

2012 - Mazda6 - Body and Accessories

NO.9 NO AUDIO SYSTEM ILLUMINATION [ENTIRE AUDIO SYSTEM]

9	Audio system illumination does not illuminate at all	
Possible DTC	Audio unit (without display)	09:Er20
	Audio unit (with display) or car-navigation unit	Device code 09/error code 20
Possible cause	• Illumination turned off by panel light control switch operation • Open or short circuit in TNS signal wiring harness • Poor connection of audio unit/car-navigation unit connector, terminal damage • Audio unit /Car-navigation unit malfunction	

Diagnostic procedure

STEP	INSPECTION	ACTION	
1	• Has the panel light control switch been operated?	Yes	Go to the next step.
		No	The system is normal. Explain to the customer that the illumination is turned off by the panel light control switch operation.
2	• Disconnect the audio unit connector (24-pin) and inspect the continuity between the audio unit/car-navigation unit wiring harness-side connector terminal 1E (TNS) and the ground. • Is there continuity?	Yes	Repair or replace the short circuit in the suspect wiring harness. After repair the harness, replace with the appropriate standard fuse.
		No	Go to the next step.
3	• Inspect the connection of the audio unit/car-navigation unit connector (24-pin). • Inspect both the audio unit/car-navigation unit and wiring harness-	Yes	Go to the next step.
		No	If poor connection of audio unit/ car-navigation unit connector:

	side connector terminal 1E for poor connection (such as damaged/pulled-out pins, corrosion). • Are all the pins normal?		• Securely connect the audio unit/car-navigation unit connector. If the audio unit/ car-navigation unit side connector is wrong: • Replace the audio unit/car-navigation unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.) (See CAR-NAVIGATION UNIT REMOVAL/ INSTALLATION.) If the wiring harness-side connector is wrong: • Repair or replace the pins and/or the connector.
4	• Connect the audio unit/car-navigation unit connector (24-pin). • Switch the ignition to ACC. • Inspect the voltage at the audio unit connector terminal 1E (TNS). • Is the voltage B+ when the light switch is turned to the TNS position?	Yes	With audio unit (with display) • Go to the next step. With car-navigation unit or audio unit (without display) • Replace the audio unit/car-navigation unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.) (See CAR-NAVIGATION UNIT REMOVAL/ INSTALLATION.)
		No	Repair or replace the suspect wiring harness (TNS signal).
5	• Verify that all of the audio unit reset conditions for the customer's audio unit are met. (See AUDIO UNIT RESET PROCEDURE [ENTIRE AUDIO SYSTEM] .) • Are all of the audio unit reset conditions for the customer's audio	Yes	Perform the audio unit reset. (See AUDIO UNIT RESET PROCEDURE [ENTIRE AUDIO SYSTEM] .)
		No	Replace the audio unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.)

	unit met?		
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	side connector terminal 1E for poor connection (such as damaged/pulled-out pins, corrosion). • Are all the pins normal?		• Securely connect the audio unit/car-navigation unit connector. If the audio unit/ car-navigation unit side connector is wrong: • Replace the audio unit/car-navigation unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.) (See CAR-NAVIGATION UNIT REMOVAL/ INSTALLATION.) If the wiring harness-side connector is wrong: • Repair or replace the pins and/or the connector.
4	• Connect the audio unit/car-navigation unit connector (24-pin). • Switch the ignition to ACC. • Inspect the voltage at the audio unit connector terminal 1E (TNS). • Is the voltage B+ when the light switch is turned to the TNS position?	Yes	With audio unit (with display) • Go to the next step. With car-navigation unit or audio unit (without display) • Replace the audio unit/car-navigation unit. (See AUDIO UNIT REMOVAL/ INSTALLATION.) (See CAR-NAVIGATION UNIT REMOVAL/ INSTALLATION.)
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