Without Bose[®]

Without Bose®				
Description	Audio unit internal malfunction			
Audio unit (circuit around power amplifier) malfunction detected				
Detection condition	• Audio unit protection function operates due to short to ground in speaker wiring harness and speaker			
Fall and formation	lead wire			
Fail-safe function	Output to speakers stops • Audio unit connector or terminal malfunction			
	Speaker connector or terminal malfunction One principal in wiring barrage between the following terminals:			
	Open circuit in wiring harness between the following terminals: Audio unit terminal 1A and front door speaker (LH) terminal C			
	Audio unit terminal 1A and front door speaker (LH) terminal B Audio unit terminal 1C and front door speaker (LH) terminal B			
	— Audio unit terminal 1C and front door speaker (EH) terminal C — Audio unit terminal 1D and front door speaker (RH) terminal C			
	Audio unit terminal 1B and front door speaker (RH) terminal B			
	Audio unit terminal 1S and rear door speaker (LH) terminal C			
	Audio unit terminal 10 and rear door speaker (LH) terminal B			
	Audio unit terminal 1V and rear door speaker (RH) terminal C			
	Audio unit terminal 1X and rear door speaker (RH) terminal B			
Possible cause	Short to ground in wiring harness between the following terminals:			
	Audio unit terminal 1A and front door speaker (LH) terminal C			
	Audio unit terminal 1C and front door speaker (LH) terminal B			
	Audio unit terminal 1D and front door speaker (RH) terminal C			
	Audio unit terminal 1F and front door speaker (RH) terminal B			
	Audio unit terminal 1S and rear door speaker (LH) terminal C			
	Audio unit terminal 1U and rear door speaker (LH) terminal B			
	Audio unit terminal 1V and rear door speaker (RH) terminal C			
	Audio unit terminal 1X and rear door speaker (RH) terminal B			
	Speaker malfunction			
	Audio unit malfunction			
	AUDIO UNIT FRONT DOOR SPEAKER (LH)			
	(1A)			
	(1C) }} 			
	FRONT DOOR SPEAKER (RH)			
	(1D) \(\) \(\(\) \(\)			
	(1F)************************************			
	REAR DOOR SPEAKER (LH)			
	(1s) }} 			
	(1U) (B)			
	REAR DOOR SPEAKER (RH)			
	(1V)))) 			
	(1X) }⟩⟩ 			
AUDIO UNIT WIRING HARNESS-SIDE SPEAKER WIRING HARNESS-SIDE CONNECTOR CONNECTOR				
CONNECTOR CONNECTOR				
1X 1V 1	U 1S 1F 1D 1C 1A			
7//////	D C B A			
1W	1P 1N 1L 1J 1H			
	1R 1Q 10 1M 1K 1I 1G 1E			

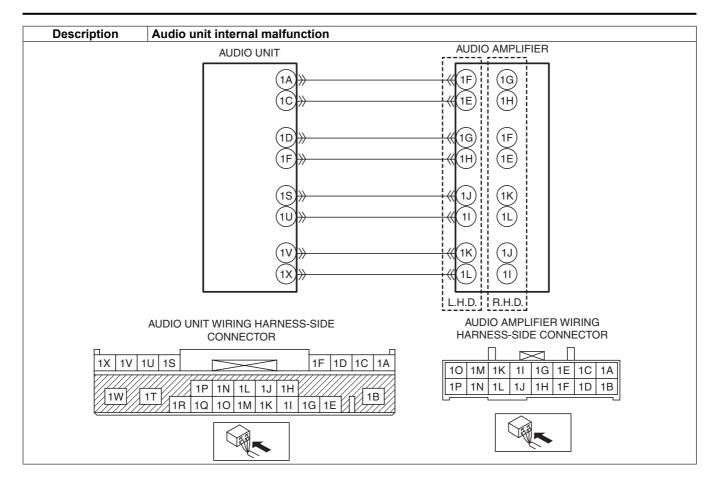
Diagnostic Procedure

Step	Inspection		Action
1	INSPECT AUDIO UNIT CONNECTOR	Yes	Repair or replace the connector, then go to Step 6.
	CONDITION	No	Go to the next step.
	Switch the ignition off (LOCK).		
	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 audio unit connector.		
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	for damage, deformation, corrosion, or		
	disconnection.		
	Is there any malfunctioning part?		
2		Voc	Panair or replace the connector, then go to Ston 6
4	INSPECT SPEAKER CONNECTOR CONDITION	Yes	Repair or replace the connector, then go to Step 6.
	Disconnect the speaker connector.	No	Go to the next step.
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	·		
	for damage, deformation, corrosion, or disconnection.		
3	Is there any malfunctioning part? INSPECT SPEAKER CIRCUIT FOR OPEN	Yes	Co to the payt step
3	CIRCUIT	No	Go to the next step. Repair or replace the wiring harness, then go to Step 6.
	Audio unit connector and speaker connector are	INO	Repair of replace the willing flatfless, then go to Step o.
	disconnected.		
	Inspect for continuity between the following		
	terminals (vehicle wiring harness).		
	Audio unit terminal 1A and front door		
	speaker (LH) terminal C		
	Audio unit terminal 1C and front door		
	speaker (LH) terminal B		
	Audio unit terminal 1D and front door		
	speaker (RH) terminal C		
	Audio unit terminal 1F and front door		
	speaker (RH) terminal B		
	Audio unit terminal 1S and rear door		
	speaker (LH) terminal C		
	Audio unit terminal 1U and rear door		
	speaker (LH) terminal B		
	Audio unit terminal 1V and rear door		
	speaker (RH) terminal C		
	Audio unit terminal 1X and rear door		
	speaker (RH) terminal B		
	• Is there continuity?		
4	INSPECT SPEAKER CIRCUIT FOR SHORT TO	Yes	Repair or replace the wiring harness, then go to Step 6.
'	GROUND	No	Go to the next step.
	Inspect for continuity between the following	.10	or to the flow otop.
	wiring harness terminals (vehicle wiring harness		
	side) and body ground.		
	Speaker terminal C		
	Speaker terminal B		
	• Is there continuity?		
	.5 a.s. 6 containing :		

Step	Inspection		Action
5	INSPECT SPEAKERS Inspect the speakers. (See FRONT DOOR SPEAKER INSPECTION.)	Yes	Replace the speaker, then go to Step 6. (See FRONT DOOR SPEAKER REMOVAL/ INSTALLATION.) (See REAR DOOR SPEAKER REMOVAL/INSTALLATION.)
	(See REAR DOOR SPEAKER INSPECTION.) • Is there any malfunctioning part?	No	Go to the next step.
6	VERIFY THAT REPAIRS HAVE BEEN COMPLETED • Reconnect all the disconnected connectors. • Connect the negative battery cable.	Yes	Return to Step 1 and inspect for other possible causes. If the malfunction recurs, replace the audio unit, then go to the next step. (See AUDIO UNIT REMOVAL/INSTALLATION.)
	(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 the audio unit DTCs. (See CLEARING DTC [AUDIO].) • Perform the audio unit DTC inspection. (See DTC INSPECTION [AUDIO].) • Is the same DTC displayed?	No	Go to the next step.
7	• Are any other DTCs displayed?	Yes	Repair the malfunctioning part according to the applicable DTC troubleshooting. (See DTC TABLE [AUDIO].)
		No	DTC troubleshooting completed.

With Bose[®]

Description	Audio unit internal malfunction		
Detection condition	lead wire		
Fail-safe function	Output to speakers stops		
Possible cause	 Audio unit connector or terminal malfunction Speaker connector or terminal malfunction Open circuit in wiring harness between the following terminals: — Audio unit terminal 1A and audio amplifier terminal 1F (L.H.D.)/ terminal 1G (R.H.D.) — Audio unit terminal 1D and audio amplifier terminal 1E (L.H.D.)/ terminal 1F (R.H.D.) — Audio unit terminal 1D and audio amplifier terminal 1G (L.H.D.)/ terminal 1E (R.H.D.) — Audio unit terminal 1S and audio amplifier terminal 1J (L.H.D.)/ terminal 1K (R.H.D.) — Audio unit terminal 1U and audio amplifier terminal 1I (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1K (L.H.D.)/ terminal 1J (R.H.D.) — Audio unit terminal 1X and audio amplifier terminal 1L (L.H.D.)/ terminal 1I (R.H.D.) Short to ground in wiring harness between the following terminals: — Audio unit terminal 1A and audio amplifier terminal 1F (L.H.D.)/ terminal 1G (R.H.D.) — Audio unit terminal 1D and audio amplifier terminal 1E (L.H.D.)/ terminal 1H (R.H.D.) — Audio unit terminal 1D and audio amplifier terminal 1G (L.H.D.)/ terminal 1F (R.H.D.) — Audio unit terminal 1S and audio amplifier terminal 1J (L.H.D.)/ terminal 1K (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1I (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1K (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1K (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1L (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1L (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1L (L.H.D.)/ terminal 1L (R.H.D.) — Audio unit terminal 1V and audio amplifier terminal 1L (L.H.D.)/ terminal 1L (R.H.D.) 		



Diagnostic Procedure

Step	Inspection		Action
1	INSPECT AUDIO UNIT CONNECTOR	Yes	Repair or replace the connector, then go to Step 5.
	CONDITION	No	Go to the next step.
	Switch the ignition off (LOCK).		
	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 audio unit connector.		
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	for damage, deformation, corrosion, or		
	disconnection.		
	Is there any malfunctioning part?		
2	INSPECT AUDIO AMPLIFIER CONNECTOR	Yes	Repair or replace the connector, then go to Step 5.
	CONDITION	No	Go to the next step.
	Disconnect the audio amplifier connector.		
	Inspect the connector engagement and		
	connection condition and inspect the terminals		
	for damage, deformation, corrosion, or		
	disconnection.		
	Is there any malfunctioning part?		

Step	Inspection		Action
3	INSPECT AUDIO AMPLIFIER CIRCUIT FOR	Yes	Go to the next step.
	OPEN CIRCUIT	No	Repair or replace the wiring harness, then go to Step 5.
	Audio unit connector and audio amplifier		
	connector are disconnected.		
	Inspect for continuity between the following		
	terminals (vehicle wiring harness).		
	Audio unit terminal 1A and audio amplifier		
	terminal 1F (L.H.D.)/ terminal 1G (R.H.D.)		
	 Audio unit terminal 1C and audio amplifier terminal 1E (L.H.D.)/ terminal 1H (R.H.D.) 		
	A Programme LAB and the Programme Control		
	Audio unit terminal 1D and audio amplifier terminal 1G (L.H.D.)/ terminal 1F (R.H.D.)		
	Audio unit terminal 1F and audio amplifier		
	terminal 1H (L.H.D.)/ terminal 1E (R.H.D.)		
	Audio unit terminal 1S and audio amplifier		
	terminal 1J (L.H.D.)/ terminal 1K (R.H.D.)		
	Audio unit terminal 1U and audio amplifier		
	terminal 1I (L.H.D.)/ terminal 1L (R.H.D.)		
	Audio unit terminal 1V and audio amplifier		
	terminal 1K (L.H.D.)/ terminal 1J (R.H.D.)		
	 Audio unit terminal 1X and audio amplifier 		
	terminal 1L (L.H.D.)/ terminal 1I (R.H.D.)		
	Is there continuity?		
4	INSPECT AUDIO AMPLIFIER CIRCUIT FOR	Yes	Repair or replace the wiring harness, then go to Step 5.
	SHORT TO GROUND	No	Go to the next step.
	Inspect for continuity between the following		
	wiring harness terminals (vehicle wiring harness		
	side) and body ground.		
	 Audio amplifier terminal 1F (L.H.D.)/ terminal 1G (R.H.D.) 		
	Audio amplifier terminal 1E (L.H.D.)/		
	terminal 1H (R.H.D.)		
	Audio amplifier terminal 1G (L.H.D.)/		
	terminal 1F (R.H.D.)		
	Audio amplifier terminal 1H (L.H.D.)/		
	terminal 1E (R.H.D.)		
	 Audio amplifier terminal 1J (L.H.D.)/ 		
	terminal 1K (R.H.D.)		
	— Audio amplifier terminal 1I (L.H.D.)/		
	terminal 1L (R.H.D.)		
	— Audio amplifier terminal 1K (L.H.D.)/		
	terminal 1J (R.H.D.)		
	Audio amplifier terminal 1L (L.H.D.)/		
	terminal 1I (R.H.D.)		
5	• Is there continuity? VERIFY THAT REPAIRS HAVE BEEN	Yes	Return to Step 1 and inspect for other possible causes. If the
5	COMPLETED	168	malfunction recurs, replace the audio unit, then go to the next
	Reconnect all the disconnected connectors.		step.
	Connect the negative battery cable.		(See AUDIO UNIT REMOVAL/INSTALLATION.)
	(See NEGATIVE BATTERY CABLE	No	Go to the next step.
	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 the audio unit DTCs. (See CLEARING DTC (AUDIO))		
	(See CLEARING DTC [AUDIO].)		
	Perform the audio unit DTC inspection. (See DTC INSPECTION [AUDIO].)		
	• Is the same DTC displayed?		
	io the ballic bit o displayed:		

Step	Inspection		Action
6	VERIFY IF OTHER DTCs DISPLAYED	Yes	Repair the malfunctioning part according to the applicable
	Are any other DTCs displayed?		DTC troubleshooting.
			(See DTC TABLE [AUDIO].)
		No	DTC troubleshooting completed.