Service Alert

Mazda North American Operations Irvine, CA 92618-2922



Subject:

CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING

Service Alert No.: SA-009/23

Last Issued: 08/15/2023

BULLETIN NOTES

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

Previous TSBs:	Date(s) Issued:
SA-009/23	07/05/23, 06/12/23, 05/24/23, 04/25/23, 03/28/23, 03/01/23 and 02/06/23
SA-017/22	12/13/22, 10/10/22, 08/25/22, 05/06/22, 04/04/22
SA-013/21	12/22/21, 10/13/21, 09/14/21, 05/11/21, 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:

2019-2024 Mazda3

2020-2024 CX-30

2021-2024 CX-5

2021-2023 CX-9

2022-2023 MX-30

2023-2024 CX-50

2024 CX-90

DESCRIPTION

Some customers may complain about any of the following:

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

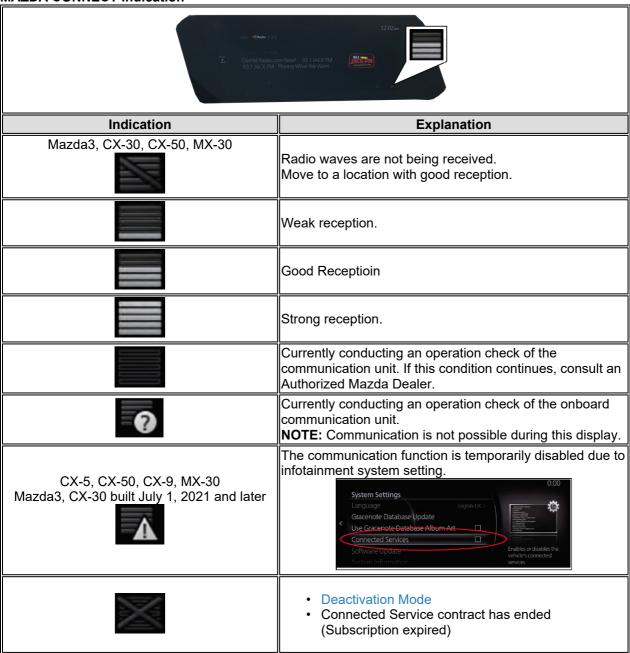
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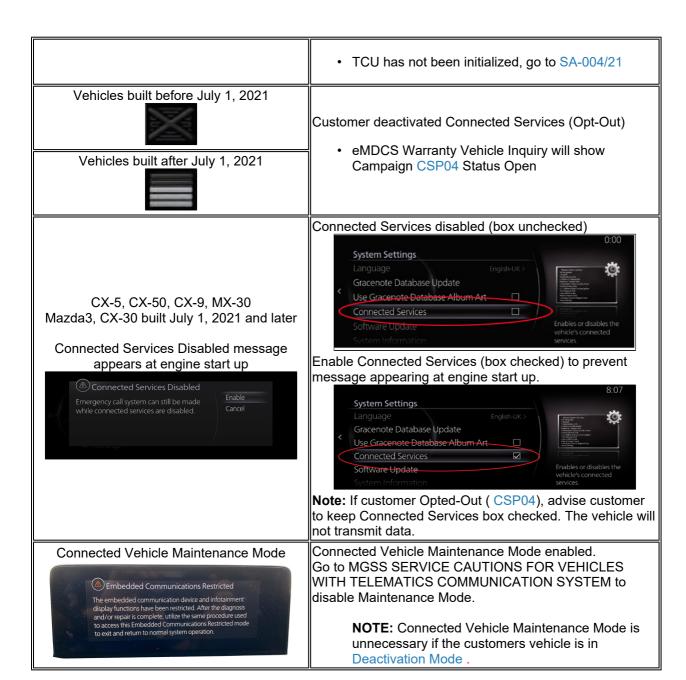
- MAZDA CONNECT Indication
- Remote Engine Start Will Not Function
- · Remote Engine Start Function Will turn engine OFF
- · Deactivation Mode

MAZDA CONNECT Indication



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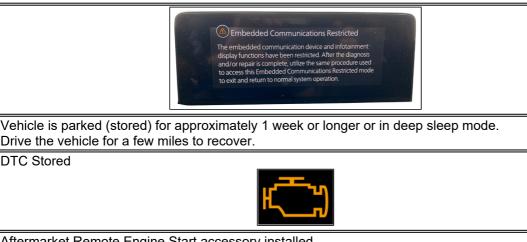


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Remote Engine Start Will Not Function under the following conditions

Item	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, 2021 CX-30, CX-50, MX-30: Vehicle's electrical control area network (CAN) is in "Sleep Mode" Low Battery Risk Start Vehicle to Charge 12V Battery Or Or		
	A registered key is detected in the vehicle		
10	Brake pedal switch detects brake application		
11	Low fuel warning		
12	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)		

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Aftermarket Remote Engine Start accessory installed. 21

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)]
- First remote control attempt fails, second attempt works fine. Go to TSB 16-002/20.
- 24 CSP04 Status Open

DTC Stored

19

20

Remote Engine Start Function Will turn engine OFF under the following conditions

Item	Condition	
1	Vehicle door(s) opened	
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.	

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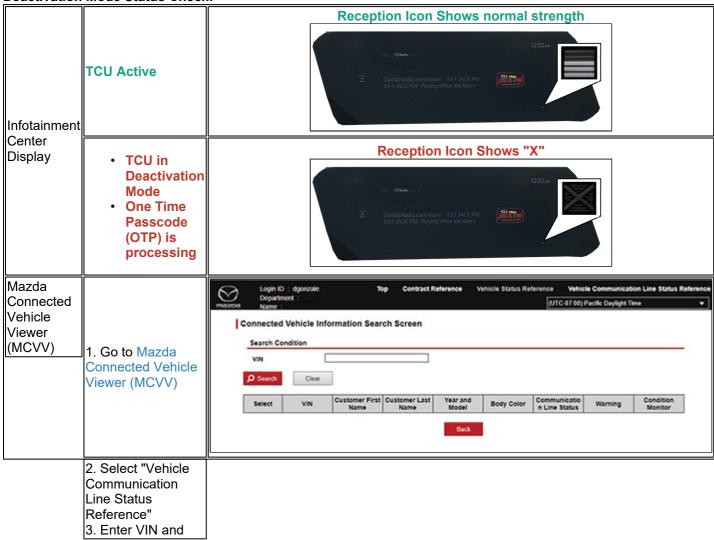
Deactivation Mode

- Deactivation Mode Temporary Suspension 6/16/2023 (6/11/2023 retail date and later)
- Vehicles retailed before 6/11/2023 and in Deactivation Mode will remain in Deactivation mode.

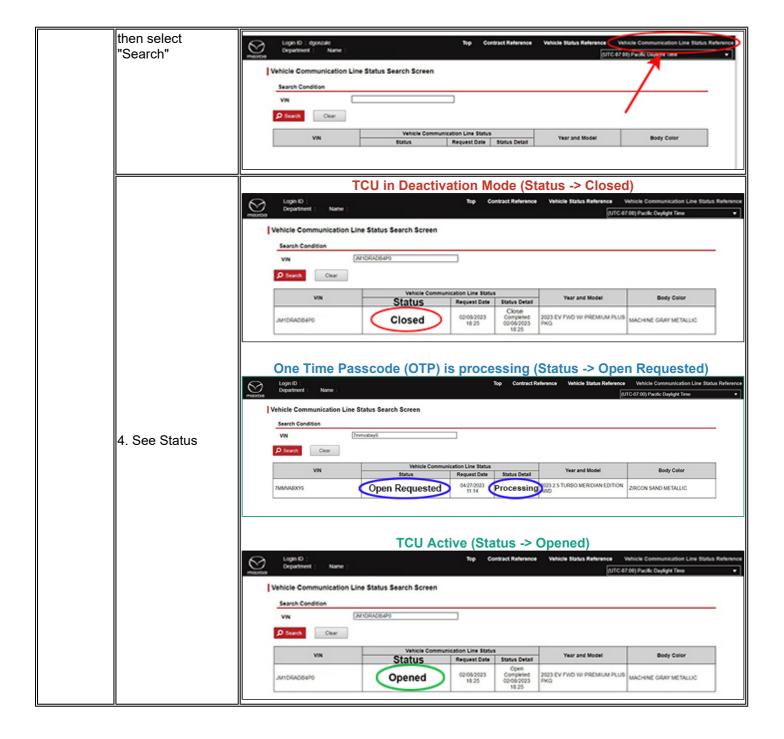
NOTE:

- Customer/Dealer can activate CV services anytime via MyMazda app
 - Customer There might be a slight delay in making the backend connection since it was temporarily deactivated.
 - Dealer Go to Repair Procedure -> TCU Activation
- When TCU is in Deactivation Mode, infotainment Over-the-Air (OTA) Connectivity Master Unit (CMU) software
 update is not possible (disabled).
- Prior to Retail Date, the TCU is active.

Deactivation Mode Status Check:



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REPAIR PROCEDURE

CAUTION: DO NOT swap TCU with another vehicle as the TCU is VIN locked after activation. A TCU swap with another vehicle will disable Connected Services on both vehicles.

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PREPARATION:

- 1. Confirm that the TCU is at the latest software level. Go to Telematics Communication Unit (TCU) Updates
- Go to eMDCS Vehicle Inquiry and confirm the following campains are not shown or closed:
 - CSP06
 - CSP07
 - SSPC7
 - DRW41
- 3. Go to eMDCS Vehicle Inquiry and confirm CSP04 is not shown.
- 4. Confirm the customer's phone and vehicle have good to strong reception during the concern as shown in the table below.



• If the reception icon shows "X", the vehicle is possibly is in Deactivation Mode.



- Customer/Dealer can activate CV services anytime via MyMazda app
 - Customer There might be a slight delay in making the backend connection since it was temporarily deactivated.
 - Dealer Go to TCU Activation
- 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 Connected Vehicle Troubleshooting below.

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.

Index

- 1. Unable to create a MyMazda account
- 2. Remote function(s) inoperative
- 3. No One Time Pass Code (OTP)
- 4. Connected vehicle reception strength icon shows "X" or "\"
- 5. MyMazda App displays incorrect tire pressures (Except CX-5 and CX-9)

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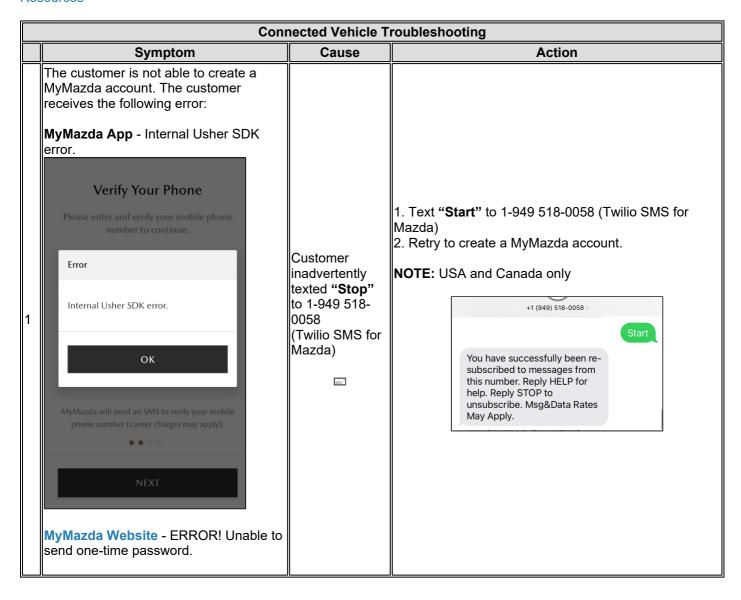
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- 6. Unable to activate Connected Services (2019 Mazda3)
- 7. Software Update Error (2020 Mazda3)
- 8. Functions inoperative (2021-> CX-30, CX-50, Mazda3 and MX-30)
- 9. First remote control attempt fails, second attempt works fine
- 10. Engine turns off when opening door
- 11. Low Tire pressure will not clear after correcting tire pressue
- 12. MyMazda App does not display tire air pressures (CX-5, CX-9)

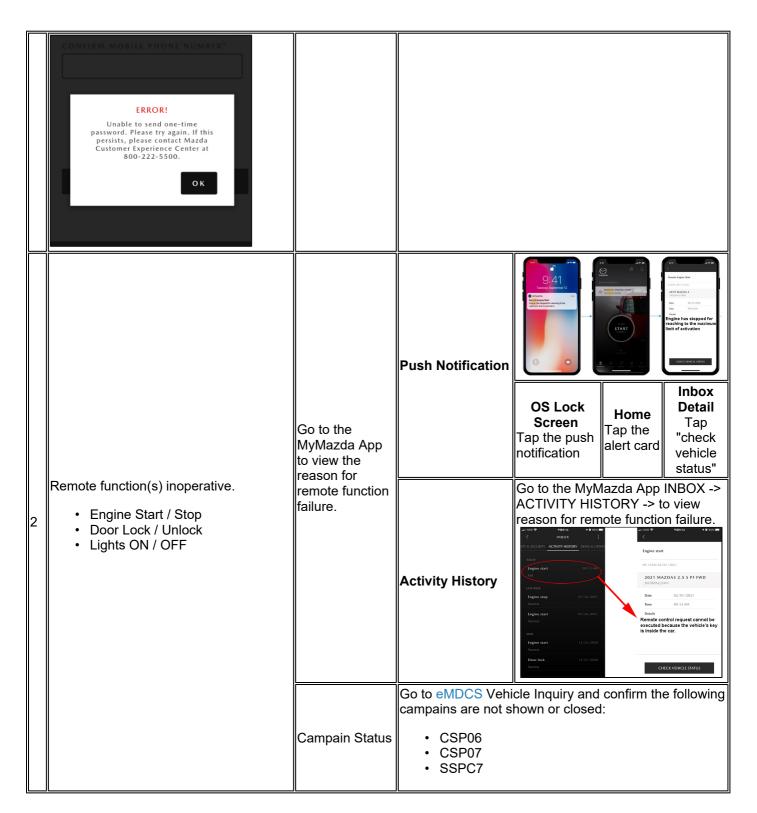
TCU Activation

Educational Videos

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	DRW41 1. Use MDARS to ID the vehicle and check for DTC's
Troubleshooting needed	stored. Are DTC(s) stored? • Yes - Go to MGSS and perform normal DTC diagnostics. • No - Go to next step. 2. Confirm TCU software version is at the following using TCU Software Version Check • Mazda3 - 10006 or later • CX-30 - 10006 or later • CX-5 - 10023 or later • CX-9 - 10023 or later • CX-9 - 10003 or later • CX-50: 10003 or later • CX-50: 10003 or later • CX-50: 10003 or later • CX-Formonect battery for 30 seconds and then reconnect (KAM reset). NOTE: Test drive vehicle after battery disconnect to allow the GPS clock to sychronize before retrying Authorization Code. 4. Perform one of the following: • Customer: Un-enroll Connected Services, then re-enroll into Connected Services as a new primary user. • Dealer: Perform customer take-over enrollment for test confirmation, then at customer pick-up, inform customer to re-enroll into Connected Services as a new primary user. 5. Contact Hotline for additional technical support if needed.
Only a single remote request can be made per 60-second period	Customer needs to wait 60 seconds for the initial request cycle to be completed to make the second request.
Remote Transmitter Key(s) in the vehicle	Do not leave keys in vehicle.
1. Aftermarket Remote Engine Start accessory	Remove the aftermarket accessory. The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function.

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installed. Cannot use both. 2. Mazda Remote Engine Mazda Remote Engine Start (RES) Removal Start (BCKAa. Remove the Mazda Remote Engine Start (RES) V7-620) accessory module. accessory b. Deactivate and activate Advanced Key(s). Refer to installed. MGSS IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [(US)]. TCU in "deep sleep" mode Advise customer to drive the vehicle as normal (at due to vehicle least several miles) and the Connected being parked for Services should start working again. a long period. Advise customer that Remote Engine Start may start vehicle temporarily, but vehicle will turn Low fuel off automatically when the fuel level is low to conserve the remaining fuel. Vehicle is Advise customer that vehicles with a manual equipped with transmission do not have the Remote Engine Start/ Manual Stop function capability. Transmission Engine started Advise customer they will see an error message when with key attempting to make a Remote Engine Off request if ltransmitter they initially turned on vehicle with a physical key instead of (instead of through their MyMazda app). MyMazda App. MyMazda App Enrollment Preparation 1. Create a MyMazda account. 2. Complete any "OPEN" Recalls / Special Service Programs. Go to MGSS -> warranty Veh. Ing. 3. Update the Telematics Communication Unit (TCU) to the latest software version. Go to MGSS -> Telematics Communication Unit (TCU) Updates. 4. 2019 Mazda3 only - Update the Connectivity Master Unit (CMU) to No One Time Passcode (OTP) the latest software version. Go to MGSS -> MAZDA CONNECT Updates (Vehicle infotainment center display does not provide the Authorization Code Check TCU activation status. during the MyMazda App enrollment) a. Go to MAZDA CONNECT home screen. b. Select Entertainment c. Select Source List and then select any of the following: FM AM

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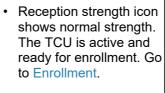
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CONSUMER NOTICE: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/ equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "doit-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

SiriusXM

d. Check the Connected Vehicle reception strength icon:





 Reception strength icon shows "X". The TCU is deactivated. Enrollment is not possible. Go to TCU Activation.



 Reception strength icon shows "\". Move the vehicle to an area with a clear view of the sky.



Enrollment

1. After registering for a MyMazda account, the Select Vehicle screen will appear. Tap "Add Vehicle" and follow the onscreen instructions to add your vehicle. 2. To enroll in Connected Services, tap



screen.
3. On the
Connected
Services
Enrollment
screen, tap

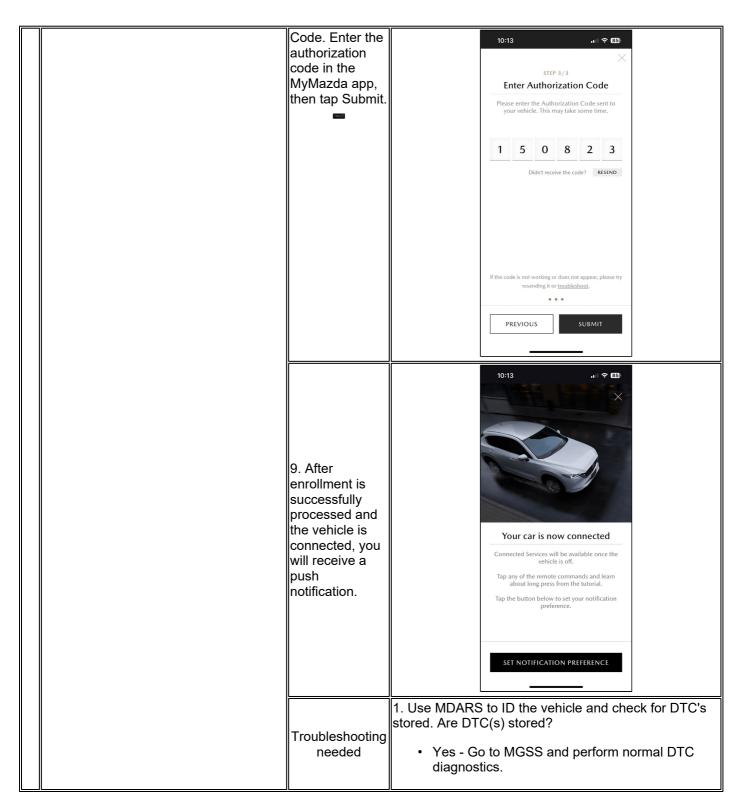
"Enroll" on the "My Vehicles"

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Start to begin the enrollment process. Turn Ignition ON 4. Switch the ignition ON in your Mazda vehicle. 5. Wait 30 Once you are inside the vehicle, proceed to the next step. seconds. 6. Tap Next. Do not drive the car during Enrollment PREVIOUS 7. Tap Request Request Authorization Code to receive authorization code on your vehicle's Mazda Connect center display. Wait a few thorization Code will be available for minutes for the infotainment Tap 'Request' to send Authorization Code to your vehicle center display to show the Authorization Code. PREVIOUS 8. After a few minutes, the infotainment center display will show the Authorization

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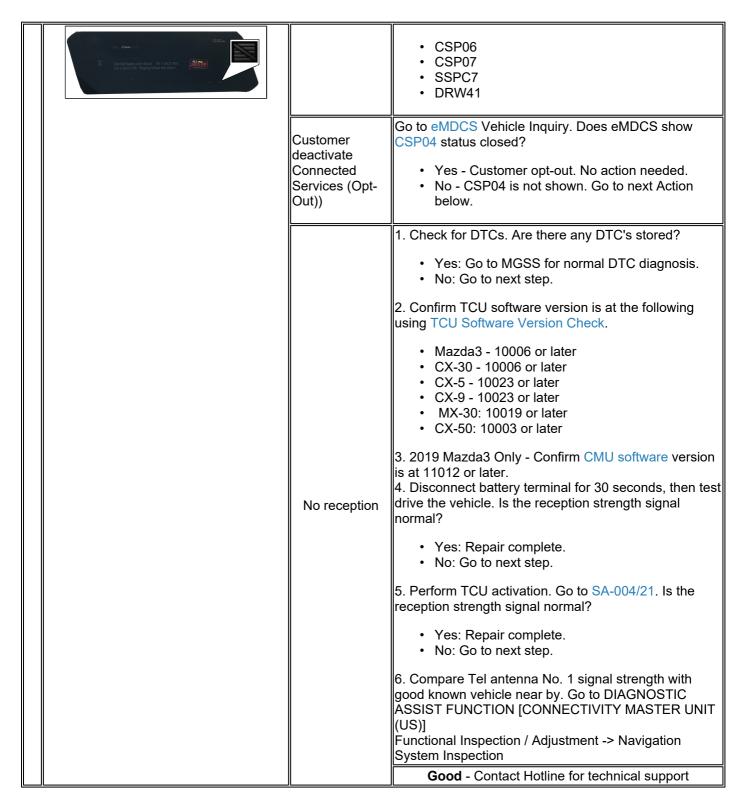
			 No - Perform ODR Data Collection Procedure, then go to step 2. 2. Confirm TCU software version is at the following using TCU Software Version Check. Mazda3 - 10006 or later CX-30 - 10006 or later CX-5 - 10023 or later CX-9 - 10023 or later MX-30: 10019 or later CX-50: 10003 or later CX-50: 10003 or later Retrieve MAZDA CONNECT CMU log data. Go to
			MGSS -> Infotainment -> MAZDA CONNECT CMU Data Retrieval 5. Perform "Activating Remote Control by Smart Phone " (links TCU to BCM) 6. Clear DTC(s). NOTE: If DTC 2050:55 is stored, go to SA-003/20 to clear DTC. 7. Check TCU Remote Service Flag Information • Remote Service Flag Information 1101 go to step 8.
			Remote Service Flag Information 0000 go to step 9. 8. Disconnect 12V battery for 1 hour, then retry connected vehicle enrollment. NOTE: Test drive vehicle after battery disconnect to allow the GPS clock to sychronize before retrying Authorization Code. 9. Contact Hotline for additional technical support if needed.
4	MAZDA CONNECT connected vehicle reception strength icon shows "X" or "\". Mazda3, CX-30, CX-50, MX-30 3 0000 Section Nation (3) 124234	Deactivation Mode ■	Customer/Dealer can activate CV services anytime via MyMazda app Customer - There might be a slight delay in making the backend connection since it was temporarily deactivated. Dealer - Go to TCU Activation
	CX-5, CX-9	Campain Status	Go to eMDCS Vehicle Inquiry and confirm the following campains are not shown or closed:

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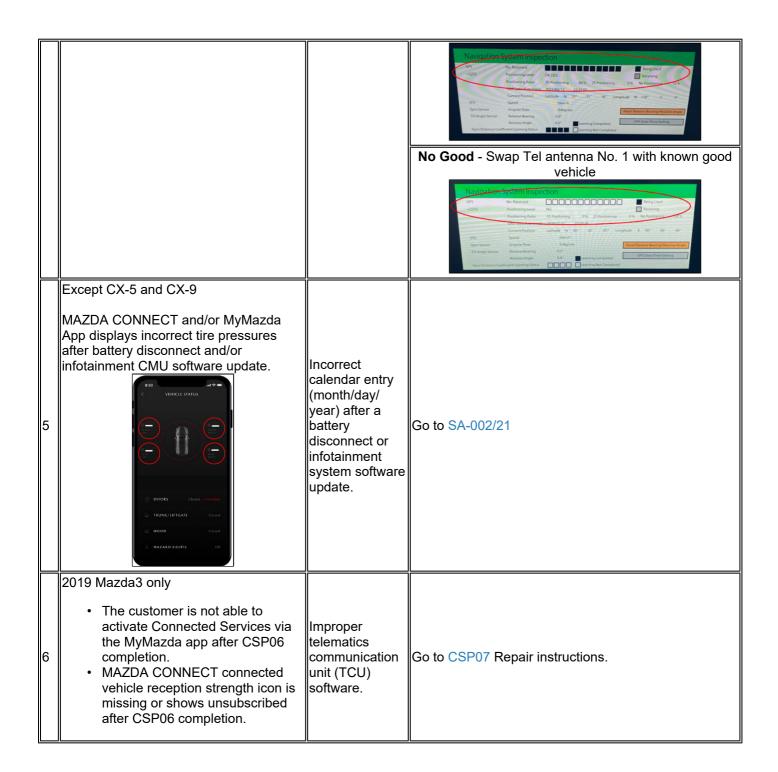
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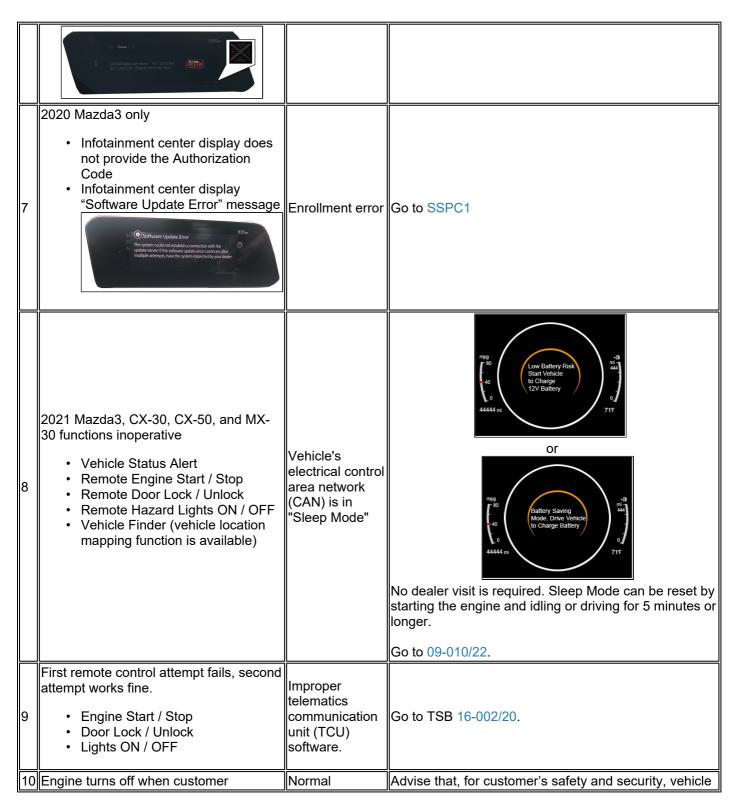
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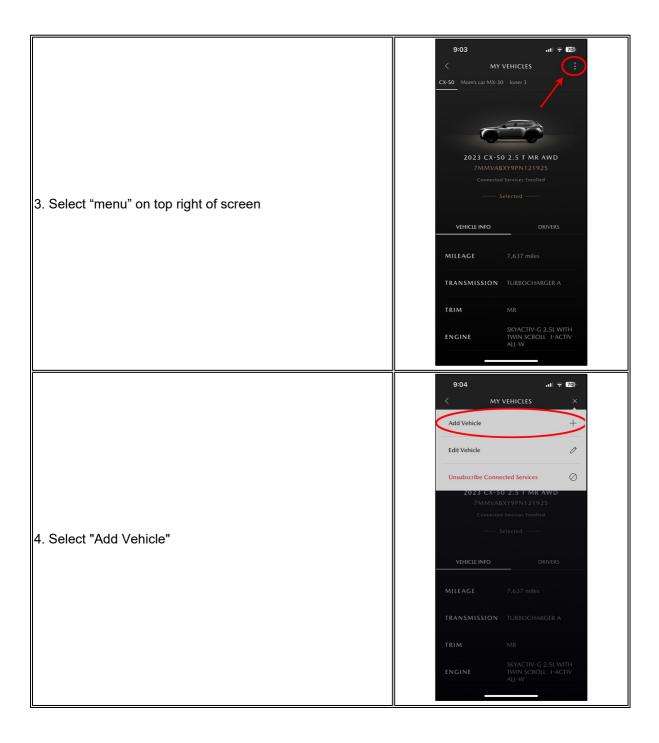
	opens vehicle door.	Operation	is designed to shut-off automatically when the vehicle door is opened.
11	 Low Tire pressure will not clear after correcting tire pressue. Vehicle status is inaccurate. 	MyMazda App is not real time.	Customer must go to MyMazda app's Inbox and read/open all the messages related to the low tire pressure alert, then the "Low tire pressure" alert will clear from MyMazda app's Health Report Message will clear after next drive cycle.
12	CX-5, CX-9 The MyMazda App does not display tire air pressures Solution Color C	CX-5 and CX-9 Normal Operation	No action Needed

TCU Activation

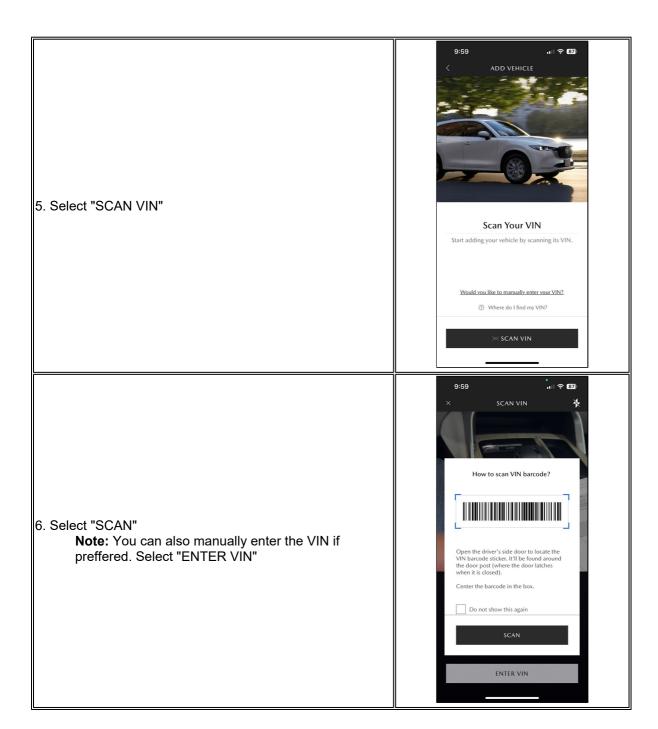
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9:03 \otimes 1. Select "hamburger menu" on top right of screen **START** INBOX MYMAZDA 2. From the MYMAZDA dropdown, select My Vehicles Schedule Service ROADSIDE ASSISTANCE SUPPORT V EXPLORE MAZDA

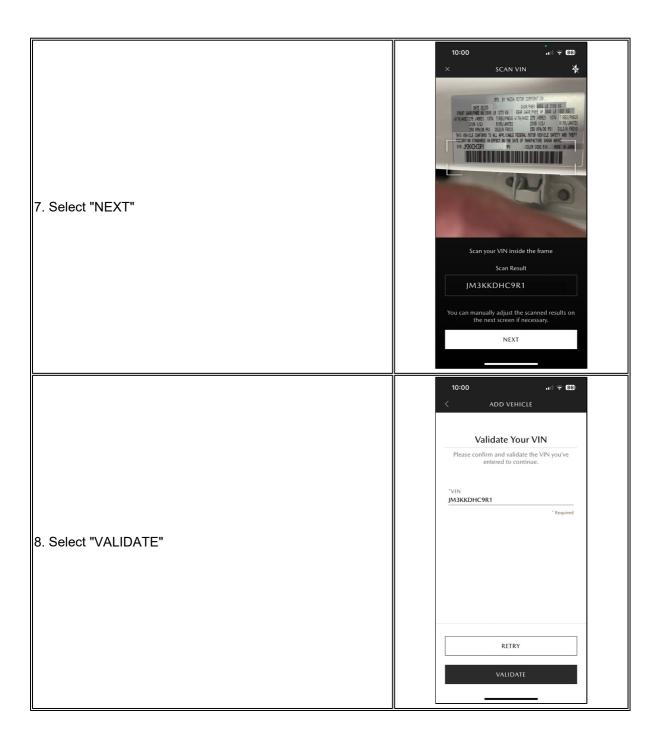
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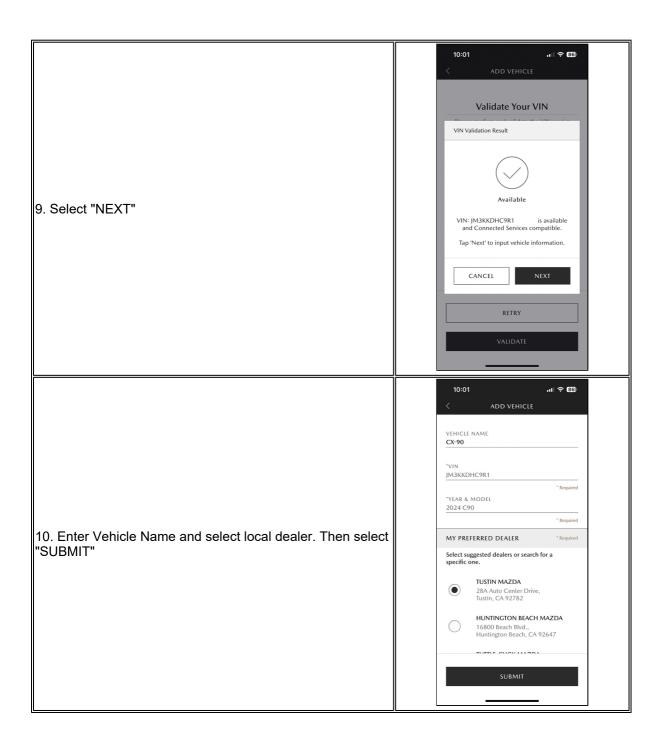
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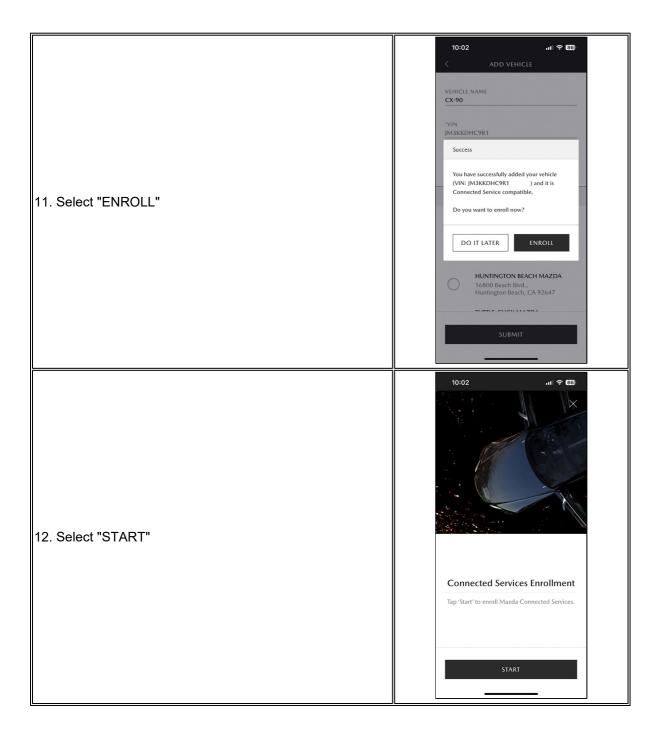
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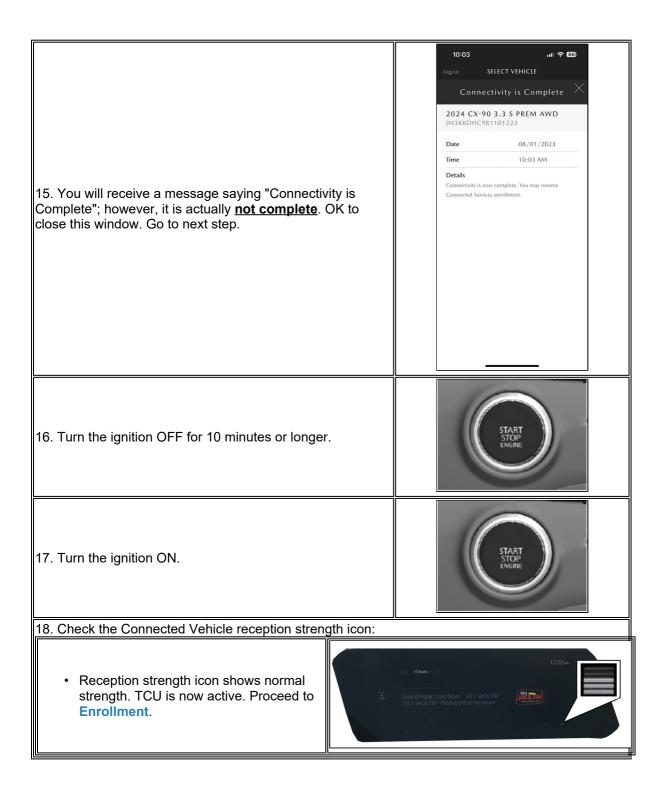
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ctivity Terms & Conditions 13. Agree to the Terms & Conditions, then select "AGREE" DECLINE Activation Process in Progress connectivity with your vehicle. You will receive an in-app message when connectivity is established. You may need to restart your 14. You will see a message stating "Activation Process in Progress", Select "CLOSE" vehicle to complete the connectivity.

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 Reception strength icon shows "X". TCU activation is still processing. Repeat steps 16-18.

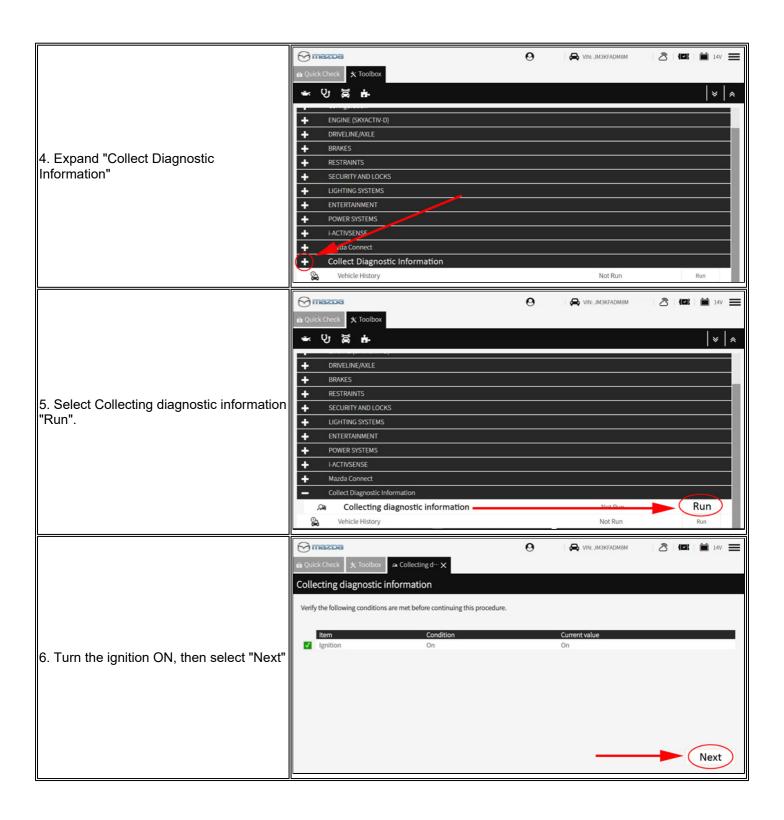
Note: This step may need to be repeated a few times until normal strength is shown.



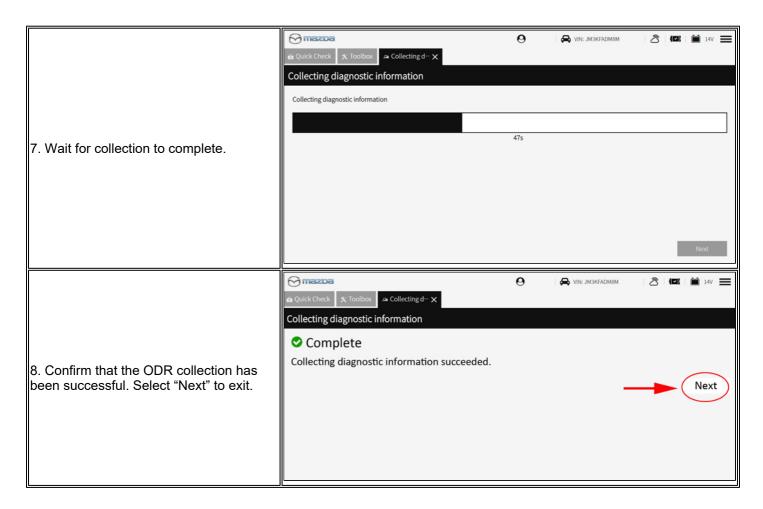
ODR Data Collection Procedure



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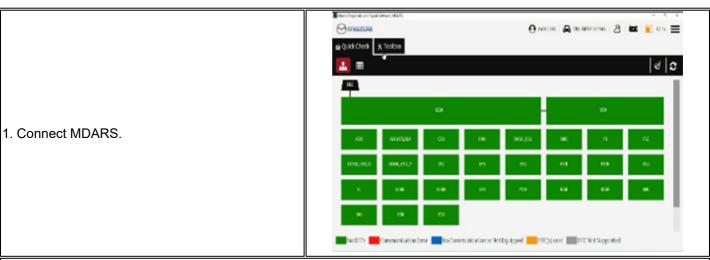
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Activating Remote Control by Smart Phone (links TCU to BCM)

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

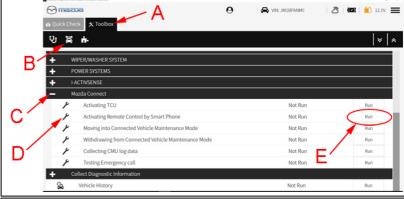
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Use MDARS to verify if the Telematics Control Unit (TCU) is at the latest software level (Toolbox > Software Update > Run > TCU).

Is the TCU at the latest software level?

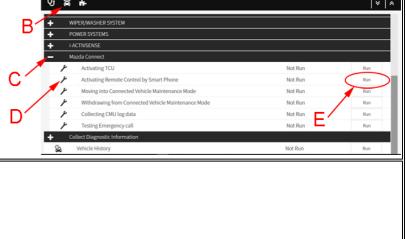
- Yes: Go to step 3.
- **No:** Update TCU software, then go to step 3.
- 3. Select the following:
- a. Toolbox
- b. Repair icon
- c. MAZDA CONNECT
- d. Activating Remote Control by Smart Phone
- e. RUN.



4. Follow the on-screen instructions and wait for process to complete.

NOTE: If the Activating Remote Control by Smart Phone shows "Incomplete", the possible causes are:

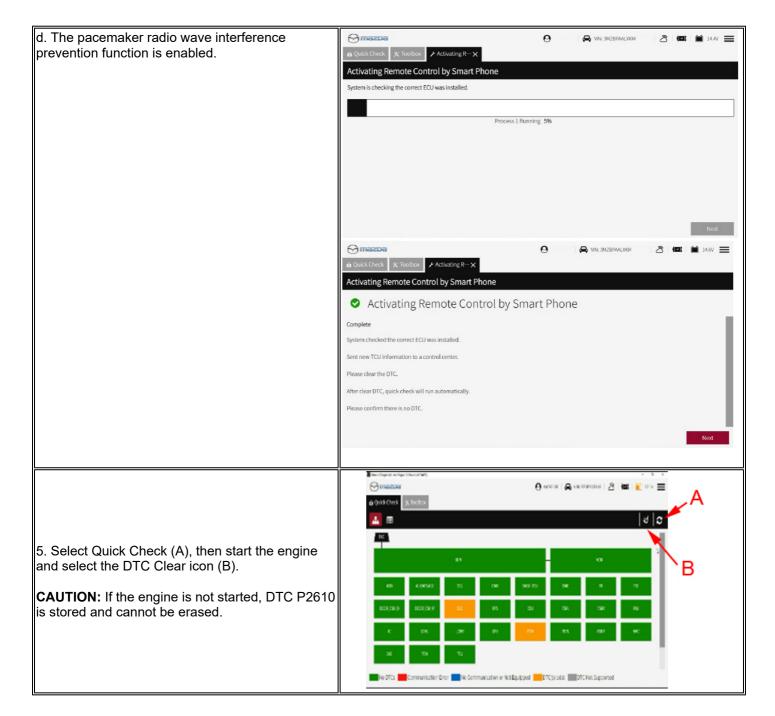
- a. The advanced key is not in the vehicle.
- b. The connected Vehicle Maintenance Mode is enabled.
- c. The Key transmitter power saving function is enabled.



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TCU Software Version Check

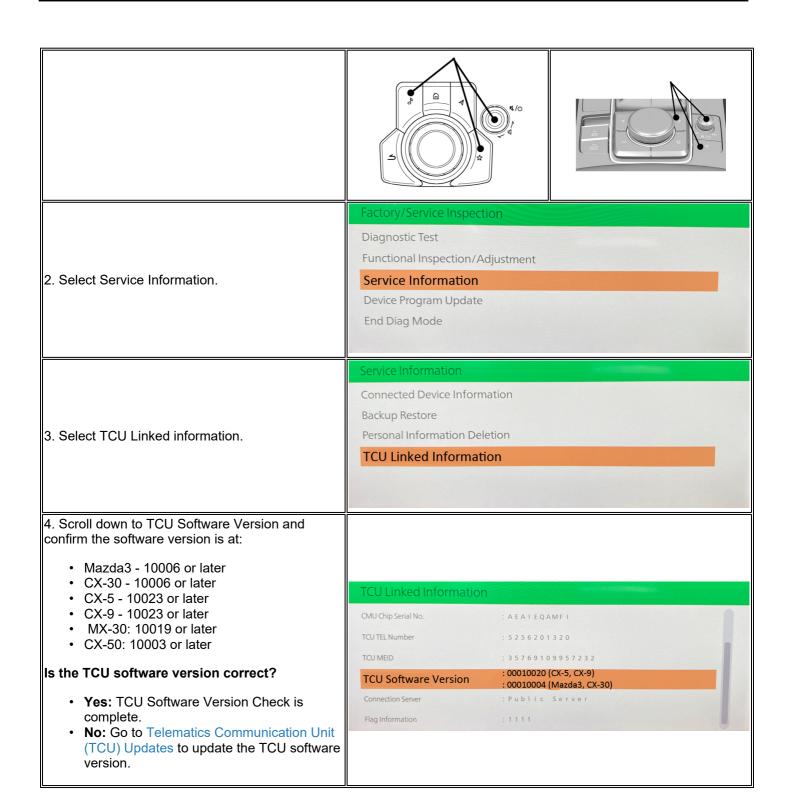
1. Press and hold the Volume knob, then press and hold the Entertainment and Favorite buttons at the same time for 3-5 seconds and the Factory/Service Inspection screen will appear.

CX-5 and CX-9

Except CX-5 and CX-9

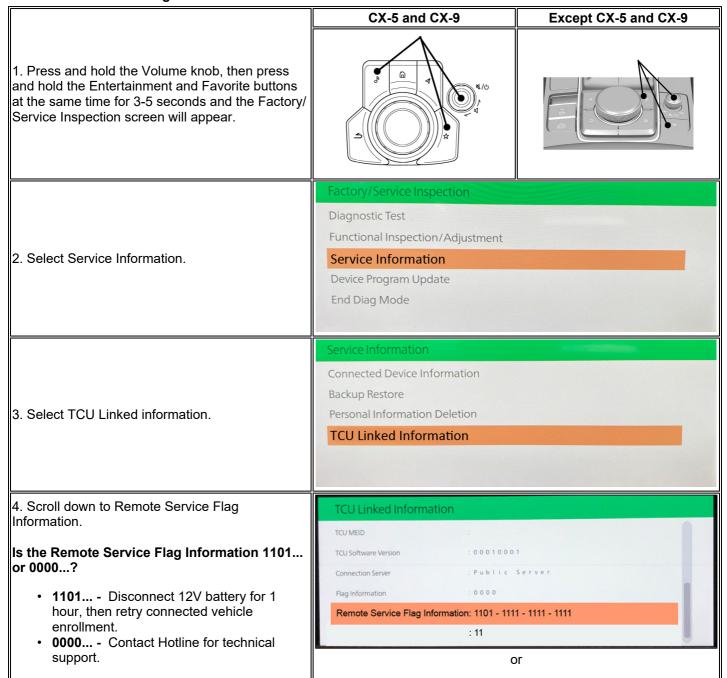
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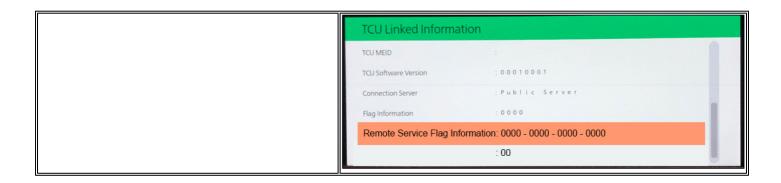


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TCU Remote Service Flag Information Check



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Educational Videos

Overview
Using MyMazda App
In-car Wi-Fi hotspot
MyMazda remote
Notifications
Saftey features

Resources

SA-015/23 - MAZDA CONNECTED SERVICES - FREQUENTLY ASKED QUESTIONS (FAQ)

Connected Services Owner's Manual

MAZDA CONNECT and MAZDA CONNECTED SERVICES USER GUIDE

MAZDA CONNECTED VEHICLE VIEWER (MCVV) USER GUIDE

MAZDA CONNECT ESSENTIALS (30076WBT)

MAZDA CONNECT & CONNECTED SERVICES FOCAL POINT (30093FOC)

MAZDA CONNECTED SERVICES SMART CARDS

MAZDA CONNECTED SERVICES: CUSTOMER OUTREACH

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