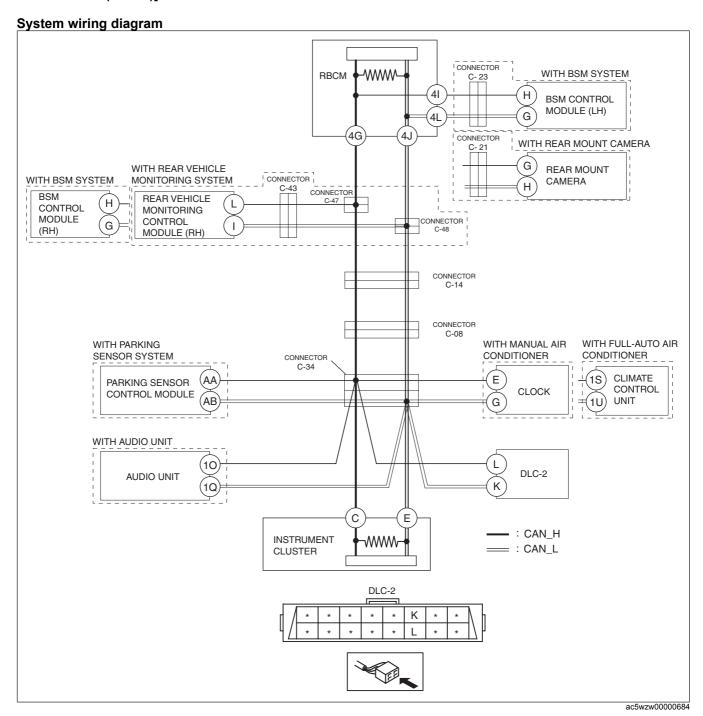
Caution

 Perform the following malfunction diagnosis only when it is diagnosed with a short to the power supply by CONTROLLER AREA NETWORK (CAN) MALFUNCTION DIAGNOSIS FLOW [SKYACTIV-D 2.2 (R.H.D.)].



Determination procedure

Caution

- When disconnecting the connector, verify that there is no looseness, damage, deformation, corrosion, or poor connection of the connector terminals.
- When inspecting the DLC-2, touch it with a paper clip or similar thin pin without directly inserting
 a tester into the terminals.

 Disconnect the negative battery cable before performing any work that requires handling of connectors.

Step	Inspection		Action
1	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to Step 11.
	BETWEEN CONNECTOR C-08 AND	No	Go to the next step.
	INSTRUMENT CLUSTER	''	So to the heat step.
	Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connector C-08.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		
2	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to the next step.
	BETWEEN CONNECTORS C-34 AND DLC-2	No	Repair or replace the wiring harness between DLC-2 and
	Switch the ignition off (LOCK).		connector C-34 because the wiring harness is shorted to
	Disconnect the negative battery cable.		the power supply.
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connector C-34.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	Is the voltage 0 V?		
3	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to Step 5.
	BETWEEN CONNECTOR C-34 AND PARKING	No	Go to the next step.
	SENSOR CONTROL MODULE	110	Go to the flext step.
	Measure the voltage at parking sensor control		
	module terminals AA and AB.		
	• Is the voltage between 1.5 - 3.5 V?		
4	INSPECT PARKING SENSOR CONTROL	Yes	Replace the parking sensor control module because there
"	MODULE FOR SHORT TO POWER SUPPLY	168	'
	• Switch the ignition off (LOCK).		is a short to power supply in the parking sensor control module.
	Disconnect the negative battery cable.		(See PARKING SENSOR CONTROL MODULE
	(See NEGATIVE BATTERY CABLE		1 '
	DISCONNECTION/CONNECTION	No	REMOVAL/INSTALLATION.)
		No	Repair or replace the wiring harness between the parking
	[SKYACTIV-D 2.2].)		sensor control module and connector C-34 because the
	Disconnect the parking sensor control module connector		wiring harness is shorted to the power supply.
	connector.		
	Connect the pagetive bettery cable		
	Connect the negative battery cable. (See NECATIVE BATTERY CABLE)		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
5	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to Step 7.
	BETWEEN CONNECTOR C-34 AND CLIMATE	No	Go to the next step.
	CONTROL UNIT OR CLOCK		or to the next step.
	Measure the voltage at climate control unit		
	terminals 1S and 1U. (with full-auto air		
	conditioner)		
	Measure the voltage at clock terminals E and G.		
	(with manual air conditioner)		
	• Is the voltage between 1.5 - 3.5 V?		
6	INSPECT CLIMATE CONTROL UNIT OR	Yes	Replace the climate control unit or the clock because there
	CLOCK FOR SHORT TO POWER SUPPLY		is a short to power supply inside the climate control unit or
	Switch the ignition off (LOCK).		the clock.
	Disconnect the negative battery cable.		(See CLIMATE CONTROL UNIT REMOVAL/
	(See NEGATIVE BATTERY CABLE		INSTALLATION [FULL-AUTO AIR CONDITIONER].)
	DISCONNECTION/CONNECTION		(See CLOCK REMOVAL/INSTALLATION.)
	[SKYACTIV-D 2.2].)	No	Repair or replace the wiring harness between the climate
	Disconnect the climate control unit connector or		control unit or the clock and connector C-34 because the
	the clock connector.		wiring harness is shorted to the power supply.
	• Connect connector C-34.		
	Connect the negative battery cable. (See NEGATIVE BATTERY CABLE)		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		
7	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to Step 9.
	BETWEEN CONNECTOR C-34 AND AUDIO	No	Go to the next step.
	Measure the voltage at audio unit terminals 10		
	and 1Q.		
	• Is the voltage between 1.5 - 3.5 V?		
8	INSPECT AUDIO UNIT FOR SHORT TO	Yes	Replace the audio unit because there is a short to the
	POWER SUPPLY		power supply in the audio unit.
	Switch the ignition off (LOCK). Disconnect the negative battery cable.	No	(See AUDIO UNIT REMOVAL/INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Repair or replace the wiring harness between the audio unit and connector C-34 because the wiring harness is
	DISCONNECTION/CONNECTION		shorted to the power supply.
	[SKYACTIV-D 2.2].)		shorted to the power supply.
	• Disconnect the audio unit connector.		
	Connect connector C34.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at audio unit terminals 10		
	and 1Q (wiring harness side).		
	• Is the voltage between 1.5 - 3.5 V?	V.	Danis an analysis the minimum to the second of the second
9	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Repair or replace the wiring harness between connector
	BETWEEN CONNECTOR C-34 AND INSTRUMENT CLUSTER		C-08 and connector C-34 because the wiring harness is shorted to the power supply.
	Measure the voltage at instrument cluster	No	Go to the next step.
	terminals C and E.	INO	שי וט נו פ וופגנ אפף.
	• Is the voltage between 1.5 - 3.5 V?		
	10 the voltage between 1.0 - 0.0 V!		

Step	Inspection		Action
10	INSPECT INSTRUMENT CLUSTER FOR	Yes	Replace the instrument cluster because there is a short to
'0	SHORT TO POWER SUPPLY	.03	the power supply in the instrument cluster.
	Switch the ignition off (LOCK).		(See INSTRUMENT CLUSTER REMOVAL/
	Disconnect the negative battery cable.		INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Repair or replace the wiring harness between the
	DISCONNECTION/CONNECTION		instrument cluster and connector C-34 because the wiring
	[SKYACTIV-D 2.2].)		harness is shorted to the power supply.
	Disconnect the instrument cluster connector.		, , , , , , , , , , , , , , , , , , , ,
	Connect connector C-34.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		
11	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to the next step.
	BETWEEN CONNECTORS C-14 AND C-08	No	Repair or replace the wiring harness between connector
	Switch the ignition off (LOCK).		C-14 and connector C-08 because the wiring harness is
	Disconnect the negative battery cable.		shorted to the power supply.
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connector C-14.		
	Connect connector C-08.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		
12	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to the next step.
	BETWEEN CONNECTORS C-47 AND C-48	No	Repair or replace the wiring harness between connectors
	AND CONNECTOR C-14		C-47 and C-48 and connector C-14 because the wiring
	Switch the ignition off (LOCK).		harness is shorted to the power supply.
	• Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].) • Disconnect connectors C-47 and C-48.		
	• Connect connector C-14.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		
13	INSPECT BETWEEN REAR VEHICLE	Yes	Go to Step 16.
	MONITORING CONTROL MODULE (RH) OR	No	Go to the next step. (With rear vehicle monitoring system)
	BSM CONTROL MODULE (RH) AND		• Go to Step 15.
	CONNECTORS C-47 AND C-48 FOR SHORT		
	TO POWER SUPPLY		
	Measure the voltage at rear vehicle monitoring		
	control module (RH) terminals L and I. (With		
	rear vehicle monitoring system)		
	Measure the voltage at BSM control module		
	(RH) terminals H and G. (With BSM system)		
	• Is the voltage between 1.5 - 3.5 V?		
	· · ·		

Step	Inspection		Action
14	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Repair or replace the wiring harness between connector
	BETWEEN REAR VEHICLE MONITORING		C-43 and connectors C-47 and C-48 because the wiring
	CONTROL MODULE (RH) AND CONNECTOR		harness is shorted to the power supply.
	C-43	No	Go to the next step.
	Switch the ignition off (LOCK).		'
	Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connectors C-43.		
	 Connect the negative battery cable. 		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at rear vehicle monitoring		
	(RH) terminals L and I.		
	• Is the voltage between 1.5 - 3.5 V?		
15	INSPECT BETWEEN REAR VEHICLE	Yes	Replace the rear vehicle monitoring control module (RH)
	MONITORING CONTROL MODULE (RH) OR		or the BSM control module (RH) because there is a short
	BSM CONTROL MODULE (RH) FOR SHORT		to the power supply in the rear vehicle monitoring control
	TO POWER SUPPLY		module (RH) or the BSM control module (RH).
	Switch the ignition off (LOCK). Disconnect the negative battery cable.		(See REAR VEHICLE MONITORING CONTROL MODULE REMOVAL/INSTALLATION.)
	(See NEGATIVE BATTERY CABLE		(See BLIND SPOT MONITORING (BSM) CONTROL
	DISCONNECTION/CONNECTION		MODULE REMOVAL/INSTALLATION.)
	[SKYACTIV-D 2.2].)	No	Repair or replace the wiring harness between the rear
	Disconnect the rear vehicle monitoring control	140	vehicle monitoring control module (RH) and connector
	modules (RH) connector or the BSM control		C-43 because the wiring harness is shorted to the power
	module (RH) connector.		supply. (With rear vehicle monitoring system)
	Connect connectors C-47 and C-48.		Repair or replace the wiring harness between the BSM
	Connect the negative battery cable.		control module (RH) and connectors C-47 and C-48
	(See NEGATIVE BATTERY CABLE		because the wiring harness is shorted to the power
	DISCONNECTION/CONNECTION		supply. (With BSM system)
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals L and		
	K.		
	• Is the voltage between 1.5 - 3.5 V?		
16	INSPECT FOR SHORT TO POWER SUPPLY	Yes	Go to Step 19.
	BETWEEN REAR BODY CONTROL MODULE	No	Go to the next step.
	(RBCM) AND BSM CONTROL MODULE (LH)		
	OR REAR MOUNT CAMERA		
	Switch the ignition off (LOCK). Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect the rear body control module		
	(RBCM) connector.		
	Connect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Switch the ignition ON (engine off).		
	Measure the voltage at BSM control module		
	(LH) terminals H and G. (With BSM system)		
	Measure the voltage at BSM control module		
	(LH) terminals H and G. (With rear mount		
	camera)		
	• Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
17	INSPECT BETWEEN REAR BODY CONTROL	Yes	Go to the next step.
	MODULE (RBCM) AND CONNECTOR C-23 OR C-21 FOR SHORT TO POWER SUPPLY • Switch the ignition off (LOCK). • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Disconnect connector C-23 or C-21. • Connect the rear body control module (RBCM) connector. • Connect connectors C-47 and C-48. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Switch the ignition ON (engine off). • Measure the voltage at DLC-2 terminals L and K. • Is the voltage between 1.5 - 3.5 V?	No	Repair or replace the wiring harness between the rear body control module (RBCM) and connector C-23 or C-21 because the wiring harness is shorted to the power supply.
18	INSPECT BSM CONTROL MODULE (LH) OR REAR MOUNT CAMERA FOR SHORT TO POWER SUPPLY • Switch the ignition off (LOCK). • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Disconnect the BSM control module (LH) connector or the rear mount camera connector. • Connect connector C-23 or C-21. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Switch the ignition ON (engine off). • Measure the voltage at DLC-2 terminals L and K. • Is the voltage between 1.5 - 3.5 V?	No	Replace the BSM control module (LH) or the rear mount camera because there is a short to the power supply in the BSM control module (LH) or the rear mount camera. (See BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/INSTALLATION.) (See REAR MOUNT CAMERA REMOVAL/INSTALLATION.) • Repair or replace the wiring harness between BSM control module (LH) and connector C-23 because the wiring harness is shorted to the power supply. (With BSM system) • Repair or replace the wiring harness between the rear mount camera and connector C-21 because the wiring harness is shorted to the power supply. (With rear mount camera)
19	INSPECT REAR BODY CONTROL MODULE (RBCM) FOR SHORT TO POWER SUPPLY • Switch the ignition off (LOCK). • Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Connect connectors C-47 and C-48. • Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Switch the ignition ON (engine off). • Measure the voltage at DLC-2 terminals L and K. • Is the voltage between 1.5 - 3.5 V?	Yes	Replace the rear body control module (RBCM) because there is a short to the power supply in the rear body control module (RBCM). (See REAR BODY CONTROL MODULE (RBCM) REMOVAL/INSTALLATION.) Repair or replace the wiring harness between the rear body control module (RBCM) and connectors C-47 and C-48 because the wiring harness is shorted to the power supply.