Service Alert

Mazda North American Operations Irvine, CA 92618-2922



Subject:

MAZDA CONNECT SYMPTOM TROUBLESHOOTING (7TH GENERATION VEHICLES)

Service Alert No.: SA-027/20

Last Issued: 04/08/2020

BULLETIN NOTES

This service alert supersedes the previously issued service alert listed below. The changes are noted in Red text.

Previous Service Alert:	Date(s) Issued:
SA-027/20	02/11/20
SA-042/19	03/19/2020, 12/12/19and 09/25/19

APPLICABLE MODEL(S)/VINS

2019-2020 Mazda3 2020 CX-30

MAZDA CONNECT Software Version 11002 NOTE:

"Mazda3 owners may notice an icon in their infotainment's display that indicates Mazda Connected Services. This new feature is a global technology and designed with the latest version of Mazda ConnectTM. At this time, the service is not active for Mazda3 vehicles in the U.S. Any updates to the service will be announced at the appropriate time."



DESCRIPTION

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Customers having MAZDA CONNECT concerns should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

NOTE: Before proceeding:

- Document the vehicle current MAZDA CONNECT CMU software version.
- Confirm that the Connectivity Master Unit (CMU) is updated to the latest software version.
 - Go to MGSS Infotainment MAZDA CONNECT Updates
 - Go to TSB 16-001/20 to view MAZDA CONNECT CMU software fix list.
- Confirm that the customers device is updated to the latest software version.
- Apple Carplay/Android Auto FAQ, go to SA-001/19.

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- No. 11 How to Check Navi SD Card VIN Lock

No. 1 Blank Screen

Step	Inspection	Result	Action
1	Is the Rear View Camera displayed?	Yes	Go to step 2.
1		No	Refer to No. 2. Rear View Camera is not displayed
2	Press and hold the Power Button. Is the	Yes	Normal Operation
2	screen displayed correctly?		Go to step 3.
2	Press the "HOME" button. Is the HOME	Yes	Normal Operation
3	screen displayed correctly?		Go to step 4.
4	Using M-MDS, are any infotainment	Yes	Go to MGSS for DTC diagnosis
4	system DTC's stored?	No	Go to step 5.
_	Is there a device connected to the USB	Yes	Go to step 6.
5	port?	No	Go to step 7.

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	Disconnect the USB device. Does the display function properly after USB device is disconnected?		USB device is not compatible	
6			Go to step 7.	
7	Is the connector for the Center Display		Go to step 8.	
	inserted correctly	No	Insert the connector correctly.	
0	Are the connectors for the CMU inserted	Yes	Go to step 9.	
0	correctly?	No	Insert the connectors correctly.	
	Is the voltage at the CMU, PWR CTRL	Yes	Go to step 10.	
9	OUT (0920-101A Terminal 1S SB wire) of the CMU normal?		Go to step 11.	
S۱	10 known vehicle. Is the screen display	Yes	Check / Replace the Center Display.	
		No	Go to step 11.	
11	Swap the CMU with good known vehicle. Is the screen display normal?	Yes	Check / Replace the CMU. 1. Retrieve the data log if possible before replacing the CMU 2. Document date and time of the condition	
		No	Repair / Replace wiring harness. Go to MGSS View Content - Wiring Diagram - Body and Accessories - Entertainment System.	

No. 2 Rear View Camera is not displayed

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system DTC's stored?	Yes	Go to MGSS for DTC diagnosis
1		No	Go to step 2.
2	Is the vehicle equipped with 360 View	Yes	Go to step 3.
۷	Monitor?	No	Go to step 4.
3	Is the Front Camera and Side Cameras displayed normally?	Yes	Check / Replace the 360 View Monitor control unit.
5		No	Go to step 4.
4	Are images other than the Rear View		Go to step 5.
4	Camera displayed?	No	Go to No. 1 Blank Screen.
Е	Is the connector for the Rear View	Yes	Go to step 6.
5	Camera Inserted correctly?	No	Insert the connector correctly.
6		Yes	Go to step 7.

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	Is the connector for the Center Display Inserted correctly	No	Insert the connector correctly
7	Are the connectors for the CMU Inserted correctly	Yes	Go to step 8.
/		No	Insert the connectors correctly
II	Swap the Rear View Camera with good known vehicle. Is the screen display normal?	Yes	Check / Replace the Rear View Camera See TSB 09-021/19
		No	Go to Step 9
114	Swap the CMU with good known vehicle. Is the screen display normal?	Yes	Check / Replace the CMU. 1. Retrieve the data log if possible before replacing the CMU 2. Document date and time of the condition
		No	Repair / Replace wiring harness. Go to MGSS View Content - Wiring Diagram - Body and Accessories - Entertainment System.

No. 3 Rebooting

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system DTC's	Yes	Go to MGSS for DTC diagnosis
1	stored?	No	Go to step 2.
	Does the reboot continue after removing the	Yes	Go to step 3.
2		No	Check / Replace the Navigation SD card.
2	Is there a device connected to the LICD part?	Yes	Go to step 4.
3	Is there a device connected to the USB port?		Go to step 5.
4	Disconnect the USB device. Does the reboot	Yes	USB device is not compatible
4	continue after USB device is disconnected?		Go to step 5.
		Yes	Go to step 6.
			Check / Replace the CMU.
5	Does the reboot continue after ignition key OFF then back ON?	No	 Retrieve the data log if possible before replacing the CMU Document date and time of the condition

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			Check / Replace the CMU.
116	Does the reboot continue after vehicle battery disconnect?	Yes	 Retrieve the data log if possible before replacing the CMU Document date and time of the condition
		No	No repair needed.

No. 4 Infotainment System Has No Sound

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system DTC's stored?		Go to MGSS for DTC diagnosis
_			Go to step 2.
2	Is sound normal other than navigation	Yes	Go to step 3.
2	guidance?	No	Go to step 4.
3	Can you hear the voice after raising the	Yes	Normal Operation.
3	navigation volume?	No	Go to step 5.
4	Can you hear sound after turning on audio	Yes	Normal Operation.
4	mode?	No	Go to step 6.
5 h		Yes	Complete
	Replace the Navigation SD Card. Can you hear voice after Navigation SD Card replacement?	No	 Check / Replace the CMU. Retrieve Retrieve the data log if possible before replacing the CMU Document date and time of the condition
6	Can you hear sound after raising the volume		Normal Operation
O	of audio?	No	Go to step 7.
7	Source: USB/iPod Are there any problems with the media and the music files? Source: Radio Are there any problems with the antenna and the reception? Source: Bluetooth Audio	Yes	Source: USB/iPod Check the media and the compatible files. Source: Radio Check the antenna, the reception, and the Remote Tuner side. Source: Bluetooth Audio Check the Bluetooth connection and the Bluetooth device.
	Are there any problems with Bluetooth?	No	Go to step 8.

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8	Active Speaker Check Function - Speaker Inspection.	Pass	Check / Replace the CMU. Retrieve 1. Retrieve the data log if possible before replacing the CMU 2. Document date and time of the condition	
	Did the Speaker Inspection Pass?	Fail	Go to step 9.	
ıu ı	Is the connector for the Speaker(s) that	Yes	Go to step 10.	
	failed inserted correctly?	No	Insert the connector correctly.	
10	is the connector for the ampinior mocreta	Yes	Go to step 11.	
10		No	Insert the connector correctly.	
11	Are the CMU connectors inserted correctly?	Yes	Go to step 12.	
11		No	Insert the connectors correctly.	
12	Swap speakers from good known vehicle. Can you hear sound?	Yes	Check / Replace the speakers.	
12		No	Go to step 13.	
13	.3		Check / Replace the Amplifier.	
13			Go to step 14.	
14	Swap the CMU from known good vehicle. Can you hear sound?		Check / Replace the CMU. 1. Retrieve the data log if possible before replacing the CMU 2. Document date and time of the condition	
			Repair/Replace wiring harness. Go to MGSS View Content - Wiring Diagram - Body and Accessories - Entertainment System.	

No. 5 Commander Switch Does Not Work

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system	Yes	Go to MGSS for DTC diagnosis
DTC's stored?	DTC's stored?	No	Go to step 2.
2	Does the Commander Switch work correctly?	Yes	Go to step 3.
2		No	Go to step 4.
3	Does the Steering Wheel Switch work	Yes	Normal Operation.
3	correctly?	No	Go to step 5.
4	Is fuse F13 missing?	Yes	Go to SA-025/19.

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		No	Go to step 8.	
	Go to MGSS "DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MASTER UNIT (US)]" Perform Functional Inspection/Adjustment - Steering SW Inspection - Did the Steering SW Inspection Pass?		Go to step 6.	
5			Go to MGSS STEERING SWITCH INSPECTION.	
6	Is the connector for the CMU inserted	Yes	Go to step 7.	
	correctly?	No	Insert the connector correctly.	
7	Swap the CMU from known good vehicle. Does the Steering Wheel Switch work correctly?	Yes	 Check / Replace the CMU. Retrieve the data log if possible before replacing the CMU Document date and time of the condition 	
		No	Repair/Replace wiring harness. Go to MGSS View Content - Wiring Diagram - Body and Accessories - Entertainment System.	
8	Go to MGSS "DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MASTER UNIT (US)]" Perform Functional Inspection/Adjustment - Touch Pad/Commander Inspection - Commander switch inspection. Did the Commander switch inspection Pass?		 Check / Replace the CMU. Retrieve the data log if possible before replacing the CMU Document date and time of the condition 	
	<u> </u>	Fail Yes	Go to step 9.	
9	Is the connector for the Commander Switch		Go to step 10.	
	inserted correctly?		Insert the connector correctly.	
10	Are the CMU connectors inserted correctly?	Yes	Go to step 11.	
		No	Insert the connectors correctly.	
	Swap the Commander Switch with good known	Yes	Check / Replace the Commander Switch.	
11	vehicle. Does the Commander Switch work correctly?	No	Go to step 12.	
12	Swap the CMU from known good vehicle. Does the Commander Switch work correctly?	Yes	Check / Replace the CMU. 1. Retrieve the data log if possible before replacing the CMU 2. Document date and time of the condition	

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		Repair/Replace wiring harness. Go to MGSS
	No	View Content - Wiring Diagram - Body and
		Accessories - Entertainment System.

No. 6 Bluetooth device will not pair

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system DTC's stored?		Go to MGSS for DTC diagnosis
1			Go to step 2.
	Is Bluetooth enabled on the customers device?		Go to step 3.
2			Enable Bluetooth on the customers device.
		Yes	Go to step 4.
3	Is the customers device paired to the vehicle?	No	Pair the customers device to the vehicle.
	Is the customers device selected in MAZDA	Yes	Go to step 5.
I/I	CONNECT settings?	No	Select the customers device from Bluetooth settings.
	Delete the device from MAZDA CONNECT and then re-pair it. Does Bluetooth work correctly?		Normal Operation
5			Go to step 6.
	Go to http://infotainment.mazdahandsfree.com	Yes	Go to step 7.
	Web Site. Is the customers device compatible?		The customers device is not compatible.
		Yes	Go to step 8.
	Does the same symptom occur on another same model/year vehicle?	No	 Check / Replace the CMU. Document device model, software version and occurrence of the condition. Retrieve the data log if possible before replacing the CMU Document date and time of the condition
8		Yes	Vehicle operation is normal.

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Reboot the customers device. Does Bluetooth work correctly?		Check / Replace the CMU.
	No	 Document device model, software version and occurrence of the condition. Retrieve the data log if possible before replacing the CMU Document date and time of the condition

No. 7 Incorrect GPS position

Step	Inspection	Result	Action
	Go to MAZDA CONNECT - Navi menu, Travel Information - Where Am I? - Settings - GPS information - Check Available Satellites.	Yes	Normal Operation.
1	Or Go to MGSS "DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MASTER UNIT (US)]" Perform Functional Inspection/Adjustment - Navi System Inspection - Check GPS Received Level.	No	Go to step 2.
	Does the Navi system show correct vehicle position? Using M-MDS, are any of the following DTC's stored?	Yes	Go to step 3.
2	- B119F:13, GPS antenna signal circuit malfunction (short to power or open circuit) - B119F:2B, GPS antenna signal circuit malfunction (short to ground)		Go to step 8.
3	latha CDC automa compaton conjugal arganalis?		Go to step 4.
3	Is the GPS antenna connector secured properly?	No	Insert the connector correctly.
4	Is the GPS wiring harness open or shorted?		Repair / Replace GPS wiring harness.
			Go to step 5.
5	Are the CMU connectors secured properly?	Yes	Go to step 6.
,	Are the Civio connectors secured properly?		Insert the connectors correctly.
6	Is the CMU wiring harness open or shorted?	Yes	Repair / Replace CMU wiring harness.

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		No	Go to step 7.
		Yes	Repair completed.
7	Replace GPS antenna. Does the Navigation system show correct position?		 Check / Replace the CMU. Retrieve the data log if possible before replacing the CMU Document date and time of the condition
8	Using M-MDS, is DTC B119F:49 stored?		Go to step 9.
0	(Communication error with GNSS)	No	Go to step 11.
9	Are the CMII connectors secured preparly?	Yes	Go to step 10.
9	Are the CMU connectors secured properly?		Insert the connectors correctly.
		Yes	Repair / Replace CMU wiring harness.
10	Is the CMU wiring harness open or shorted?		Check / Replace the CMU. 1. Retrieve the data log if possible before replacing the CMU 2. Document date and time of the condition
	Check / Replace the CMU. Retrieve CMU data log if possible	Yes	Repair completed.
11	before replacing CMU. Did DTC B119F:49 clear?		Repair / Replace GPS antenna.

NOTE: Remove aftermarket GPS devices that may interfere with vehicle GPS antenna. Example: Some radar detectors may emit radio waves that interfere with the vehicle GPS antenna.

No. 8 Voice Recognition Does Not Work

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system DTC's stored?	Yes	Go to MGSS for DTC diagnosis
1		No	Go to step 2.
	Go to MGSS "DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MASTER UNIT (US)]" Perform Functional Inspection/Adjustment - Steering SW Inspection - Did the Steering SW Inspection Pass?	Pass	Go to step 3.
2		l⊦aıl l	Go to MGSS STEERING SWITCH INSPECTION.

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3	Go to MGSS "DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MASTER UNIT (US)]" Perform Functional Inspection/Adjustment - Microphone Inspection - Did the Microphone Inspection Pass?	Pass	 Check / Replace the CMU. Retrieve the data log if possible before replacing the CMU Document date and time of the condition
		IFail	Go to MGSS MICROPHONE INSPECTION.

No. 9 Cannot Make a Hands-Free Call

Step	Inspection	Result	Action
1		Yes	Go to MGSS for DTC diagnosis
1		No	Go to step 2.
	Is Bluetooth enabled on the customers device?	Yes	Go to step 3.
2		INo I	Enable Bluetooth on the customers device.
	Is the customers device data service strength good?	Yes	Go to step 4.
∥ ⊰ ∣		INo I	Move to a location where data service strength is good and retest.
4	Is the customers device paired to the vehicle?	Yes	Go to step 5.
4		No	Pair the customers device to the vehicle.
	Is the customers device selected in MAZDA CONNECT settings?	Yes	Go to step 6.
115 1		No	Select the customers device from Bluetooth settings.
	then re-pair it.	Yes	Normal Operation
6		No	Go to step 7.
	Web Site.	Yes	Go to step 8.
7		No	The customers device is not compatible.
8		Yes	Go to step 9.
5		No	Go to step 10.
a	Reboot the customers device. Does Bluetooth	Yes	Vehicle operation is normal.
9	work correctly?		Go to step 10.

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	Is the Bluetooth device in a place where radio waves may be blocked? (Behind or under a sheet, in a box, in a purse/bag, ext.)	11466	Move the Bluetooth device away from hidden location. Go to step 11.	
	Is the Bluetooth device contacting or blocked by metal objects?	Yes	Move the Bluetooth device away from metal objects. Go to step 12.	
117)	Is a Bluetooth device and a USB device connected at the same time?	Yes	Disconnect other USB device.	
13	Does the problem occur in a specific geological location only?	Yes	Move to a different location. This may be caused by electrical interference by radio stations, specific small power radio stations, or amateur radio stations for mobile identification used in industrial, scientific and medical devices.	
		No	Go to step 14.	
11/1	Does the same symptom occur on another Bluetooth device?	Yes	Go to step 15	
		No	The customers device is not compatible.	
15	Does the voice recognition system operate using other functions such as Bluetooth Audio?	Yes	Check / Replace the CMU. 1. Document device model, software version and occurrence of the condition. 2. Retrieve the data log if possible before replacing the CMU 3. Document date and time of the condition Go to No. 8 Voice Recognition Does Not	
		No	Work	

No. 10 Cannot Play Bluetooth Audio

Step	Inspection	Result	Action
1	Using M-MDS, are any infotainment system DTC's	Yes	Go to MGSS for DTC diagnosis
1	stored?		Go to step 2.
2	Is Bluetooth enabled on the customers device?	Yes	Go to step 3.

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		No	Enable Bluetooth on the customers device.
	Is the customers device data service strength good?	Yes	Go to step 4.
3		No	Move to a location where data service strength is good and retest.
		Yes	Go to step 5
4	Is the customers device battery strength good?	No	Connect the customers device to a charger or recharge the device, then retest.
		Yes	Go to step 6.
5	Is the customers device paired to the vehicle?	No	Pair the customers device to the vehicle.
		Yes	Go to step 7.
6	Is the customers device selected in MAZDA CONNECT settings?	No	Select the customers device from Bluetooth settings.
	Delete the device from MAZDA CONNECT and then	Yes	Normal Operation
7	re-pair it. Does Bluetooth work correctly?	No	Go to step 8.
	Go to http://infotainment.mazdahandsfree.com	Yes	Go to step 9.
8	Web Site. Is the customers device compatible?	No	The customers device is not compatible.
9	Does the same symptom occur on another same	Yes	Go to step 10.
9	model/year vehicle?	No	Go to step 11.
10	Reboot the customers device. Does Bluetooth work	Yes	Vehicle operation is normal.
10		No	Go to step 11.
11	Is the Bluetooth device in a place where radio waves may be blocked?	Yes	Move the Bluetooth device away from hidden location.
	(Behind or under a sheet, in a box, in a purse/bag, ext.)	No	Go to step 12.
12	metal objects?	Yes	Move the Bluetooth device away from metal objects.
		No	Go to step 13.
13		Yes	Disconnect other USB device.

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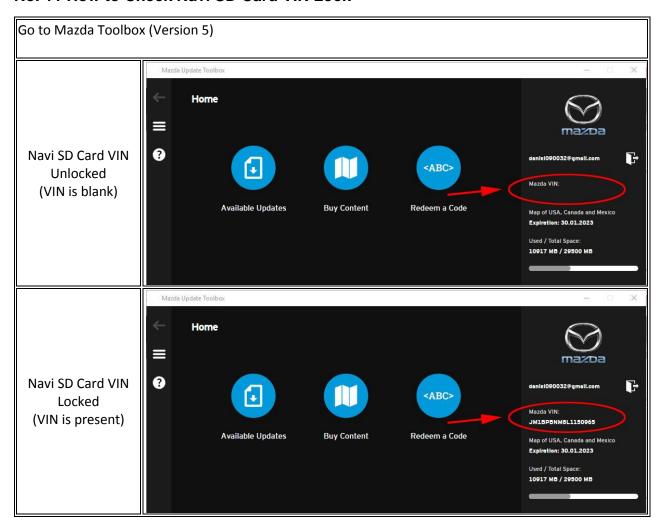
Is a Bluetooth device and a USB device connected at the same time?

1. Document device model, software version and occurrence of the condition.

2. Retrieve the data log if possible before replacing the CMU.

3. Document date and time of the condition

No. 11 How to Check Navi SD Card VIN Lock



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