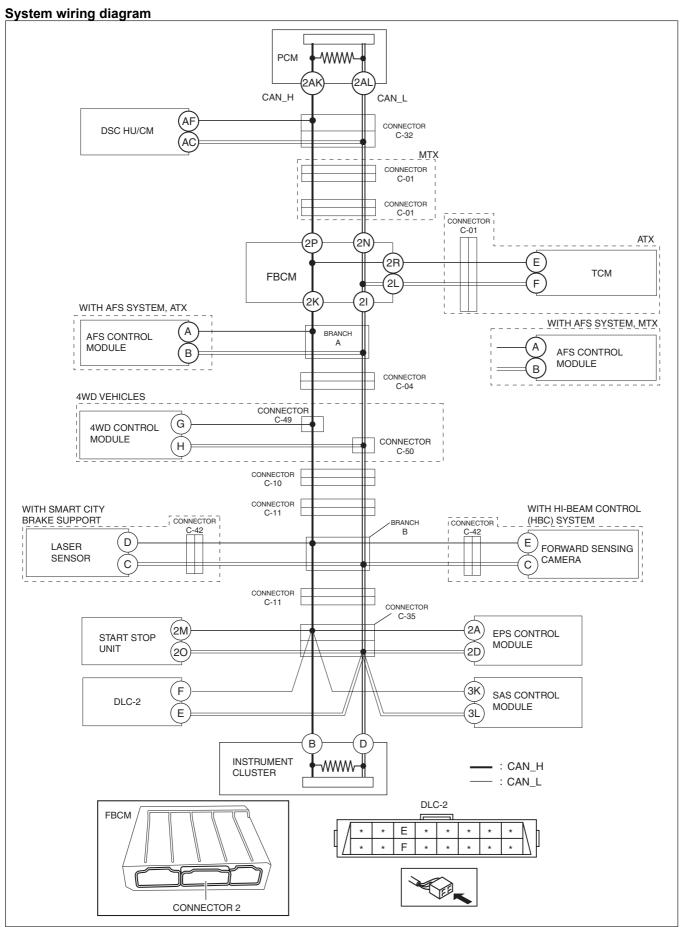
DETERMINING SHORT TO POWER SUPPLY LOCATION (HS-CAN) [SKYACTIV-D 2.2 (L.H.D.)]

id100205000700

Caution

 Perform the following malfunction diagnosis only when it is diagnosed with a short to power supply by CONTROLLER AREA NETWORK (CAN) MALFUNCTION DIAGNOSIS FLOW [SKYACTIV-D 2.2 (L.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 the next step.
	BETWEEN FRONT BODY CONTROL MODULE	No	Go to Step 5.
	(FBCM) AND INSTRUMENT CLUSTER		'
	Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connector 2 which has front body		
	control module (FBCM) terminals 2K and 2I.		
	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 F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		
2	INSPECT CAN LINE BETWEEN TCM OR AFS	Yes	Go to Step 26.
	CONTROL MODULE AND FRONT BODY	No	Go to the next step. (ATX)
	CONTROL MODULE (FBCM) FOR SHORT TO		Go to Step 4. (MTX)
	POWER SUPPLY		
	Measure the voltage at TCM terminals E and F.		
	(ATX)		
	Measure the voltage at AFS control module terminals A and B. (MTX)		
	terminals A and B. (MTX) • Is the voltage between 1.5 - 3.5 V?		
3	INSPECT CAN LINE BETWEEN TCM AND	Yes	Repair or replace the wiring harness between connector
3	CONNECTOR C-01 FOR SHORT TO POWER	165	C-01 and the front body control module (FBCM) because
	SUPPLY		the wiring harness is shorted to the power supply.
	Switch the ignition off (LOCK).	No	Go to the next step.
	Disconnect the negative battery cable.	110	Outo the next step.
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Disconnect connector C-01.		
	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 TCM terminals E and F.		
	• Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
4	INSPECT TCM OR AFS CONTROL MODULE	Yes	Replace the TCM because there is a short to the power
	FOR SHORT TO POWER SUPPLY	100	supply in the TCM. (ATX)
	Switch the ignition off (LOCK).		(See CONTROL VALVE BODY REMOVAL/
	Disconnect the negative battery cable.		INSTALLATION [FW6A-EL, FW6AX-EL].)
	(See NEGATIVE BATTERY CABLE		(See CONTROL VALVE BODY REMOVAL/
	DISCONNECTION/CONNECTION		INSTALLATION [GW6A-EL, GW6AX-EL].)
			Replace the AFS control module because there is a short
	[SKYACTIV-D 2.2].)		
	Disconnect the TCM connector. (ATX) Connect connector. (ATX)		to the power supply in the AFS control module. (MTX)
	Connect connector C-01. (ATX) Discourse of the AFC control resolution and the AFC control resolutions.		(See ADAPTIVE FRONT LIGHTING SYSTEM (AFS)
	• Disconnect the AFS control module connector.		CONTROL MODULE REMOVAL/INSTALLATION.)
	(MTX)	No	Repair or replace the wiring harness between TCM and
	Connect connector 2 which has front body		connector C-01 because the wiring harness is shorted to
	control module (FBCM) terminals 2K and 2I		the power supply. (ATX)
	Connect the negative battery cable.		Repair or replace the wiring harness between AFS control
	(See NEGATIVE BATTERY CABLE		module and the front body control module (FBCM)
	DISCONNECTION/CONNECTION		because the wiring harness is shorted to the power
	[SKYACTIV-D 2.2].)		supply. (MTX)
	Switch the ignition ON (engine off).		
	Measure the voltage at DLC-2 terminals F and		
	E.		
	 Is the voltage between 1.5 - 3.5 V? 		
5	INSPECT CAN LINE BETWEEN CONNECTOR	Yes	Go to the next step. (ATX)
	C-04 AND INSTRUMENT CLUSTER FOR		Repair or replace the wiring harness between the front
	SHORT TO POWER SUPPLY		body control module (FBCM) and connector C-04
	Switch the ignition off (LOCK).		because the wiring harness is shorted to the power
	Disconnect the negative battery cable.		supply. (MTX)
	(See NEGATIVE BATTERY CABLE	No	Go to Step 7.
	DISCONNECTION/CONNECTION		'
	[SKYACTIV-D 2.2].)		
	Disconnect connector C-04.		
	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 F and		
	E.		
	Is the voltage between 1.5 - 3.5 V?		
6	INSPECT AFS CONTROL MODULE FOR	Yes	Replace the AFS control module because there is a short
	SHORT TO POWER SUPPLY		to the power supply in the AFS control module.
	Switch the ignition off (LOCK).		(See ADAPTIVE FRONT LIGHTING SYSTEM (AFS)
	Disconnect the negative battery cable.		CONTROL MODULE REMOVAL/INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Repair or replace the wiring harness between AFS control
	DISCONNECTION/CONNECTION		module and the front body control module (FBCM) /
	[SKYACTIV-D 2.2].)		connector C-04 because the wiring harness is shorted to
	• Disconnect the AFS control module connector.		the power supply.
	Connect connector C-04.		k awkk-1.
	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 F and		
	E.		
	Is the voltage between 1.5 - 3.5 V?		
	- 19 the voltage between 1.0 - 3.0 V!		

Step	Inspection		Action
7	INSPECT CAN LINE BETWEEN	Yes	Go to the next step.
	CONNECTORS C-49 AND C-50 AND	No	Go to Step 10.
	INSTRUMENT CLUSTER FOR SHORT TO	110	Go to step 10.
	POWER SUPPLY		
	Switch the ignition off (LOCK).		
	Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Disconnect connectors C-49 and C-50.		
	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 F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		
8	INSPECT CAN LINE BETWEEN 4WD	Yes	Repair or replace the wiring harness between connector
0	CONTROL MODULE AND CONNECTORS	168	C-04 and connectors C-49 and C-50 because the wiring
	C-49 AND C-50 FOR SHORT TO POWER		harness is shorted to the power supply.
	SUPPLY	No	Go to the next step.
	Measure the voltage at 4WD control module	INO	GO to the flext step.
	terminals G and H.		
	• Is the voltage between 1.5 - 3.5 V?		
9	INSPECT 4WD CONTROL MODULE FOR	Yes	Replace the 4WD control module because there is a short
9	SHORT TO POWER SUPPLY	165	to the power supply in the 4WD control module.
	• Switch the ignition off (LOCK).		(See 4WD CONTROL MODULE REMOVAL/
	Disconnect the negative battery cable.		INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Repair or replace the wiring harness between the 4WD
	DISCONNECTION/CONNECTION	INO	control module and connectors C-49 and C-50 because the
	[SKYACTIV-D 2.2].)		wiring harness is shorted to the power supply.
	• Connect connectors C-49 and C-50.		willing harriess is shorted to the power suppry.
	Disconnect the 4WD control module 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 DLC-2 terminals F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		
10	INSPECT CAN LINE BETWEEN CONNECTOR	Yes	Repair or replace the wiring harness between connectors
	C-10 AND INSTRUMENT CLUSTER FOR		C-49 and C-50 and connector C-10 because the wiring
	SHORT TO POWER SUPPLY		harness is shorted to the power supply.
	Switch the ignition off (LOCK).	No	Go to the next step.
	Disconnect the negative battery cable.		'
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connector C-10.		
	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 F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		
	•		

Step	Inspection		Action
11	INSPECT CAN LINE BETWEEN CONNECTOR	Yes	Go to the next step.
	C-11 AND INSTRUMENT CLUSTER FOR	No	Go to Step 17.
	SHORT TO POWER SUPPLY	110	G0 t0 0t0p 17.
	Switch the ignition off (LOCK).		
	Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	Disconnect connector C-11.		
	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 F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		
12	INSPECT CAN LINE BETWEEN CONNECTOR	Yes	Repair or replace the wiring harness between connector
	C-11 AND FORWARD SENSING CAMERA/		C-10 and connector C-11 because the wiring harness is
	LASER SENSOR FOR SHORT TO POWER		shorted to the power supply.
	SUPPLY	No	Go to the next step.
	Measure the voltage at the forward sensing		
	camera terminals E and C (with high beam		
	control (HBC) system).		
	Measure the voltage at laser sensor terminals D		
	and C (with smart city brake support).		
	• Is the voltage between 1.5 - 3.5 V?		
13	INSPECT CAN LINE BETWEEN LASER	Yes	Go to Step 15.
	SENSOR AND CONNECTOR C-42 FOR	No	Go to the next step.
	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-42.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 laser sensor terminals D		
	and C.		
	• Is the voltage between 1.5 - 3.5 V?		
14	INSPECT LASER SENSOR FOR SHORT TO	Yes	Replace the laser sensor because there is a short to the
'	POWER SUPPLY		power supply in the laser sensor.
	Switch the ignition off (LOCK).		(See LASER SENSOR REMOVAL/INSTALLATION.)
	Disconnect the negative battery cable.	No	Repair or replace the wiring harness between the laser
	(See NEGATIVE BATTERY CABLE		sensor and connector C-42 because the wiring harness is
	DISCONNECTION/CONNECTION		shorted to the power supply.
	[SKYACTIV-D 2.2].)		'''
	Disconnect the laser sensor connector.		
	Connect connector C-42.		
	Connect connector C-11.		
	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 F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
15	INSPECT CAN LINE BETWEEN FORWARD	Yes	Repair or replace the wiring harness between connector
	SENSING CAMERA AND CONNECTOR C-42		C-11 and connector C-42 because the wiring harness is
	FOR SHORT TO POWER SUPPLY		shorted to the power supply.
	Measure the voltage at forward sensing camera	No	Go to the next step.
	terminals E and C.		•
	Is the voltage between 1.5 - 3.5 V?		
16	INSPECT FORWARD SENSING CAMERA FOR	Yes	Replace the forward sensing camera because there is a
	SHORT TO POWER SUPPLY		short to the power supply in the forward sensing camera.
	Switch the ignition off (LOCK).		(See FORWARD SENSING CAMERA (FSC) REMOVAL/
	Disconnect the negative battery cable.		INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Repair or replace the wiring harness between the forward
	DISCONNECTION/CONNECTION		sensing camera and connector C-42 because the wiring
	[SKYACTIV-D 2.2].)		harness is shorted to the power supply.
	Disconnect the forward sensing camera		
	connector.		
	Connect connector C-42.		
	Connect connector C-11.		
	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 F and		
	E		
47	• Is the voltage between 1.5 - 3.5 V?	\/	0 - 4 - 4 4 - 4
17	INSPECT CAN LINE BETWEEN CONNECTOR C-35 AND DLC-2 FOR SHORT TO POWER	Yes	Go to the next step.
	SUPPLY	No	Repair or replace the wiring harness between connector C-35 and DLC-2 because the wiring harness is shorted to
	Switch the ignition off (LOCK).		the power supply.
	Disconnect the negative battery cable.		The power supply.
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Disconnect connector C-35.		
	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 F and		
	E.		
	Is the voltage 0 V?		
18	INSPECT CAN LINE BETWEEN START STOP	Yes	Go to Step 20.
	UNIT AND CONNECTOR C-35 FOR SHORT TO	No	Go to the next step.
	POWER SUPPLY		·
	Measure the voltage at start stop unit terminals		
	2M and 2O.		
	Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
19	INSPECT START STOP UNIT FOR SHORT TO	Yes	Replace the start stop unit because there is a short to the
19	POWER SUPPLY	162	power supply in the start stop unit.
	Switch the ignition off (LOCK). Disconnect the pagetive better cookle	Nia	(See START STOP UNIT REMOVAL/INSTALLATION.)
	• Disconnect the negative battery cable.	No	Repair or replace the wiring harness between the start stop
	(See NEGATIVE BATTERY CABLE		unit and connector C-35 because the wiring harness is
	DISCONNECTION/CONNECTION		shorted to the power supply.
	[SKYACTIV-D 2.2].)		
	• Connect connector C-35.		
	Disconnect the start stop unit 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 DLC-2 terminals E and		
	F.		
	• Is the voltage between 1.5 - 3.5 V?		
20	INSPECT CAN LINE BETWEEN EPS	Yes	Go to Step 22.
	CONTROL MODULE AND CONNECTOR C-35	No	Go to the next step.
	FOR SHORT TO POWER SUPPLY		
	Measure the voltage at EPS control module		
	terminals 2A and 2D.		
0.4	• Is the voltage between 1.5 - 3.5 V?	\/	Della di EDO contalia di la la contalia di
21	INSPECT EPS CONTROL MODULE FOR	Yes	Replace the EPS control module because there is a short
	SHORT TO POWER SUPPLY		to the power supply in the EPS control module.
	Switch the ignition off (LOCK).		(See STEERING WHEEL AND COLUMN REMOVAL/
	Disconnect the negative battery cable.		INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Repair or replace the wiring harness between the EPS
	DISCONNECTION/CONNECTION		control module and connector C-35 because the wiring
	[SKYACTIV-D 2.2].)		harness is shorted to the power supply.
	• Connect connector C-35.		
	Disconnect the EPS control module connector.		
	Connect the negative battery cable. 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 E and		
	F Weasure the voltage at DLC-2 terminals E and		
	• Is the voltage between 1.5 - 3.5 V?		
22	INSPECT CAN LINE BETWEEN INSTRUMENT	Yes	Go to Step 24.
	CLUSTER AND CONNECTOR C-35 FOR		·
	SHORT TO POWER SUPPLY	No	Go to the next step.
	Measure the voltage at instrument cluster		
	terminals B and D.		
	• Is the voltage between 1.5 - 3.5 V?		
23	INSPECT INSTRUMENT CLUSTER FOR	Yes	Replace the instrument cluster because the instrument
20	SHORT TO POWER SUPPLY	. 03	cluster is shorted to the power supply.
	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	. 10	instrument cluster and connector C-35 because the wiring
	[SKYACTIV-D 2.2].)		harness is shorted to the power supply.
	• Connect connector C-35.		
	Disconnect the instrument cluster 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 DLC-2 terminals F and		
	E.		
	Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
24	INSPECT CAN LINE BETWEEN SAS	Yes	Go to the next step.
24	CONTROL MODULE AND CONNECTOR C-35 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 SAS control module 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 SAS control module	No	Repair or replace the wiring harness between the SAS control module and connector C-35 because the wiring harness is shorted to the power supply.
25	terminals 3K and 3L (wiring harness side). • Is the voltage 0 V? INSPECT CAN LINE BETWEEN CONNECTOR C-11 AND CONNECTOR C-35 FOR SHORT TO POWER SUPPLY • Switch the ignition off (LOCK).	Yes	Replace the SAS control module because there is a short to the power supply in the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.)
	 Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) Connect connector C-35. Disconnect the SAS control module 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 DLC-2 terminals F and E. Is the voltage between 1.5 - 3.5 V? 	No	Repair or replace the wiring harness between connector C-11 and connector C-35 because the wiring harness is shorted to the power supply.
26	INSPECT CAN LINE BETWEEN PCM AND FRONT BODY CONTROL MODULE (FBCM) FOR SHORT TO POWER SUPPLY • Measure voltage at PCM terminals 2AK and 2AL. • Is the voltage between 1.5 - 3.5 V?	Yes	Replace the front body control module (FBCM) because there is a short to the power supply in the front body control module (FBCM). (See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.) • Go to Step 29. (ATX)
27	INSPECT CAN LINE BETWEEN CONNECTOR C-01 AND FRONT BODY CONTROL MODULE (FBCM) 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-01. • Connect connector 2 which has front body control module (FBCM) terminals 2K and 2I. • 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 F and E. • Is the voltage between 1.5 - 3.5 V?	Yes	Go to the next step. Go to the next step. Repair or replace the wiring harness between connector C-01 and the front body control module (FBCM) because the wiring harness is shorted to the power supply.

Step	Inspection		Action
28	INSPECT CAN LINE BETWEEN CONNECTOR	Yes	Go to Step 30.
	C-01 AND CONNECTOR C-32 FOR SHORT TO POWER SUPPLY	No	Repair or replace the wiring harness between connector C-01 and connector C-32 because the wiring harness is
	Switch the ignition off (LOCK).		shorted to the power supply.
	• Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION		
	[SKYACTIV-D 2.2].)		
	• Disconnect connector C-32.		
	Connect connector C-01.		
	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 F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		
29	INSPECT CAN LINE BETWEEN CONNECTOR C-32 AND FRONT BODY CONTROL MODULE	Yes	Go to the next step.
	(FBCM) FOR SHORT TO POWER SUPPLY	No	Repair or replace the wiring harness between connector C-32 and front body control module (FBCM) because the
	Switch the ignition off (LOCK).		wiring harness is shorted to the power supply.
	Disconnect the negative battery cable.		
	(See NEGATIVE BATTERY CABLE		
	DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)		
	• Disconnect connector C-32.		
	Connect connector 2 which has front body		
	control module (FBCM) terminals 2K and 2I.		
	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 F and		
	E		
30	• Is the voltage between 1.5 - 3.5 V? INSPECT CAN LINE BETWEEN DSC HU/CM	Yes	Go to Step 32.
30	AND CONNECTOR C-32 FOR SHORT TO	No	Go to the next step.
	POWER SUPPLY	110	So to the next step.
	Measure voltage at DSC HU/CM terminals AF		
	and AC.		
31	• Is the voltage between 1.5 - 3.5 V? INSPECT DSC HU/CM FOR SHORT TO	Yes	Replace the DSC HU/CM because the DSC HU/CM is
31	POWER SUPPLY	162	shorted to the power supply.
	Switch the ignition off (LOCK).		(See DSC HU/CM REMOVAL/INSTALLATION.)
	Disconnect the negative battery cable.	No	Repair or replace the wiring harness between the DSC HU/
	(See NEGATIVE BATTERY CABLE		CM and connector C-32 because the wiring harness is
	DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)		shorted to the power supply.
	• Connect connector C-32.		
	Disconnect the DSC HU/CM 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 DLC-2 terminals F and		
	E.		
	• Is the voltage between 1.5 - 3.5 V?		

Step	Inspection		Action
32	INSPECT PCM FOR SHORT TO POWER SUPPLY • Switch the ignition off (LOCK). • Disconnect the negative battery cable.	Yes	Replace the PCM because there is a short to the power supply in the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
	(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) • Connect connector C-32. • Disconnect the PCM 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 DLC-2 terminals F and E. • Is the voltage between 1.5 - 3.5 V?	No	Repair or replace the wiring harness between the PCM and connector C-32 because the wiring harness is shorted to the power supply.