

2012 - Mazda6 - Body and Accessories

NO.5 SOUND BREAK-UP OR POOR SOUND QUALITY [ENTIRE AUDIO SYSTEM]

5	Broken sound or poor sound quality	
Possible DTC	Audio unit (without display)	09:Er21
	Audio unit (with display)	Device code 09/error code 21
	Car-navigation unit	Device code 09/error code 21, 24
Possible cause	• Electronic jamming from outside, or inferior condition of broadcasting station radio wave • Tuning error with radio station • Poor connection of music device • Volume adjustment of music device is at minimum • Improper speaker installation • Vibration of door trim and/or package trim • Speaker malfunction (e.g., any foreign material, broken) • Audio unit /Car-navigation unit malfunction	

Diagnostic procedure

STEP	INSPECTION	ACTION
1	• Verify the malfunction symptom.	Yes Go to the next step.
	• Is there sound distortion?	No Go to Step 6.
2	• Does the sound distortion occur only while in radio mode?	Yes Go to the next step.
		No Go to Step 5.

3	Can the location where the sound distortion 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.
4	Does the sound distortion occur after selecting a radio station?	Yes	The system is normal. Explain to the customer that the sound distortion is caused by a tuning error with the radio station.
		No	Go to the next step.
5	Does the AUX mode operate?	Yes	Verify the connection condition and volume of the music device. If the connection condition is normal and sound is output, go to the next step.
		No	Go to the next step.
6	- Inspect the sound while adjusting the sound volume. - Is there broken sound or poor sound quality between "30" and "40"?	Yes	Go to the next step.
		No	The system is normal.
7	- Inspect the BASS/TREB. - Is there poor sound quality at "-3 — +3" of "BASS/TREB"? NOTE: - The speaker from which the sound is not emitted is specified using by that the speaker voice changes.	Yes	Go to the next step.
		No	If there is broken sound at "-6 — +6" of BASS/TREB with the maximum volume, the system is normal.
8	- Identify the speaker with broken sound by adjusting BAL/FADE. - Is the speaker installed properly?	Yes	Go to the next step.
		No	Install the speaker properly.
9	- Remove the speaker. - Is there any foreign	Yes	Repair or replace the suspect speaker.

	material or damage on the speaker?	No	Go to the next step.
10	• Inspect the sound again.	Yes	Go to the next step.
	• Is there broken sound?	No	Inspect the vibration from the door trim and/or package trim. Repair or replace the suspect trim as necessary.
11	- Replace with the speaker known to be good. (e.g., swap right and left speakers) - Does the broken sound appear at the same location?	Yes	With audio unit (with display) - Go to the next step. With car-navigation unit or audio unit (without display) - If noise occurs from the speaker of a specific channel, or the volume is minimized and the noise occurs: - Replace the audio amplifier. (See AUDIO AMPLIFIER REMOVAL/ INSTALLATION.) - If noise occurs from the speaker of two or more channels or the volume is minimized and the noise dose not occurs. - Replace the audio unit/car-navigation unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.) (See CAR-NAVIGATION UNIT REMOVAL/ INSTALLATION.)
		No	Replace the speaker. (See FRONT DOOR SPEAKER REMOVAL/ INSTALLATION.) (See REAR DOOR SPEAKER REMOVAL/ INSTALLATION.) (See FRONT CENTER SPEAKER REMOVAL/ INSTALLATION.) (See TWEETER REMOVAL/ INSTALLATION.) (See REAR CENTER SPEAKER REMOVAL/ INSTALLATION.) (See REAR SPEAKER REMOVAL/ INSTALLATION.)
12	• Verify that all of the audio unit reset conditions for the customer's audio unit	Yes	Perform the audio unit reset. (See AUDIO UNIT RESET PROCEDURE [ENTIRE AUDIO SYSTEM].)

	are met. (See AUDIO UNIT RESET PROCEDURE [ENTIRE AUDIO SYSTEM] .) • Are all of the audio unit reset conditions for the customer's audio unit met?		No Replace the audio unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.)
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