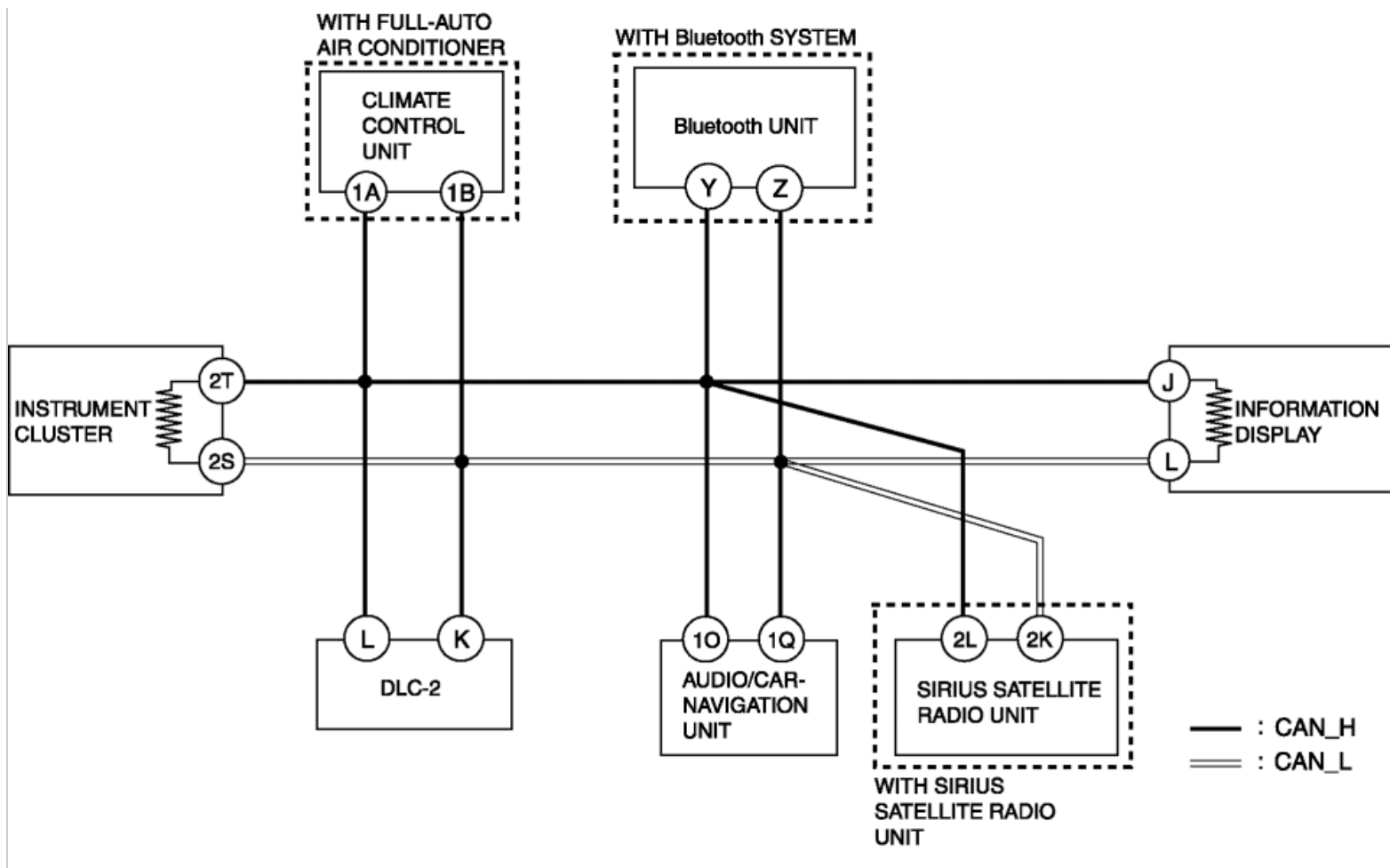


2012 - Mazda6 - Body and Accessories

DTC U0010:88, 01:Er, 16:Er11, 16:Er12, 26:Er81 [MULTI PLEX COMMUNICATION SYSTEM]

DTC	U0010:88	CAN system communication error
	01:Er	
	16:Er11	
	16:Er12	
	26:Er81	
	Device code16:Error code 11	
	Device code16:Error code 12	
	Device code26:Error code 81	
DETECTION CONDITION		WARNING: • Perform the following on-board diagnosis according to FOREWORD [MULTI PLEX COMMUNICATION SYSTEM] troubleshooting procedure. • CAN system-related harness malfunction • CAN system-related module malfunction
POSSIBLE CAUSE		• Open or short circuit in wiring harness • Malfunction of connectors between instrument cluster, climate control unit, Bluetooth unit, car-navigation unit or audio unit, sirius satellite radio unit, and information display • Instrument cluster malfunction • Climate control unit malfunction • Bluetooth unit malfunction • Car-navigation unit or audio unit malfunction • Sirius satellite radio unit malfunction • Information display malfunction



Diagnostic procedure

CAUTION:

- When disconnecting the connector, verify that there is no looseness, damage, deformation, corrosion, or poor connection of the connector terminals.

Step	Inspection	Action
1	VERIFICATION BEFORE SERVICING - Are any DTCs, except the following, displayed? - U0010:88 01:Er 16:Er11 16:Er12 26:Er81 - Device code16:Error code 11 - Device code16:Error code 12 - Device code26:Error	Yes Determine the open circuit location referring to DETERMINING MALFUNCTIONING PART (MS-CAN) [MULTIPLEX COMMUNICATION SYSTEM]. No Go to the next step.

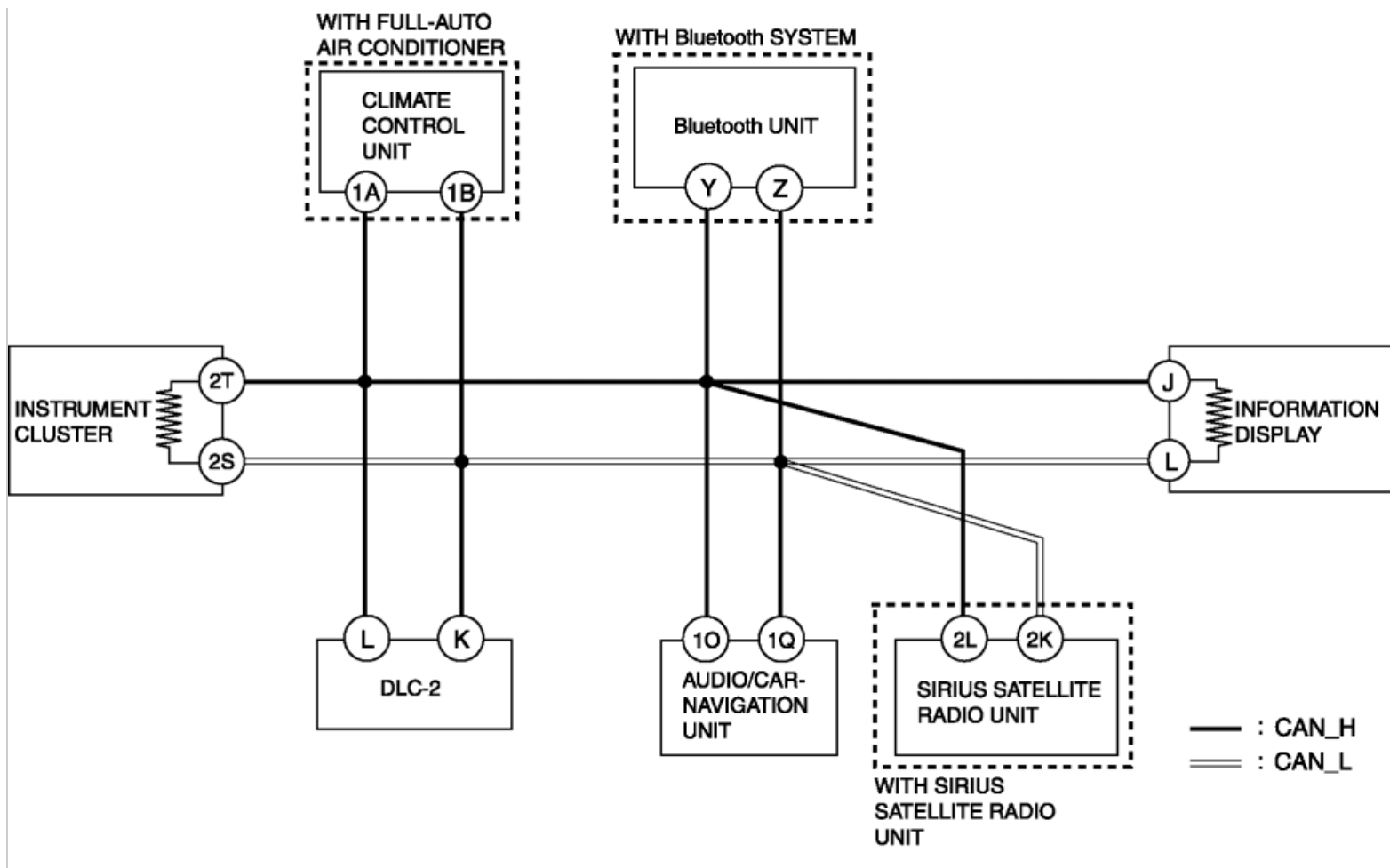
	code 81		
2	INSPECTION OF CONTROL MODULE CONNECTOR OUTPUTTING DTCs - Inspect the terminal condition of the control module connector outputting DTCs and the mid-connector. - Are the connector terminals normal without damage, deformation, corrosion, or disconnection?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
3	INSPECTION OF POWER SUPPLY OF CONTROL MODULE OUTPUTTING DTCs - Refer to the terminal voltage table of the control module outputting DTCs to inspect the terminal voltage and fuse condition. - Is the power supply voltage normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
4	INSPECTION OF BODY GROUND CONDITION OF CONTROL MODULE OUTPUTTING DTCs - Inspect the body ground wires and ground point of the control module outputting DTCs. - Are the ground and ground point normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
5	CAN SYSTEM RELATED WIRING HARNESS INSPECTION - CAN system related wiring harness inspection: - Short to ground - Short to power supply - Short between twisted pair wiring harness - Open circuit - Is the wiring harness normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
6	INSPECT INSTRUMENT CLUSTER - Disconnect the negative battery cable. - Disconnect the instrument cluster connector. - Measure the resistance between the following instrument cluster connector terminals: - Between terminal 2T and terminal 2S (part side) - Is the resistance 118-130 ohm?	Yes	Go to the next step.
		No	Replace the instrument cluster, then go to Step 9. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION.)
7	INSPECT INFORMATION DISPLAY	Yes	Go to the next step.

	• Disconnect the information display connector. • Measure the resistance between the following information display connector terminals: ▪ Between terminal J and terminal L (part side) • Is the resistance 118-130 ohm?	No	Replace the information display, then go to Step 9. (See INFORMATION DISPLAY REMOVAL/ INSTALLATION .)
8	CAN RELATED MODULE VERIFICATION • Remove only one of the CAN-related modules. • Clear DTCs. • Inspect the DTCs of all modules. • Are DTCs U0010:88, 01:Er, 16:Er11, 16:Er12, 26:Er81, Device code16:Error code 11, Device code16:Error code 12, Device code26:Error code 81 displayed?	Yes	Reinstall the removed module, remove another module and perform the same inspection. Inspect all of the CAN-related modules using the same procedure. After inspecting all of the modules, go to the next step.
		No	Replace the removed module.
9	AFTER REPAIR VERIFICATION • Connect all of the modules. • Clear DTCs. • Inspect the DTCs. • Are DTCs displayed?	Yes	Perform the CAN system on-board diagnosis again according to the troubleshooting procedure (See FOREWORD [MULTIPLEX COMMUNICATION SYSTEM] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Body and Accessories

DTC U0010:88, 01:Er, 16:Er11, 16:Er12, 26:Er81 [MULTI PLEX COMMUNICATION SYSTEM]

DTC	U0010:88	CAN system communication error
	01:Er	
	16:Er11	
	16:Er12	
	26:Er81	
	Device code16:Error code 11	
	Device code16:Error code 12	
	Device code26:Error code 81	
DETECTION CONDITION		WARNING: • Perform the following on-board diagnosis according to FOREWORD [MULTI PLEX COMMUNICATION SYSTEM] troubleshooting procedure. • CAN system-related harness malfunction • CAN system-related module malfunction
POSSIBLE CAUSE		• Open or short circuit in wiring harness • Malfunction of connectors between instrument cluster, climate control unit, Bluetooth unit, car-navigation unit or audio unit, sirius satellite radio unit, and information display • Instrument cluster malfunction • Climate control unit malfunction • Bluetooth unit malfunction • Car-navigation unit or audio unit malfunction • Sirius satellite radio unit malfunction • Information display malfunction



Diagnostic procedure

CAUTION:

- When disconnecting the connector, verify that there is no looseness, damage, deformation, corrosion, or poor connection of the connector terminals.

Step	Inspection	Action
1	VERIFICATION BEFORE SERVICING - Are any DTCs, except the following, displayed? - U0010:88 01:Er 16:Er11 16:Er12 26:Er81 - Device code16:Error code 11 - Device code16:Error code 12 - Device code26:Error	Yes Determine the open circuit location referring to DETERMINING MALFUNCTIONING PART (MS-CAN) [MULTIPLEX COMMUNICATION SYSTEM]. No Go to the next step.

	code 81		
2	INSPECTION OF CONTROL MODULE CONNECTOR OUTPUTTING DTCs - Inspect the terminal condition of the control module connector outputting DTCs and the mid-connector. - Are the connector terminals normal without damage, deformation, corrosion, or disconnection?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
3	INSPECTION OF POWER SUPPLY OF CONTROL MODULE OUTPUTTING DTCs - Refer to the terminal voltage table of the control module outputting DTCs to inspect the terminal voltage and fuse condition. - Is the power supply voltage normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
4	INSPECTION OF BODY GROUND CONDITION OF CONTROL MODULE OUTPUTTING DTCs - Inspect the body ground wires and ground point of the control module outputting DTCs. - Are the ground and ground point normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
5	CAN SYSTEM RELATED WIRING HARNESS INSPECTION - CAN system related wiring harness inspection: - Short to ground - Short to power supply - Short between twisted pair wiring harness - Open circuit - Is the wiring harness normal?	Yes	Go to the next step.
		No	Repair or replace the connector, then go to Step 9.
6	INSPECT INSTRUMENT CLUSTER - Disconnect the negative battery cable. - Disconnect the instrument cluster connector. - Measure the resistance between the following instrument cluster connector terminals: - Between terminal 2T and terminal 2S (part side) - Is the resistance 118-130 ohm?	Yes	Go to the next step.
		No	Replace the instrument cluster, then go to Step 9. (See INSTRUMENT CLUSTER REMOVAL/ INSTALLATION.)
7	INSPECT INFORMATION DISPLAY	Yes	Go to the next step.

	• Disconnect the information display connector. • Measure the resistance between the following information display connector terminals: ▪ Between terminal J and terminal L (part side) • Is the resistance 118-130 ohm?	No	Replace the information display, then go to Step 9. (See INFORMATION DISPLAY REMOVAL/ INSTALLATION .)
8	CAN RELATED MODULE VERIFICATION • Remove only one of the CAN-related modules. • Clear DTCs. • Inspect the DTCs of all modules. • Are DTCs U0010:88, 01:Er, 16:Er11, 16:Er12, 26:Er81, Device code16:Error code 11, Device code16:Error code 12, Device code26:Error code 81 displayed?	Yes	Reinstall the removed module, remove another module and perform the same inspection. Inspect all of the CAN-related modules using the same procedure. After inspecting all of the modules, go to the next step.
		No	Replace the removed module.
9	AFTER REPAIR VERIFICATION • Connect all of the modules. • Clear DTCs. • Inspect the DTCs. • Are DTCs displayed?	Yes	Perform the CAN system on-board diagnosis again according to the troubleshooting procedure (See FOREWORD [MULTIPLEX COMMUNICATION SYSTEM] .)
		No	DTC troubleshooting completed.