NO SOUND FROM ALL SPEAKERS [ENTIRE AUDIO SYSTEM]

id0903e2100700

Without Bose[®]

	No sound from all speakers				
Possible DTC	Using the M-MDS	U3003:16, U3000:09			
Possible DTC	Without using M-MDS (On- board diagnostic test mode)	09:Er20, 09:Er21			
Possible cause	 Glass antenna malfunction Antenna feeder malfunction Center roof antenna malfuncti Speaker muted by Bluetooth s Poor connection of music dev Volume adjustment of music of Poor connection at audio unit Audio unit malfunction Short circuit in wiring harness 	system (hands-free telephone (HF/TEL) system) operation ice device is at minimum			

Diagnostic procedure

	ostic procedure				
STEP	INSPECTION		ACTION		
1	It sound not output from the speaker only while	Yes	Go to the next step.		
	in radio mode?	No	Go to Step 6.		
2	Does noise occur?	Yes	Go to the next step.		
		No	Go to Step 8.		
3	Can the location where the noise occurs be	Yes	The system is normal. Explain to the customer that the noise		
	specified?		is caused by radio wave disturbances or broadcast wave		
			conditions from the outside.		
		No	Go to the next step.		
4	Compare the radio broadcast reception	Yes	Go to the next step.		
	condition on another vehicle of the same model	No	Go to Step 6.		
	(model/unit) in the location where the noise				
	occurs.				
	Compared to another vehicle of the same				
	model, is the reception worse?				
5	Inspect the glass antenna and antenna feeder.	Yes	Go to the next step.		
	Are the glass antenna and antenna feeder	No	Repair or replace the glass antenna and/or the antenna		
	normal?		feeder.		
6	Does the Bluetooth system (hands-free	Yes	The system is normal. Explain to the customer that the		
	telephone (HF/TEL) system) operate?		Bluetooth system (hands-free telephone (HF/TEL) system)		
			operates and the speaker is muted.		
		No	Go to the next step.		
7	Does the AUX mode operate?	Yes	Verify the volume of the music device which has been		
			connected. If sound is output, go to the next step.		
		No	Go to the next step.		
8	Connect the audio unit connector.	Yes	Go to the next step.		
	• Inspect the voltage for the power supply line (B +, ACC).	No	Charge the battery, then go to the next step.		
	Specification:				
	Switch the ignition to ON: 11.5 V or more				
	Idle: 12.5 V or more				
	Is the voltage normal?				
9	Play the CD or Radio.	Yes	The system is normal.		
	Adjust the volume between"10" to "15".	No	Go to the next step.		
	• Is there sound?				

STEP	INSPECTION		ACTION
10	Switch the ignition to off.	Yes	Repair or replace the suspect wiring harness or speaker unit.
	Remove the audio unit.		
	Disconnect the audio unit connector (24-pin).		Note
	Inspect the continuity between the audio unit		If there is a short circuit between the speaker harness
	wiring harness-side connector terminal and		or speaker lead wire and ground, the protector circuit
	ground:		inside the audio unit operates to cut the sound.
	For front door speaker	No	Replace the audio unit.
	Terminal 1A (LH+)—GND		(See AUDIO UNIT REMOVAL/INSTALLATION.)
	Terminal 1C (LH-)—GND		
	Terminal 1D (RH+)—GND		
	Terminal 1F (RH-)—GND		
	For rear door speaker		
	Terminal 1S (LH+)—GND		
	Terminal 1U (LH-)—GND		
	Terminal 1V (RH+)—GND		
	Terminal 1X (RH-)—GND		
	Disconnect the front door speaker connector (4-pin)		
	Inspect the continuity between the front door		
	speaker wiring harness-side connector terminal		
	and ground:		
	For tweeter		
	Terminal 1A (LH+)—GND		
	— Terminal 1C (LH-)—GND		
	Terminal 1D (RH+)—GND		
	— Terminal 1F (RH-)—GND		
	Is there continuity?		

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	No sound from all speakers				
Possible DTC	Using the M-MDS	U3003:16, U3000:09			
Possible DTC	Without using M-MDS (On-	09:Er20, 09:Er21			
	board diagnostic test mode)	U3.E120, U3.E121			
	Electronic jamming from outside, or inferior condition of broadcasting station radio wave				
	Glass antenna malfunction				
	Antenna feeder malfunction				
	Center roof antenna malfunction				
	Speaker muted by Bluetooth system (hands-free telephone (HF/TEL) system) operation				
	Poor connection of music device				
	Volume adjustment of music device is at minimum				
Possible cause	Speaker malfunction				
	Audio amplifier malfunction				
	Audio unit malfunction				
	Open or short circuit in wiring harness between audio amplifier and audio unit				
	Poor connection of audio unit or audio amplifier connector, terminal damage				
	CAN signal wiring harness malfunction				
	Short circuit inside speaker				
	Open or short circuit in wiring harness between audio amplifier and speaker				

Diagnostic procedure

Diagnostic procedure			
STEP	INSPECTION		ACTION
1	It sound not output from the speaker only while	Yes	Go to the next step.
	in radio mode?	No	Go to Step 6.
2	Does noise occur?	Yes	Go to the next step.
		No	Go to Step 8.
3	Can the location where the noise occurs be specified?	Yes	The system is normal. Explain to the customer that the noise is caused by radio wave disturbances or broadcast wave conditions from the outside.
		No	Go to the next step.

STEP	INSPECTION		ACTION
4	Compare the radio broadcast reception	Yes	Go to the next step.
	condition on another vehicle of the same model (model/unit) in the location where the noise occurs. • Compared to another vehicle of the same model, is the reception worse?	No	Go to Step 6.
5	Inspect the glass antenna and antenna feeder.	Yes	Go to the next step.
	Are the glass antenna and antenna feeder normal?	No	Repair or replace the glass antenna and/or the antenna feeder.
6	Does the Bluetooth system (hands-free telephone (HF/TEL) system) operate?	Yes	The system is normal. Explain to the customer that the Bluetooth system (hands-free telephone (HF/TEL) system) operates and the speaker is muted.
		No	Go to the next step.
7	Does the AUX mode operate?	Yes	Verify the volume of the music device which has been
			connected. If sound is output, go to the next step.
		No	Go to the next step.
8	Connect the audio unit connector.	Yes	Go to the next step.
	• Inspect the voltage for the power supply line (B +, ACC).	No	Charge the battery, then go to the next step.
	Specification: Switch the ignition to ON: 11.5 V or more Idle: 12.5 V or more Is the voltage normal?		
9	Play CD or radio.	Yes	The system is normal.
	Adjust the volume between "10" and "15". Is there sound?	No	Go to the next step.
10	Measure the voltage at the audio amplifier	Yes	Go to the next step.
	terminal 3A. (8-pin, vehicle harness-side)	No	Repair or replace wiring harness between the audio amplifier
	Is the voltage B+?		and fuse.
			Go to the next step.
11	Inspect the connection of audio unit connector	Yes	Go to the next step.
	(24-pin) and audio amplifier connectors for poor connection (such as damaged/pulled-out pins, corrosion).Are all pins normal?	No	Repair or replace the pins and/or the connector.

STEP	INSPECTION		ACTION
12	Switch the ignition to off.	Yes	Go to the next step.
	Disconnect the audio amplifier connector. Inspect continuity between the following terminals of the audio amplifier connector and	No	Repair or replace the repair related wiring harnesses.
	speaker connector.		
	For front door speaker (LH) — Terminal 3F (L.H.D.)/3C (R.H.D.)—Terminal C — Terminal 3E (L.H.D.)/3D (R.H.D.)—Terminal B		
	For front door speaker (RH)		
	 Terminal 3C (L.H.D.)/3F (R.H.D.)—Terminal C Terminal 3D (L.H.D.)/3E (R.H.D.)—Terminal 		
	В		
	For tweeter (LH) — Terminal 2G (L.H.D.)/2C (R.H.D.)—Terminal B		
	Terminal 2I (L.H.D.)/2E (R.H.D.)—Terminal A		
	For tweeter (RH)		
	Terminal 2C (L.H.D.)/2G (R.H.D.)—Terminal B		
	Terminal 2E (L.H.D.)/2I (R.H.D.)—Terminal A		
	For rear door speaker (LH)		
	Terminal 2O (L.H.D.)/2M (R.H.D.)—Terminal C		
	Terminal 2P (L.H.D.)/2K (R.H.D.)—Terminal B		
	For rear door speaker (RH) — Terminal 2M (L.H.D.)/2O (R.H.D.)—Terminal C		
	Terminal 2K (L.H.D.)/2P (R.H.D.)—Terminal B		
	For front center speaker		
	Terminal 3G—Terminal B		
	— Terminal 3H—Terminal A		
	For D-pillar speaker		
	— Terminal 2A—Terminal B		
	Terminal 2B—Terminal A Is there continuity?		
	- 15 there continuity :		

STEP	INSPECTION		ACTION
13	Switch the ignition to off.	Yes	Repair or replace the related wiring harness or speaker.
	Disconnect the audio amplifier connector.		(See FRONT DOOR SPEAKER REMOVAL/
	Inspect the continuity between the audio		INSTALLATION.)
	amplifier connector and ground:		(See TWEETER REMOVAL/INSTALLATION.)
	For front door speaker (LH)		(See REAR DOOR SPEAKER REMOVAL/INSTALLATION.)
	Terminal 3F (L.H.D.)/3C (R.H.D.)—GND		(See FRONT CENTER SPEAKER REMOVAL/
	Terminal 3E (L.H.D.)/3D (R.H.D.)—GND		INSTALLATION.)
	For front door speaker (RH)		(See D-PILLAR SPEAKER REMOVAL/INSTALLATION.)
	Terminal 3C (L.H.D.)/3F (R.H.D.)—GND		
	Terminal 3D (L.H.D.)/3E (R.H.D.)—GND		Note
	For tweeter (LH)		If there is a short circuit between the speaker harness
	Terminal 2G (L.H.D.)/2C (R.H.D.)—GND		or speaker lead wire and ground, the protector circuit
	Terminal 2I (L.H.D.)/2E (R.H.D.)—GND		inside the audio unit operates to cut the sound.
	For tweeter (RH)	No	Go to the next step.
	Terminal 2C (L.H.D.)/2G (R.H.D.)—GND		
	Terminal 2E (L.H.D.)/2I (R.H.D.)—GND		
	For rear door speaker (LH)		
	Terminal 2O (L.H.D.)/2M (R.H.D.)—GND		
	Terminal 2P (L.H.D.)/2K (R.H.D.)—GND		
	For rear door speaker (RH)		
	Terminal 2M (L.H.D.)/2O (R.H.D.)—GND		
	Terminal 2K (L.H.D.)/2P (R.H.D.)—GND		
	For front center speaker		
	Terminal 3G—GND		
	Terminal 3H—GND		
	For D-pillar speaker		
	Terminal 2A—GND		
	Terminal 2B—GND		
	Is there continuity?		
14	Switch the ignition to off.	Yes	Replace the audio amplifier.
	Disconnect the audio amplifier connector and		(See AUDIO AMPLIFIER REMOVAL/INSTALLATION.)
	audio unit connector (24-pin).	No	Repair or replace the wiring harness between the audio
	Inspect the continuity between the audio		amplifier and audio unit.
	amplifier terminal 2F (16-pin, vehicle harness-		Then go to the next step.
	side) and audio unit terminal 1J (24-pin, vehicle		
	harness- side).		
	Is there continuity?		
15	Is there any sound?	Yes	The system is normal.
		No	Replace the audio amplifier.
			(See AUDIO AMPLIFIER REMOVAL/INSTALLATION.)