

## Subject:

CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING

Service Alert No.: SA-013/21

Last Issued : 05/11/2021

# 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-013/21	04/27/21, 03/15/21, 02/22/21, 02/08/21 and 02/02/2021
SA-031/20	12/09/20,11/30/20, 11/06/20, 10/28/20, 06/16/20, 06/05/20, 06/01/20, 05/18/20, 04/14/2020, 04/02/20, 03/11/20 and 02 /27/20

# APPLICABLE MODEL(S)/VINS

2019-2021 Mazda3 2020-2021 CX-30 2021 CX-5 2021 CX-9

# DESCRIPTION

Some customers may complain about any of the following:

- Infotainment Center Display does not provide the Authorization Code during the MyMazda App Connected Vehicle enrollment.
- Remote function(s) inoperative.
  - Engine Start / Stop
  - Door Lock / Unlock
  - Lights ON / OFF
- MAZDA CONNECT connected vehicle reception strength icon shows "X" or "\".

Confirm the customer's phone and vehicle have good to strong reception during the concern as shown in the table below.

- If the reception is weak, move the vehicle to a location where the reception is good to strong as shown in the table, then try to get the Authorization Code and/or operate the remote functions before proceeding to the Repair Procedure if there is still an issue.
- If the reception is good to strong, proceed to the Repair Procedure.

	FM 10 Ruleo 12.3 Dwnld Radio com Nowl 93.1 JACK FM 93.1 JACK FM - Playing What We Want
Indication	Explanation
Ŵ	Radio waves are not being received. Move to a location with good reception.
	Weak reception.
	Good Receptioin
	Strong reception.
	Currently conducting an operation check of the communication unit. If this condition continues, consult an Authorized Mazda Dealer.
0	Currently conducting an operation check of the onboard communication unit. <b>NOTE:</b> Communication is not possible during this display.
CX-5, CX-9	The communication function is temporarily disabled due to infotainment system setting.
Mazda3, CX-30 CX-5, CX-9	<ul> <li>Connected Service contract has ended (Subscription expired)</li> <li>Customer deactivated Connected Services (Opt-Out)         <ul> <li>eMDCS Warranty Vehicle Inquiry will show Campaign CSP04 Status Closed</li> </ul> </li> <li>TCU has not been initialized, go to SA-004/21</li> </ul>

## Remote Engine Start Will Not Function under the following conditions

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ltem	Condition
1	Vehicle battery voltage low
2	Automatic Transmission shift position except "P"
3	Vehicles equipped with manual transmission
4	Vehicle speed above 3 mi/h (5 km/h)
5	Brake pedal switch malfunction
6	Engine has been running by remote engine start function
7	Engine started by remote engine start more than 2 consecutive times while the vehicle is not driven. The vehicle must be driven 1-mile or 24-hours must pass from the last successful Remote Engine Start for the use count to reset.
8	2021 Mazda3 and CX-30: Vehicle's electrical control area network (CAN) is in "Sleep Mode"
9	A registered key is detected in the vehicle
10	Brake pedal switch detects brake application
11	Low fuel warning message
	Engine starts, then turns OFF due to abnormal high engine rpm detected. (Engine rotation over 3000 rpm continued for more than 0.2[s])
13	No engine rpm detected after sending engine start request. (Engine rotation 0 rpm continued for more than 0.2[s])
14	When the CAN data signal for engine shut off is present (e.g.: door ajar signal)
15	After 10 second maximum cranking time
16	Burglar alarm status is "Alarm" and "Alarm stand by" (CAUTION - DO NOT enable, see Theft- Deterrent System section in SA-012/20)
17	Room fuse blown/missing
18	Connected Vehicle Maintenance Mode enabled (Restricted Transmitting Mode in MDARS)
19	Vehicle is parked (stored) for approximately 1 week or longer or in deep sleep mode. Drive the vehicle for a few miles to recover.
20	DTC Stored
21	Aftermarket Remote Engine Start accessory installed.
	Mazda Remote Engine Start (BCKA-V7-620) accessory installed (No MyMazda app remote engine start function).
22	Mazda Remote Engine Start (RES) Removal a. Remove the Mazda Remote Engine Start (RES) accessory module. b. Deactivate and activate Advanced Key(s). Refer to MGSS IMMOBILIZER SYSTEM- RELATED PARTS PROGRAMMING [(US)]
23	First remote control attempt fails, second attempt works fine. Go to TSB 16-002/20.

## Remote Engine Start Function <u>Will</u> turn engine OFF under the following conditions

1 Vehicle door(s) opened	ltem	Condition
	1	Vehicle door(s) opened

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2	Vehicle trunk opened
3	Vehicle hood opened
4	Ignition switch push button "ON" detected
5	Remote engine STOP request
6	Brake pedal switch detects brake application
7	DTC Stored
8	Engine will stop running automatically after 15 minutes for safety, security and emissions.

## **REPAIR PROCEDURE**

**NOTE:** Vehicles stored for long periods may loose GPS clock sychronization. If the vehicle is stored for a long period, test drive the vehicle to give the GPS clock time to sychronize before enrolling or testing connected vehicle functions.

Customer Complaint	Action				
	<ol> <li>Go to the MyMazda App INBOX -&gt; ACTIVITY HISTORY -&gt; to view reason for remote function failure.</li> <li>If necessary, use MDARS to ID the vehicle and check for DTC's stored.</li> <li>Are DTC(s) stored?         <ul> <li>Yes: Go to MGSS for normal DTC diagnosis</li> <li>No: Contact Hotline for technical support if needed.</li> </ul> </li> <li>NOTE: The customer can view the reason for remote function failure.</li> </ol>				
Remote function(s) inoperative. • Engine Start / Stop • Door Lock / Unlock • Lights ON / OFF	Example 1 (Push notification)				
	OS Lock Screen Tap the push notificationHome Tap the alert cardInbox Detail Tap "check vehicle status"				

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	Example 2 (A	ctivity History)				
		19:14 <b>-7 ⊠</b> 95% <b>-</b> 3OX :	.∎II H20 奈 <	午前9:14 イ 194% 🔲		
	ETY & SECURITY ACTIVITY	( HISTORY NEWS & UPDAT	Engine start	Engine start		
	TODAY Engine start	09:13 AM	09:13AM 02/01	09:13AM 02/01/2021		
	Fail		2021 MAZ JM1BPALL5M	2021 MAZDA3 2.5 S PF FWD		
	LAST WEEK Engine stop	01/26/2021	Date	02/01/2021		
	Success		Time	09:13 AM		
	Engine start Success	01/26/2021		trol request cannot be cause the vehicle's key car.		
	2020 Engine start Success	12/23/2020				
	Door lock Success	12/21/2020	CHEC	CK VEHICLE STATUS		
Vehicle Center Display does not provide the Authorization Code during the MyMazda App Connected Vehicle enrollment. MAZDA CONNECT connected vehicle reception	Are DTC(s) st • Yes: Ge • No: Per 2. 2. Retrieve MA CONNECT CM 3. Perform "Act to BCM) 4. Clear DTC(s NOTE: If DTC 5. Perform KA NOTE: Test des sychronize bes 6. Contact Hot	o to step 2. fform ODR Data Co AZDA CONNECT O MU Data Retrieval ctivating Remote Co s). 2050:55 is stored, M reset. rive vehicle after a fore retrying Author tline for additional t	ollection Procedu CMU log data. Go ontrol by Smart P go to SA-003/20 KAM reset to allo rization Code. echnical support	to clear DTC. w the GPS clock to if needed.		
strength icon shows "X" or "\". Mazda3, CX-30	1. Did the customer deactivate Connected Services (Opt-Out)? NOTE: If deactivated, eMDCS Warranty Vehicle Inquiry will show Campaign CSP04 Status Closed.					
PM Hitter 12:3     Downld Radio com Now! 93.1 JACK FM     92.1 JACK FM - Raying What We Wart	<ul> <li>No: Go</li> <li>2. Check for D</li> </ul>	o repair needed. to next step. PTCs. <b>DTC's stored?</b>				

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CX-5, CX-9	<ul> <li>Yes: Go to MGSS for normal DTC diagnosis.</li> <li>No: Go to next step.</li> </ul>				
Doniel Radio com Nowl 93.1 JACK FM     93.1 JACK FM - Playing What We Want	3. Disconnect battery terminal for 30 seconds, then move the vehicle. Is the reception strength signal normal?				
	<ul> <li>Yes: Repair complete.</li> <li>No: Go to next step.</li> </ul>				
	4. Perform TCU activation. Go to SA-004/21. Is the reception strength signal normal?				
	<ul> <li>Yes: Repair complete.</li> <li>No: Go to next step.</li> </ul>				
	5. Compare Tel antenna No. 1 signal strength with good known vehicle near by.				
	Go to DIAGNOSTIC ASSIST FUNCTION [CONNECTIVITY MASTER UNIT (US)] Functional Inspection / Adjustment -> Navigation System Inspection				
	Example: Good				
	GOOOD         No Brog Viet Inspection         Or So         Positioning Lead         Po				
	No Good         Ors No Received         Positioning of the 20 Positioning Offic				
	<ul> <li>Good: Contact Hotline for technical support.</li> <li>No Good: Swap Tel antenna No. 1 with known good vehicle.</li> </ul>				
Except CX-5 and CX-9: <ul> <li>MAZDA CONNECT and/or MyMazda APP</li> </ul>	Go to SA-002/21.				

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displays incorrect tire pressures after battery disconnect and/or infotainment CMU software update.	
<ul> <li>2019 Mazda3 only:</li> <li>The customer is not able to activate Connected Services via the MyMazda app after CSP06 completion.</li> <li>MAZDA CONNECT connected vehicle reception strength icon is missing or shows unsubscribed after CSP06 completion.</li> </ul>	Go to CSP07 Repair instructions.
2020 Mazda3 only: • Infotainment center display does not provide Authorization Code during the MyMazda App Connected Vehicle enrollment and infotainment Software Update Error message. • • • • • • • • • • • • • • • • • • •	Go to SSPC1.

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<ul> <li>2021 Mazda3 and CX-30 functions inoperative:</li> <li>Vehicle Status Alert</li> <li>Remote Engine Start / Stop</li> <li>Remote Door Lock / Unlock</li> <li>Remote Hazard Lights ON / OFF</li> <li>Vehicle Finder (vehicle location mapping function is available)</li> </ul>	Vehicle's electrical control area network (CAN) is in "Sleep Mode".
<ul> <li>First remote control attempt fails, second attempt works fine.</li> <li>Engine Start / Stop</li> <li>Door Lock / Unlock</li> <li>Lights ON / OFF</li> </ul>	Go to TSB 16-002/20.
Remote Engine Start inoperative due to: 1. Aftermarket Remote Engine Start accessory installed. 2. Mazda Remote Engine Start (BCKA-V7- 620) accessory installed.	<ol> <li>Remove the aftermarket accessory.</li> <li>The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both.</li> <li>Mazda Remote Engine Start (RES) Removal         <ul> <li>Remove the Mazda Remote Engine Start (RES) accessory module.</li> <li>Deactivate and activate Advanced Key(s). Refer to MGSS IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [(US)]             </li></ul> </li> </ol>

## **ODR Data Collection Procedure**

1. ID the vehicle using MDARS	

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	Mazda Diagnostic and	Repair Software (MDARS)						- 0 ×
	Georgia				\rm dgonzale	R VIN: JMIBPANMGR	8	<b>4621:   🗰</b> 13.8v 🗮
	<b>.</b>							&   <b>2</b>
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2. Select "Toolbox"	ADD	ALHUNISURV	CCU	сми	DAGILESI		rsc.	158.
	DOOR_ESU_D	DOOR, ISU, P	DSC	09S	ESU	FSRR	RFR.	838
	ю	LONL	LCMR	LFU	PCM			
	sas No DTCs	ICM Communication Er	ror No Com	munication or Not	t Equipped	C(s) exist	lot Supported	
	Marcla Diagnostic and	Toolbox	, 		$\Theta$ dgonzale	🖨 VIN: JMIBPANM6K	8	- 0 ×
	ি শ স্থি 🛓							*   *
		alogger nation test for syster	n operation			Not Ru	n	Run
3. Select Vehicle Icon	+ On-dem	nand self-test						
		icle History				Not Ru	n	Run

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	👜 Quick Check 🗶 Toolbax		
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	+ BRAKES		
	+ TRANSMISSION/TRANSAXLE		
	+ RESTRAINTS		
4. Select "Collect Diagnostic	+ SEATS		
Information"	+ SECURITY AND LOCKS		
	+ LIGHTING SYSTEMS		
	+ WIPER/WASHER SYSTEM		
	+ POWER SYSTEMS		
	+ i-ACTIVSENSE		
	+ Mazda Connect		
	+ Collect Diagnostic Information		
	Venicle History	Not Run	Run
	Mazda Diagnostic and Repair Software (MDARS)		- 🗆 ×
	Massa Diagnostic and Repair Software (MDARS)	😝 dgorizale   🚔 VIP. JM1BPANMGK	- 0 ×
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5. Select Collect Diagnostic		😧 dgonzale   🚑 VIR: JMIBPANMEK	
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	Mazda Diagnostic and Repair Software (MDARS)		- 🗆 X
	⊖ mazoa	\rm dgorzale   🚔 VIN: JM1BPANIMGK	2 (CL ) 🖬 13.8v 🚍
	Quick Check X Toolbox Collect Diag X		
	ODR Collection		
	Verify the following conditions are met before continuing this procedure.		
	Ignition Condition : On Current value : On		
			Next
6. Turn Ignition ON, then select			Next
"Next"	Macda Diagnostic and Repair Software (MDARS)		- 0 X
	⊖ mazoa	\varTheta dgonzale   🖨 VIII: JM1BPANM6K.	2 (121) 🗎 13.8v 🚍
	Quick Check X Toolbox .a Collect Diag- X		
	ODR Collection		
	<ul> <li>ODR collection has been successful.</li> </ul>		

## Activating Remote Control by Smart Phone (links TCU to BCM)

NOTE: This procedure cannot be performed if the key transmitter power saving function is enabled. See SA-040/20.

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1. Connect MDARS.	Intercent of light Mater. (dot)         Image: Control         Image: Control
<ul> <li>2. Use MDARS to verify if the Telematics Control U</li> <li>&gt; Run &gt; TCU).</li> <li>Is the TCU at the latest software level?</li> <li>Yes: Go to step 3.</li> <li>No: Update TCU software, then go to step 3</li> </ul>	nit (TCU) is at the latest software level (Toolbox > Software Update
3. Select the following: a. Toolbox b. Repair icon c. MAZDA CONNECT d. Activating Remote Control by Smart Phone e. RUN.	Event Disputer under Volume Matter
<ul> <li>4. Follow the on-screen instructions and wait for process to complete.</li> <li>NOTE: If the Activating Remote Control by Smart Phone shows "Incomplete", the possible causes are:</li> <li>a. The advanced key is not in the vehicle.</li> <li>b. The connected Vehicle Maintenance Mode is enabled.</li> <li>c. The Key transmitter power saving function is enabled.</li> </ul>	

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d. The pacemaker radio wave interference	⊖ mazda (2) 🖓 🖓 Mik 3M286A4JXKM 🖉 🕼 14.4V 🚍
prevention function is enabled.	éi Quick Check 🗶 Toolbox 🖌 Activating R···★
	Activating Remote Control by Smart Phone
	System is checking the correct ECU was installed.
	Process 1 Running 5%
	Next
	Activating Remote Control by Smart Phone
	Activating Remote Control by Smart Phone
	Complete
	System checked the correct ECU was installed.
	Sent new TCU information to a control center.
	Please clear the DTC.
	After clear DTC, quick check will run automatically.
	Please confirm there is no DTC.
	Next
	Nedwarderfelderfeld
5. Select Quick Check (A), then start the engine	
and select the DTC Clear icon (B).	B B
	40 4.(#543 0) 00 999.05 DK 8 7X
<b>CAUTION:</b> If the engine is not started, DTC P2610	
is stored and cannot be erased.	
	с DC 39 07 <mark>12 01 09</mark> 0С
	96 TO TO
	🖬 No DTCs 🚾 Communication Error 🔤 rik Communication or Not Equilation 🖬 Kit Equilation and Kit E

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