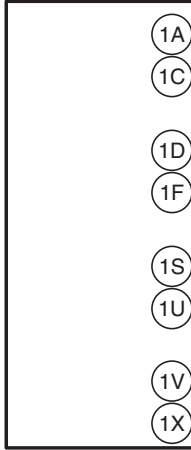


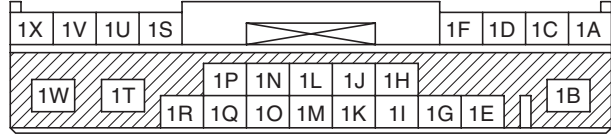
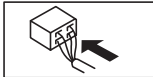
Without Bose®

Description	Audio unit internal malfunction
Detection condition	<ul style="list-style-type: none"> Audio unit (circuit around power amplifier) malfunction detected Audio unit protection function operates due to short to ground in speaker wiring harness and speaker lead wire
Fail-safe function	Output to speakers stops
Possible cause	<ul style="list-style-type: none"> Audio unit connector or terminal malfunction Speaker connector or terminal malfunction Open circuit in wiring harness between the following terminals: <ul style="list-style-type: none"> 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 Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> 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

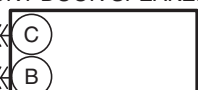
AUDIO UNIT



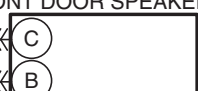
AUDIO UNIT WIRING HARNESS-SIDE CONNECTOR


FRONT DOOR SPEAKER (LH)




FRONT DOOR SPEAKER (RH)



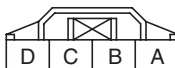
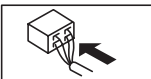
REAR DOOR SPEAKER (LH)



REAR DOOR SPEAKER (RH)



SPEAKER WIRING HARNESS-SIDE CONNECTOR

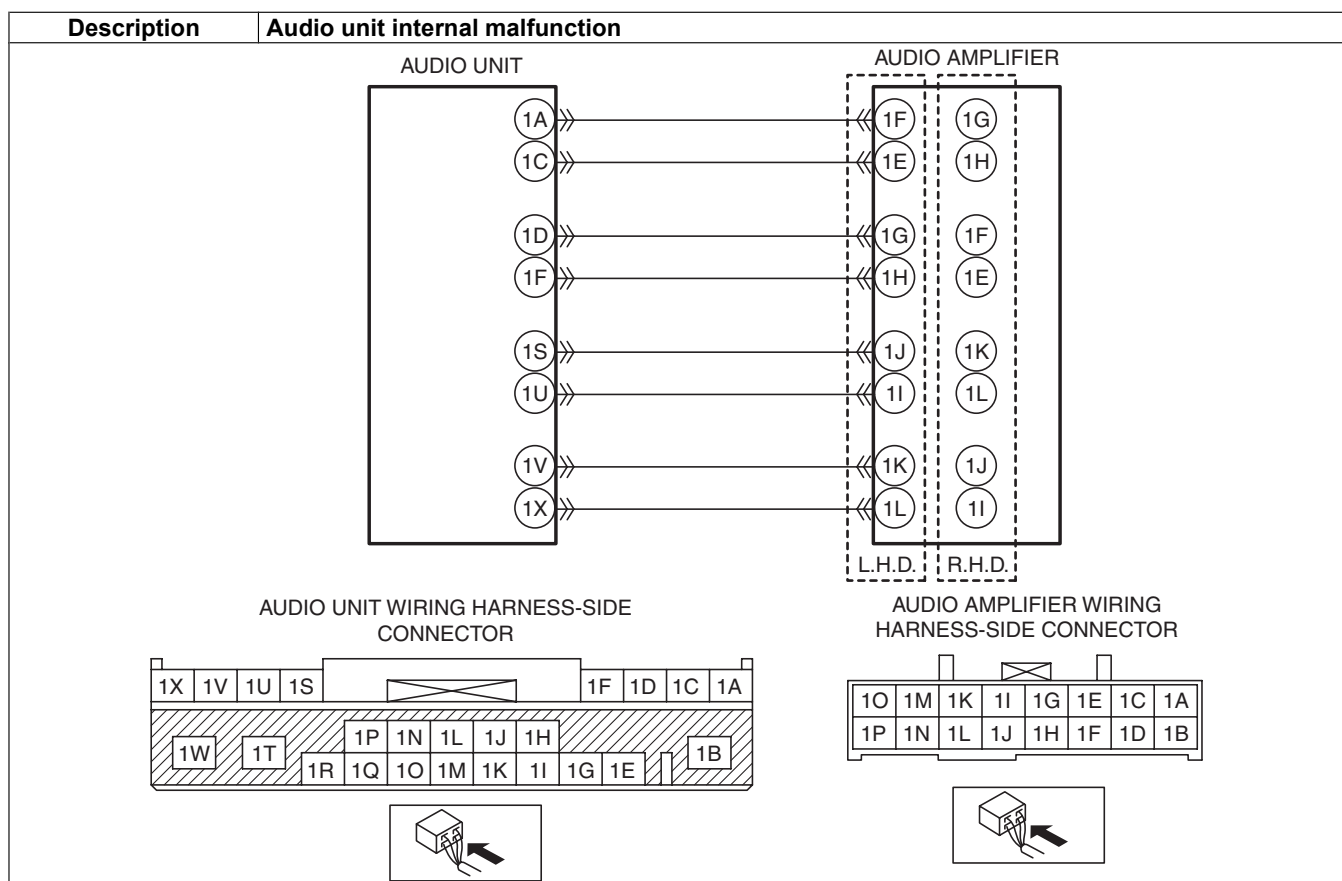
Diagnostic Procedure

Step	Inspection	Action	
1	INSPECT AUDIO UNIT CONNECTOR CONDITION <ul style="list-style-type: none"> • 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? 	Yes	Repair or replace the connector, then go to Step 6.
		No	Go to the next step.
2	INSPECT SPEAKER CONNECTOR CONDITION <ul style="list-style-type: none"> • Disconnect the speaker connector. • Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection. • Is there any malfunctioning part? 	Yes	Repair or replace the connector, then go to Step 6.
		No	Go to the next step.
3	INSPECT SPEAKER CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> • Audio unit connector and speaker connector are disconnected. • Inspect for continuity between the following terminals (vehicle wiring harness). <ul style="list-style-type: none"> — 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? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 6.
4	INSPECT SPEAKER CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> • Inspect for continuity between the following wiring harness terminals (vehicle wiring harness side) and body ground. <ul style="list-style-type: none"> — Speaker terminal C — Speaker terminal B • Is there continuity? 	Yes	Repair or replace the wiring harness, then go to Step 6.
		No	Go to the next step.

Step	Inspection	Action
5	INSPECT SPEAKERS <ul style="list-style-type: none"> Inspect the speakers. (See FRONT DOOR SPEAKER INSPECTION.) (See REAR DOOR SPEAKER INSPECTION.) Is there any malfunctioning part? 	Yes Replace the speaker, then go to Step 6. (See FRONT DOOR SPEAKER REMOVAL/INSTALLATION.) (See REAR DOOR SPEAKER REMOVAL/INSTALLATION.)
		No Go to the next step.
6	VERIFY THAT REPAIRS HAVE BEEN COMPLETED <ul style="list-style-type: none"> Reconnect all the disconnected connectors. 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].) Clear the audio unit DTCs. (See CLEARING DTC [AUDIO].) Perform the audio unit DTC inspection. (See DTC INSPECTION [AUDIO].) Is the same DTC displayed? 	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.)
		No Go to the next step.
7	VERIFY IF OTHER DTCs DISPLAYED <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Audio unit (circuit around power amplifier) malfunction detected Audio unit protection function operates due to short to ground in speaker wiring harness and speaker lead wire
Fail-safe function	Output to speakers stops
Possible cause	<ul style="list-style-type: none"> Audio unit connector or terminal malfunction Speaker connector or terminal malfunction Open circuit in wiring harness between the following terminals: <ul style="list-style-type: none"> 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.) 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.) Short to ground in wiring harness between the following terminals: <ul style="list-style-type: none"> 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.) 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.) Speaker malfunction Audio unit malfunction



Diagnostic Procedure

Step	Inspection	Action	
1	INSPECT AUDIO UNIT CONNECTOR CONDITION <ul style="list-style-type: none"> 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? 	Yes	Repair or replace the connector, then go to Step 5.
		No	Go to the next step.
2	INSPECT AUDIO AMPLIFIER CONNECTOR CONDITION <ul style="list-style-type: none"> 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? 	Yes	Repair or replace the connector, then go to Step 5.
		No	Go to the next step.

Step	Inspection	Action	
3	INSPECT AUDIO AMPLIFIER CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> Audio unit connector and audio amplifier connector are disconnected. Inspect for continuity between the following terminals (vehicle wiring harness). <ul style="list-style-type: none"> 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.) 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? 	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 5.
4	INSPECT AUDIO AMPLIFIER CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> Inspect for continuity between the following wiring harness terminals (vehicle wiring harness side) and body ground. <ul style="list-style-type: none"> 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.) Is there continuity? 	Yes	Repair or replace the wiring harness, then go to Step 5.
		No	Go to the next step.
5	VERIFY THAT REPAIRS HAVE BEEN COMPLETED <ul style="list-style-type: none"> Reconnect all the disconnected connectors. 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].) Clear the audio unit DTCs. (See CLEARING DTC [AUDIO].) Perform the audio unit DTC inspection. (See DTC INSPECTION [AUDIO].) Is the same DTC displayed? 	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.)
		No	Go to the next step.

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