

2012 - Mazda6 - Body and Accessories

FOREWORD [ENTIRE AUDIO SYSTEM]

NOTE:

- Record all radio programs set by customer prior to the repairs. Set all radio programs and adjust the time after repairs.

Troubleshooting Index

No.	Symptom	Possible DTC
1	NO.1 AF NOISE OR POP NOISE AT ALL SOURCES (RADIO, CD) [ENTIRE AUDIO SYSTEM]	Audio unit (without display) 09:Er21 Audio unit (with display) or car-navigation unit - Device code 09/error code 21
2	NO.2 AUDIO POWER IS NOT AVAILABLE OR SWITCHED ON OR OFF AUTOMATICALLY [ENTIRE AUDIO SYSTEM]	Audio unit (without display) 09:Er20 Audio unit (with display) or car-navigation unit - Device code 09/error code 20
3	NO.3 NO SOUND FROM ALL SPEAKERS [ENTIRE AUDIO SYSTEM]	Audio unit (without display) 09:Er20, 09:Er21 Audio unit (with display) or car-navigation unit - Device code 09/error code 20, 21
4	NO.4 NO SOUND FROM SOME SPEAKERS [ENTIRE AUDIO SYSTEM]	—
5	NO.5 SOUND BREAK-UP OR POOR SOUND QUALITY [ENTIRE AUDIO SYSTEM]	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
6	NO.6 VOLUME INCREASES/ DECREASES WHILE DRIVING THE VEHICLE [ENTIRE AUDIO SYSTEM]	—
7	NO.7 ALC FUNCTION IS INOPERATIVE [ENTIRE AUDIO SYSTEM]	Audio unit (without display) 16:Er11, 16:Er12 Audio unit (with display) or car-navigation unit

		Device code 16/error code 12
8	NO.8 AudioPilot®2 FUNCTION IS INOPERATIVE [ENTIRE AUDIO SYSTEM]	Audio unit (without display) • 16:Er11, 16:Er12 Audio unit (with display) or car-navigation unit • Device code 16/error code 12
9	NO.9 NO AUDIO SYSTEM ILLUMINATION [ENTIRE AUDIO SYSTEM]	Audio unit (without display) • 09:Er20 Audio unit (with display) or car-navigation unit • Device code 09/error code 20
10	NO.10 LCD DOES NOT DISPLAY AT ALL [ENTIRE AUDIO SYSTEM]	Audio unit (without display) • 09:Er20, 16:Er12 Audio unit (with display) or car-navigation unit • Device code 09/error code 20 • Device code 16/error code 12
11	NO.11 DISPLAY DOES NOT CHANGE TO THE REAR MOUNT CAMERA IMAGE [ENTIRE AUDIO SYSTEM]	Audio unit (with display) • Device code 16/error code 12
12	NO.12 SOUND JUMPS [ENTIRE AUDIO SYSTEM]	Audio unit (without display) • 09:Er07, 22:Er07 Audio unit (with display) or car-navigation unit • Device code 22/error code 07

Quick Diagnostic Chart (Entire Audio System)

X: Applicable

Possible factor	Troubleshooting item
1	POP noise on all sources (Radio, CD)
2	is not available or switched on or off automatically
3	on all speakers
4	on certain speakers
5	and or poor sound quality
6	comes loud or weak while driving the vehicle
7	is inoperative (without Bose®)
8	2 function is inoperative (with Bose®)
9	illumination does not illuminate at all
10	not display at all
11	does not change to the rear mount camera image
12	

	AF noise or	Audio power	No sound fr	No sound fr	Broken sour	Sound beco	ALC function	AudioPilot®	Audio system	LCD does not	Display does	Sound jump
Electronic jamming from outside, or inferior condition of broadcasting station radio wave	X		X		X	X						X
Defective CD (e.g., cracked, badly bent, rough edges, scratch, dirty CD, condensation)	X											X
Vibration while vehicle is driven	X											
Low vehicle battery voltage	X											
Jammed radio signals from after market equipment	X											
Speaker malfunction (e. g., any foreign material, broken)	X		X	X	X							
Improper speaker installation	X			X	X							
Poor connection of audio unit connector, terminal damage	X	X		X					X			
Antenna malfunction (e.g., poor ground)	X											
Audio unit/car-navigation unit malfunction		X	X	X	X	X	X	X	X	X	X	
Audio amplifier malfunction (with Bose®)	X		X	X	X	X		X				
Speaker muted by Bluetooth system (hands-free telephone (HF/TEL) system) operation			X	X								
Mis-operation of steering switches			X			X						X
Burnt fuse (B+)		X										
Burnt fuse (ACC)		X										
Open or short circuit in power supply (B+) wiring harness		X										
Open or short circuit in power supply (ACC) wiring harness		X										
Glass antenna malfunction			X									
Antenna feeder malfunction			X									
Center roof antenna malfunction			X									
Short circuit in wiring harness between audio unit and speaker (without Bose®)			X	X								
Open circuit in wiring harness between audio unit and speaker (without Bose®)				X								
Open or short circuit in wiring harness between audio amplifier and ground (with Bose®)	X											
Open or short circuit in wiring harness between audio amplifier and speaker (with Bose®)			X	X								
Open or short circuit in wiring harness between audio amplifier and audio unit (with Bose®)			X	X								
Poor connection of audio amplifier connector, terminal damage (with Bose®)	X		X	X				X				
Speaker muted by audio unit sound adjustment				X								
Short circuit inside speaker				X	X							
Tuning error with radio station					X							
Poor connection of music device					X							

X: Applicable

Possible factor	Troubleshooting item											
	1	2	3	4	5	6	7	8	9	10	11	12
	AF noise or POP noise on all sources (Radio, CD)	Audio power is not available or switched on or off automatically	No sound from all speakers	No sound from certain speakers	Broken sound or poor sound quality	Sound becomes loud or weak while driving the vehicle	ALC function is inoperative (without Bose®)	AudioPilot® 2 function is inoperative (with Bose®)	Audio system illumination does not illuminate at all	LCD does not display at all	Display does not change to the rear mount camera image	Sound jumps
Volume adjustment of music device is at minimum					X							
Sound level difference between audio modes						X						
Burnt fuse (TNS signal)									X			
Illumination turned off by panel light control switch operation									X			
Open or short circuit in TNS signal wiring harness									X			
Malfunction in audio unit power supply system										X		
Display dimmed by panel light control switch operation										X		
Audio panel malfunction									X			
Information display malfunction										X		
Open or short circuit in AudioPilot® 2 microphone signal wiring harness (with Bose®)								X				
Open or short circuit in AudioPilot® 2 signal wiring harness (with Bose®)								X				
Rear mount camera malfunction											X	
Poor connection of the rear mount camera connector, terminal damage											X	
CAN system malfunction											X	
Poor connection of the short-cord connector, terminal damage											X	
Open or short circuit in wiring harness between audio unit and trunk lid opener switch (vehicle side)											X	
Open or short circuit in short cord											X	
Open or short circuit in wiring harness between audio unit and the short-cord connector 1											X	
TR switch (ATX)/Back-up light switch (MTX) malfunction											X	
Open or short circuit in wiring harness between TR switch (ATX)/Back-up light switch (MTX) and BCM											X	

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6	NO.6 VOLUME INCREASES/ DECREASES WHILE DRIVING THE VEHICLE [ENTIRE AUDIO SYSTEM]	—
7	NO.7 ALC FUNCTION IS INOPERATIVE [ENTIRE AUDIO SYSTEM]	Audio unit (without display) 16:Er11, 16:Er12 Audio unit (with display) or car-navigation unit

		Device code 16/error code 12
8	NO.8 AudioPilot®2 FUNCTION IS INOPERATIVE [ENTIRE AUDIO SYSTEM]	Audio unit (without display) • 16:Er11, 16:Er12 Audio unit (with display) or car-navigation unit • Device code 16/error code 12
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11	NO.11 DISPLAY DOES NOT CHANGE TO THE REAR MOUNT CAMERA IMAGE [ENTIRE AUDIO SYSTEM]	Audio unit (with display) • Device code 16/error code 12
12	NO.12 SOUND JUMPS [ENTIRE AUDIO SYSTEM]	Audio unit (without display) • 09:Er07, 22:Er07 Audio unit (with display) or car-navigation unit • Device code 22/error code 07

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Electronic jamming from outside, or inferior condition of broadcasting station radio wave	X		X		X	X						X
Defective CD (e.g., cracked, badly bent, rough edges, scratch, dirty CD, condensation)	X											X
Vibration while vehicle is driven	X											
Low vehicle battery voltage	X											
Jammed radio signals from after market equipment	X											
Speaker malfunction (e. g., any foreign material, broken)	X		X	X	X							
Improper speaker installation	X			X	X							
Poor connection of audio unit connector, terminal damage	X	X		X					X			
Antenna malfunction (e.g., poor ground)	X											
Audio unit/car-navigation unit malfunction		X	X	X	X	X	X	X	X	X	X	
Audio amplifier malfunction (with Bose®)	X		X	X	X	X		X				
Speaker muted by Bluetooth system (hands-free telephone (HF/TEL) system) operation			X	X								
Mis-operation of steering switches			X			X						X
Burnt fuse (B+)		X										
Burnt fuse (ACC)		X										
Open or short circuit in power supply (B+) wiring harness		X										
Open or short circuit in power supply (ACC) wiring harness		X										
Glass antenna malfunction			X									
Antenna feeder malfunction			X									
Center roof antenna malfunction			X									
Short circuit in wiring harness between audio unit and speaker (without Bose®)			X	X								
Open circuit in wiring harness between audio unit and speaker (without Bose®)				X								
Open or short circuit in wiring harness between audio amplifier and ground (with Bose®)	X											
Open or short circuit in wiring harness between audio amplifier and speaker (with Bose®)			X	X								
Open or short circuit in wiring harness between audio amplifier and audio unit (with Bose®)			X	X								
Poor connection of audio amplifier connector, terminal damage (with Bose®)	X		X	X				X				
Speaker muted by audio unit sound adjustment				X								
Short circuit inside speaker				X	X							
Tuning error with radio station					X							
Poor connection of music device					X							

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	AF noise or POP noise on all sources (Radio, CD)	Audio power is not available or switched on or off automatically	No sound from all speakers	No sound from certain speakers	Broken sound or poor sound quality	Sound becomes loud or weak while driving the vehicle	ALC function is inoperative (without Bose®)	AudioPilot® 2 function is inoperative (with Bose®)	Audio system illumination does not illuminate at all	LCD does not display at all	Display does not change to the rear mount camera image	Sound jumps
Volume adjustment of music device is at minimum					X							
Sound level difference between audio modes						X						
Burnt fuse (TNS signal)									X			
Illumination turned off by panel light control switch operation									X			
Open or short circuit in TNS signal wiring harness									X			
Malfunction in audio unit power supply system										X		
Display dimmed by panel light control switch operation										X		
Audio panel malfunction									X			
Information display malfunction										X		
Open or short circuit in AudioPilot® 2 microphone signal wiring harness (with Bose®)								X				
Open or short circuit in AudioPilot® 2 signal wiring harness (with Bose®)								X				
Rear mount camera malfunction											X	
Poor connection of the rear mount camera connector, terminal damage											X	
CAN system malfunction											X	
Poor connection of the short-cord connector, terminal damage											X	
Open or short circuit in wiring harness between audio unit and trunk lid opener switch (vehicle side)											X	
Open or short circuit in short cord											X	
Open or short circuit in wiring harness between audio unit and the short-cord connector 1											X	
TR switch (ATX)/Back-up light switch (MTX) malfunction											X	
Open or short circuit in wiring harness between TR switch (ATX)/Back-up light switch (MTX) and BCM											X	

