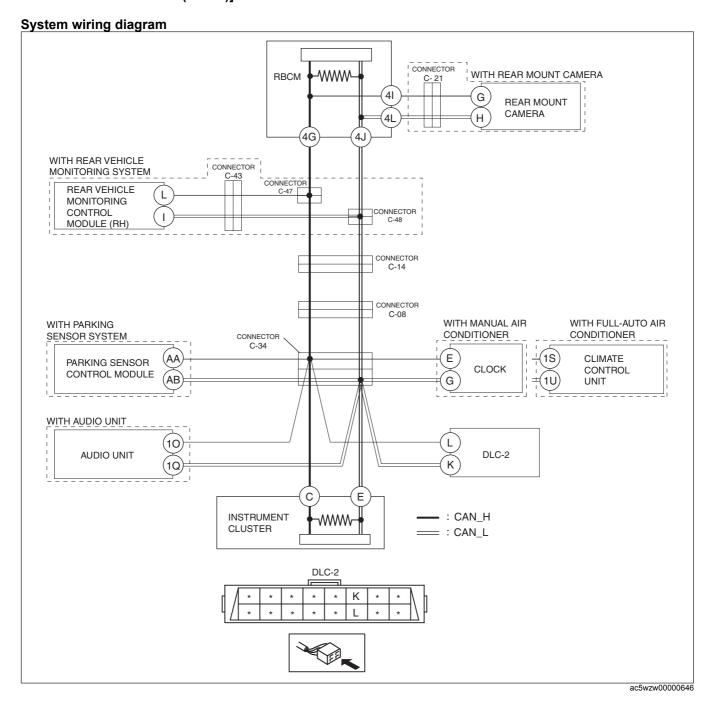
## DETERMINING SHORT TO GROUND LOCATION (MS-CAN) [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (L.H.D.)]

## Caution

 Perform the following malfunction diagnosis only when it is diagnosed with a short to ground by CONTROLLER AREA NETWORK (CAN) MALFUNCTION DIAGNOSIS FLOW [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (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.

Step	Inspection		Action
1	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN CONNECTOR C-08 AND	No	Go to Step 11.
	INSTRUMENT CLUSTER		
	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)].)		
	Disconnect connector C-08.		
	Inspect for continuity at the following terminals:		
	Between DLC-2 terminal L and body		
	ground		
	Between DLC-2 terminal K and body		
	ground		
	Is there continuity?		
2	INSPECT FOR SHORT TO GROUND	Yes	Repair or replace the wiring harness between connector
_	BETWEEN CONNECTORS C-34 AND DLC-2		C-34 and DLC-2 because the wiring harness is shorted to
	Disconnect connector C-34.		ground.
	<ul> <li>Inspect for continuity at the following terminals:</li> </ul>	No	Go to the next step.
	Between DLC-2 terminal L and body		
	ground		
	<ul> <li>Between DLC-2 terminal K and body</li> </ul>		
	ground		
	Is there continuity?		
3	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN CONNECTOR C-34 AND PARKING	No	Go to Step 5.
	SENSOR CONTROL MODULE		
	Inspect for continuity at the following terminals:		
	Between parking sensor control module		
	terminal AA and body ground		
	Between parking sensor control module		
	terminal AB and body ground		
	• Is there continuity?		
4	INSPECT CAN LINE IN PARKING SENSOR	Yes	Repair or replace the wiring harness between the parking
	CONTROL MODULE FOR SHORT TO		sensor control module and connector C-34 because the
	GROUND	NI-	wiring harness is shorted to ground.
	Disconnect the parking sensor control module connector.	No	Replace the parking sensor control module because there is a short to ground in the parking sensor control module.
	Inspect for continuity at the following terminals:		(See PARKING SENSOR CONTROL MODULE
	Between parking sensor control module		REMOVAL/INSTALLATION.)
	terminal AA (wiring harness side) and body		INCIVIO VAL/IINO I ALLA I IOIN.)
	ground		
	Between parking sensor control module		
	terminal AB (wiring harness side) and body		
	ground		
	• Is there continuity?		
	to thore continuity:		

Step	Inspection		Action
5	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN CONNECTOR C-34 AND CLIMATE	No	Go to Step 7.
	CONTROL UNIT OR CLOCK		*** *** *** *** *** *** *** *** *** *
	Inspect for continuity at the following terminals:		
	Between climate control unit terminal 1S		
	and body ground (with full-auto air		
	conditioner)		
	Between climate control unit terminal 1U		
	and body ground (with full-auto air		
	conditioner)		
	Between clock terminal E and body ground		
	(with manual air conditioner)		
	Between clock terminal G and body ground		
	(with manual air conditioner)		
	• Is there continuity?		
6	INSPECT CAN LINE IN CLIMATE CONTROL	Yes	Repair or replace the wiring harness between the climate
	UNIT OR CLOCK FOR SHORT TO GROUND	. 00	control unit or clock and connector C-34 because the wiring
	Disconnect the climate control unit connector or		harness is shorted to ground.
	clock connector.	No	Replace the climate control unit or the clock because there
	Inspect for continuity at the following terminals:		is a short to ground inside the climate control unit or the
	Between climate control unit terminal 1S		clock.
	(wiring harness side) and body ground (with		(See CLIMATE CONTROL UNIT REMOVAL/
	full-auto air conditioner)		INSTALLATION [FULL-AUTO AIR CONDITIONER].)
	Between climate control unit terminal 1U		(See CLOCK REMOVAL/INSTALLATION.)
	(wiring harness side) and body ground (with		,
	full-auto air conditioner)		
	Between clock terminal E (wiring harness		
	side) and body ground (with manual air		
	conditioner)		
	Between clock terminal G (wiring harness		
	side) and body ground (with manual air		
	conditioner)		
	Is there continuity?		
7	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN CONNECTOR C-34 AND AUDIO	No	Go to Step 9.
	UNIT		
	Inspect for continuity at the following terminals:		
	Between audio unit terminal 10 and body		
	ground		
	Between audio unit terminal 1Q and body		
	ground		
	• Is there continuity?	.,	
8	INSPECT CAN LINE IN AUDIO UNIT FOR	Yes	Repair or replace the wiring harness between the audio
	SHORT TO GROUND		unit and connector C-34 because the wiring harness is
	Disconnect the audio unit connector.		shorted to ground.
	• Inspect for continuity at the following terminals:	No	Replace the audio unit because there is a short to ground
	Between audio unit terminal 10 (wiring bernaga side) and hadv ground		inside the audio unit.
	harness side) and body ground		(See AUDIO UNIT REMOVAL/INSTALLATION.)
	Between audio unit terminal 1Q (wiring harness side) and body ground		
	harness side) and body ground		
9	• Is there continuity?	Voc	Co to the poyt stap
9	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN CONNECTOR C-34 AND	No	Repair or replace the wiring harness between connectors
	INSTRUMENT CLUSTER		C-08 and C-34 because the wiring harness is shorted to
	Inspect for continuity at the following terminals:      Detivine instrument elector terminal C and		ground.
	Between instrument cluster terminal C and body ground		
	body ground  Retween instrument cluster terminal E and		
	Between instrument cluster terminal E and body ground		
	body ground		
	• Is there continuity?		

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Step	Inspection	V	Action
10	INSPECT CAN LINE IN INSTRUMENT	Yes	Repair or replace the wiring harness between the
	CLUSTER FOR SHORT TO GROUND		instrument cluster and connector C-34 because the wiring
	Disconnect the instrument cluster connector.		harness is shorted to ground.
	Inspect for continuity at the following terminals:	No	Replace the instrument cluster because there is a short to
	Between instrument cluster terminal C		ground in the instrument cluster.
	(wiring harness side) and body ground		(See INSTRUMENT CLUSTER REMOVAL/
	Between instrument cluster terminal E		INSTALLATION.)
	(wiring harness side) and body ground		
	Is there continuity?		
11	INSPECT FOR SHORT TO GROUND	Yes	Repair or replace the wiring harness between connectors
	BETWEEN CONNECTORS C-14 AND C-08		C-14 and C-08 because the wiring harness is shorted to
	Disconnect connector C-14.		ground.
	Connect connector C-08.	No	Go to the next step.
	Inspect for continuity at the following terminals:		·
	<ul> <li>Between DLC-2 terminal L and body</li> </ul>		
	ground		
	Between DLC-2 terminal K and body		
	ground		
	Is there continuity?		
12	INSPECT FOR SHORT TO GROUND	Yes	Repair or replace the wiring harness between connectors
	BETWEEN CONNECTOR C-14 AND		C-47 and C-48 and connector C-14 because the wiring
	CONNECTORS C-47 AND C-48		harness is shorted to ground.
	Disconnect connectors C-47 and C-48.	No	Go to the next step.
	Connect connector C-14.		
	Inspect for continuity at the following terminals:		
	Between DLC-2 terminal L and body		
	ground		
	Between DLC-2 terminal K and body		
	ground		
	Is there continuity?		
13	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN REAR VEHICLE MONITORING	No	Go to Step 16.
	CONTROL MODULE (RH) AND	110	00 to 0top 10.
	CONNECTORS C-47 AND C-48		
	Inspect for continuity at the following terminals:		
	Between rear vehicle monitoring control		
	module (RH) terminal L and body ground		
	Between rear vehicle monitoring control		
	module (RH) terminal I and body ground		
	• Is there continuity?		
14	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
	BETWEEN REAR VEHICLE MONITORING	No	Repair or replace the wiring harness between connector
	CONTROL MODULE (RH) AND CONNECTOR		C-43 and connectors C-47 and C-48 because the wiring
	C-43		harness is shorted to ground.
	Disconnect connector C-43.		3
	• Inspect for continuity at the following terminals:		
	Between rear vehicle monitoring control		
	module (RH) terminal L and body ground		
	Between rear vehicle monitoring control		
	module (RH) terminal I and body ground		
	• Is there continuity?		
15	INSPECT CAN LINE IN REAR VEHICLE	Yes	Repair or replace the wiring harness between the rear
	MONITORING CONTROL MODULE (RH) FOR		vehicle monitoring control module (RH) and connector
	SHORT TO GROUND		C-43 because the wiring harness is shorted to ground.
	Disconnect the rear vehicle monitoring control	No	Replace the rear vehicle monitoring control module (RH)
	module connector.		because there is a short to ground in the rear vehicle
	Inspect for continuity at the following terminals:		monitoring control module (RH).
	Between rear vehicle monitoring control		(See REAR VEHICLE MONITORING CONTROL
	module (RH) terminal L (wiring harness		MODULE REMOVAL/INSTALLATION.)
	side) and body ground		,
	Between rear vehicle monitoring control		
	module (RH) terminal I (wiring harness		
	side) and body ground		
	Is there continuity?		
	is a lore continuity:		

Step	Inspection		Action
16	INSPECT FOR SHORT TO GROUND	Yes	Go to the next step.
.0	BETWEEN REAR BODY CONTROL MODULE	No	Go to Step 19.
	(RBCM) AND REAR MOUNT CAMERA		- Co to otop 10.
	Disconnect the rear body control module		
	(RBCM) connector.		
	Inspect for continuity at the following terminals:		
	Between rear body control module (RBCM)		
	terminal 4I (wiring harness side) and body		
	ground		
	Between rear body control module (RBCM)		
	terminal 4L (wiring harness side) and body		
	ground		
	• Is there continuity?		
17	INSPECT FOR SHORT TO GROUND	Yes	Repair or replace the wiring harness between the rear body
''	BETWEEN REAR BODY CONTROL MODULE	100	control module (RBCM) and connector C-21 because the
	(RBCM) AND CONNECTOR C-21		wiring harness is shorted to ground.
	• Disconnect connector C-21.	No	Go to the next step.
	Inspect for continuity at the following terminals:		or to the next step.
	Between rear body control module (RBCM)		
	terminal 4I (wiring harness side) and body		
	ground		
	Between rear body control module (RBCM)		
	terminal 4L (wiring harness side) and body		
	ground		
	Is there continuity?		
18	INSPECT CAN LINE IN REAR MOUNT	Yes	Repair or replace the wiring harness between the rear
	CAMERA FOR SHORT TO GROUND		mount camera and connector C-21 because the wiring
	Disconnect the rear mount camera connector.		harness is shorted to ground.
	Inspect for continuity at the following terminals:	No	Replace the rear mount camera because there is a short
	Between rear mount camera terminal G		to ground in the rear mount camera.
	(wiring harness side) and body ground		(See REAR MOUNT CAMERA REMOVAL/
	Between rear mount camera terminal H		INSTALLATION.)
	(wiring harness side) and body ground		
	Is there continuity?		
19	INSPECT CAN LINE INSIDE REAR BODY	Yes	Repair or replace the wiring harness between the rear body
	CONTROL MODULE (RBCM) FOR SHORT TO		control module (RBCM) and connectors C-47 and C-48
	GROUND		because the wiring harness is shorted to ground.
	Inspect for continuity at the following terminals:	No	Replace the rear body control module (RBCM) because
	Between rear body control module (RBCM)		there is a short to ground in the rear body control module
	terminal 4G (wiring harness side) and body		(RBCM).
	ground		(See REAR BODY CONTROL MODULE (RBCM)
	Between rear body control module (RBCM)		REMOVAL/INSTALLATION.)
	terminal 4J (wiring harness side) and body		
	ground		
	• Is there continuity?		