Service Alert

Mazda North American Operations Irvine, CA 92618-2922



Subject:

CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING

Service Alert No.: SA-017/24

Last Issued : 04/11/2024

BULLETIN NOTES

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

Previous SAs:	Date(s) Issued:
SA-017/24	03/14/24
SA-009/23	10/23/23, 08/28/23, 08/15/23, 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	2021-2023 CX-9	2024 CX-90
2020-2024 CX-30	2022-2023 MX-30	2024 MX-5
2021-2024 CX-5	2023-2024 CX-50	2025 CX-70

DESCRIPTION

Some customers may complain about any of the following:

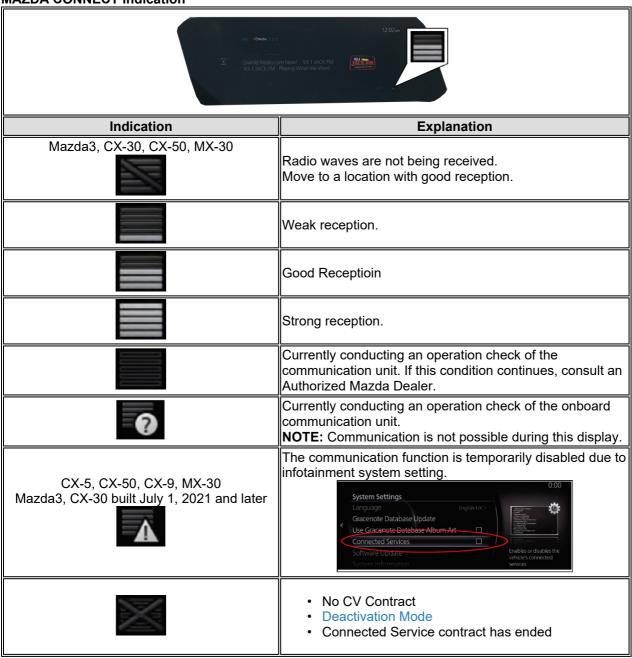
- 1. Infotainment Center Display does not provide the Authorization Code (OTP) during the MyMazda App Connected Vehicle enrollment.
- 2. Remote function(s) inoperative.
 - Engine Start / Stop
 - · Door Lock / Unlock
 - · Lights ON / OFF
 - Climate Control
- 3. MAZDA CONNECT connected vehicle reception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

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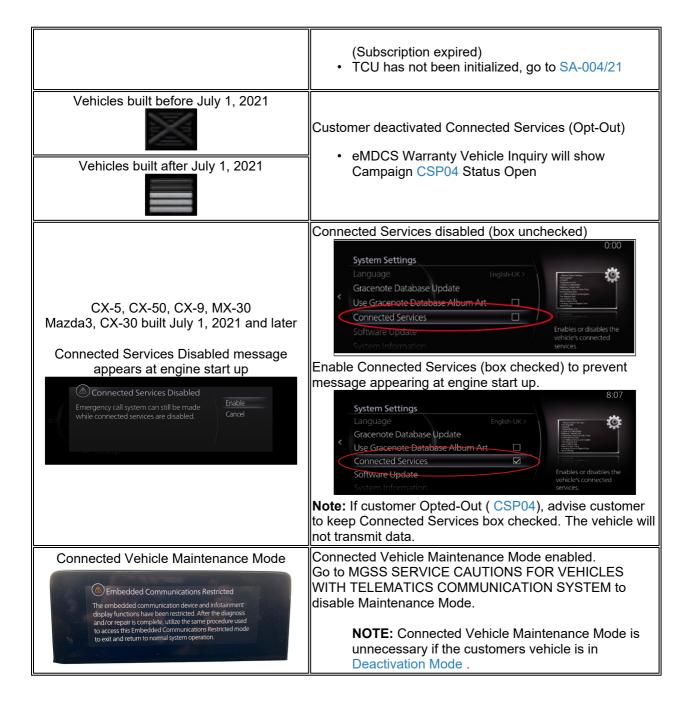
Index

- 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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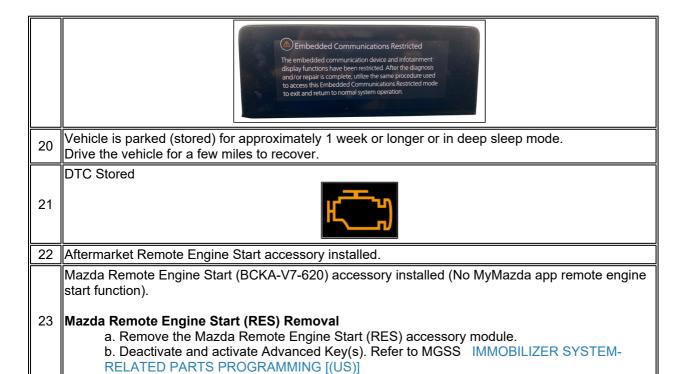


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Remote Engine Start Will Not Function under the following conditions

Item	Condition		
1	Remote Engine Start function is not available on EV and PHEV (inline 4) models. See SA-038/23		
2	Vehicle battery voltage low		
3	Automatic Transmission shift position except "P"		
4	Vehicles equipped with manual transmission		
5	Vehicle speed above 3 mi/h (5 km/h)		
6	Brake pedal switch malfunction		
7	Engine has been running by remote engine start function		
8	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.		
9	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		
10	A registered key is detected in the vehicle		
11	Brake pedal switch detects brake application		
12	Low fuel warning		
13	Engine starts, then turns OFF due to abnormal high engine rpm detected. (Engine rotation over 3000 rpm continued for more than 0.2[s])		
11 4 1	No engine rpm detected after sending engine start request. (Engine rotation 0 rpm continued for more than 0.2[s])		
15	When the CAN data signal for engine shut off is present (e.g.: door ajar signal)		
16	After 10 second maximum cranking time		
17	Burglar alarm status is "Alarm" and "Alarm stand by" (CAUTION - DO NOT enable, see Theft- Deterrent System section in SA-012/20)		
18	Room fuse blown/missing		
19	Connected Vehicle Maintenance Mode enabled (Restricted Transmitting Mode in MDARS)		

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

First remote control attempt fails, second attempt works fine.

24

25

Go to TSB 16-002/20.

CSP04 Status Open

tomoto Engine Gtart i anottori itm tam origine GTT and or 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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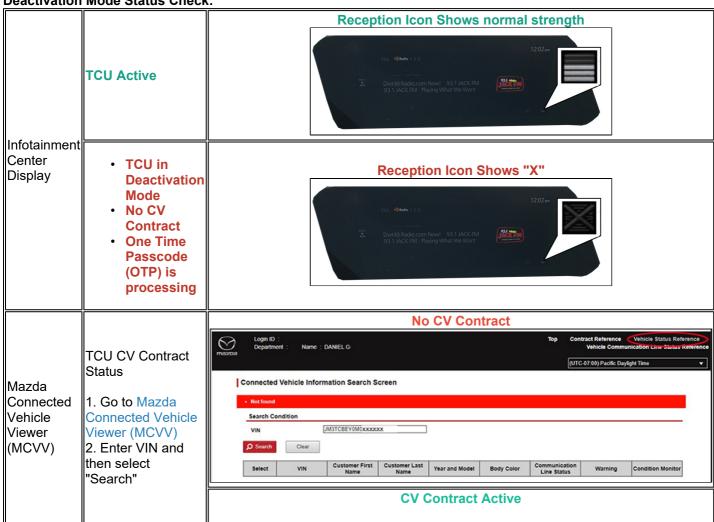
Deactivation Mode

- 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.

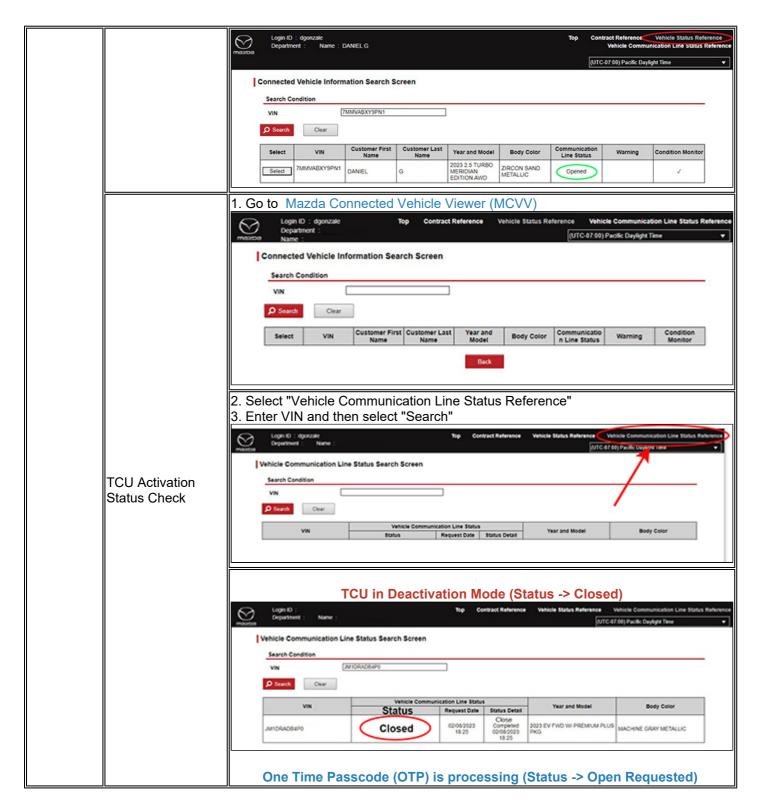
NOTE:

- 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.

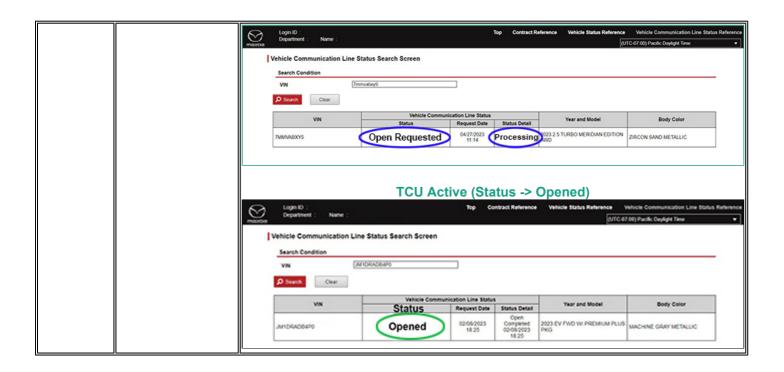
Deactivation Mode Status Check:



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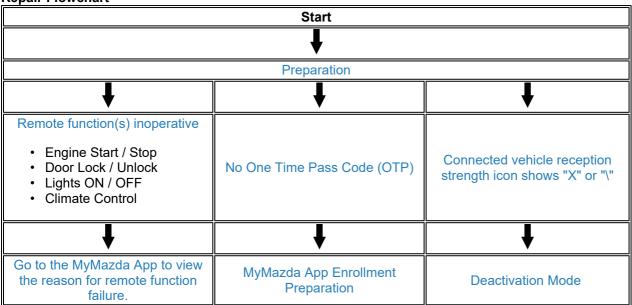
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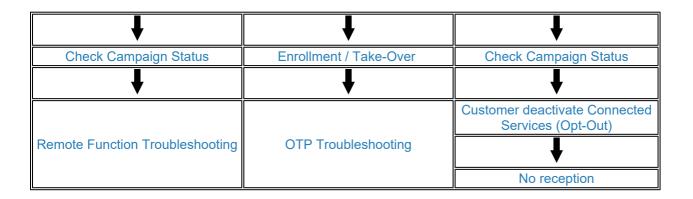
REPAIR PROCEDURE

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.

Repair Flowchart



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PREPARATION:

- 1. Confirm that the Telematics Communication Unit (TCU) is at the latest software level. Go to Telematics Communication Unit (TCU) Updates
- 2. 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. If Hotline assistance is needed, please fill out the Dealer Connected Vehicle Questionnaire before contacting Hotline. The questionnaire collects data needed by Hotline agent.
- 5. In most cases, the customer will not leave their device with you for troubleshooting, therefore a connected vehicle Take-Over is necessary. Use your personal device or dealer supplied device for troubleshooting. Go to Enrollment / Take-Over.
 - At customer pick-up, inform customer to re-enroll into Connected Services as a new primary user.
- 6. 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 TCU is deactivated. Enrollment is not possible. Go to TCU Activation.

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- 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 icon shows "\", move the vehicle to an area with a clear view of the sky.



- 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.

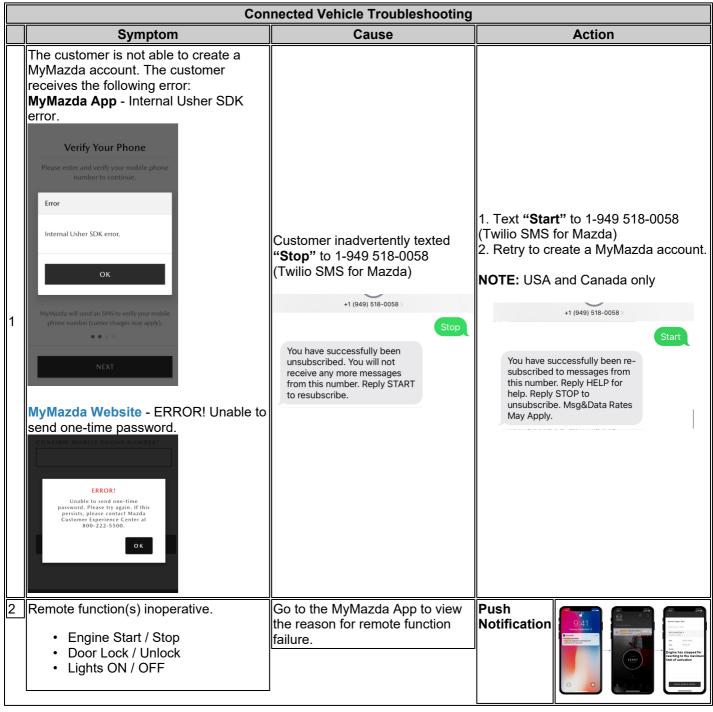
NOTE: Vehicles stored for long periods may loose GPS clock sychronization. If the vehicle is stored for a long period, test drive the vehicle to give the GPS clock time to sychronize before enrolling or testing connected vehicle functions.

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)
- 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)
 - MCVV One Time Passcode (OTP) Troubleshooting
 - TCU Activation
 - 2nd Owner Take-Over
 - · Customer Opt-Out

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- Educational Videos
- Resources



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Climate Control			OS Lock Screen Tap the push notification	Tap the alert	Inbox Detail Tap "check vehicle status"
		Activity History	Go to the MINBOX -> AHISTORY - reason for function fail	ACTIVIT-> to vie remote lure.	TY ew
	Check Campaign Status	Go to eMDC confirm the f shown or clo CSP0 CSP0 SSPC	ollowing car sed: 6 7 :7		
	Remote Function Troubleshooting	1. Confirm C enabled (box -> System S Services.	checked).	Go to S	Settings

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_][
			System Settings Language Gracenote Database Update Use Gracenote Database Album Art Use Gracenote Database Album Art Software Update System Information 2. Use MDARS to ID the vehicle and check for DTC's stored. Are DTC(s) stored?
			 Yes - Go to MGSS and perform normal DTC diagnostics. No - Go to next step.
			3. Confirm TCU software version. Go to Telematics Communication Unit (TCU) Updates 4. Disconnect 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. 5. 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.
			Fill out Dealer Connected Vehicle Questionnaire Contact Hotline for additional technical support if needed.
	ll l	Remote Climate Control only	No action needed. See SA-038/23
		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.
	ll l	Remote Transmitter Key(s) in the vehicle	Do not leave keys in vehicle.
			Remove the aftermarket accessory. The customer can use either the

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		2. Mazda Remote Engine Start (BCKA-V7-620) accessory installed.	Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both.
		START STOP	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)].
		TCU in "deep sleep" mode due to vehicle being parked for a long period.	Advise customer to drive the vehicle as normal (at least several miles) and the Connected Services should start working again.
		Low fuel	Advise customer that Remote Engine Start may start vehicle temporarily, but vehicle will turn off automatically when the fuel level is low to conserve the remaining fuel.
		Vehicle is equipped with Manual Transmission	Advise customer that vehicles with a manual transmission do not have the Remote Engine Start/Stop function capability.
		Engine started with key transmitter instead of MyMazda App.	Advise customer they will see an error message when attempting to make a Remote Engine Off request if they initially turned on vehicle with a physical key (instead of through their MyMazda app).
		MyMazda App Enrollment Prepa	ration
3	No One Time Passcode (OTP) (Vehicle infotainment center display	 Create a MyMazda account. Complete any "OPEN" Recalls / Special Service Programs. Go to MGSS -> warranty Veh. Inq. Update the Telematics Communication Unit (TCU) to the latest software version. Go to Telematics Communication Unit (TCU) Updates. 2019 Mazda3 only - Update the Connectivity Master Unit (CMU) to the latest software version. Go to MGSS -> MAZDA CONNECT Updates. 	
3	does not provide the Authorization Code during the MyMazda App enrollment)	Check TCU activation status. 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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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 normal strength. The TCU is active and ready for enrollment. Go to Enrollment / Take-Over.



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

Note: Use MCVV to check OTP status. Go to Mazda Connected Vehicle Viewer (MCVV) One Time Passcode (OTP) Troubleshooting



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



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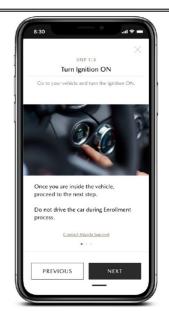
Enrollment / Take-Over 1. Install the MyMazda APP Note: If 2nd owner, follow this same Enrollment procedure to perform a Take-Over. Previous START owner will recieve email notification of Take-Over. 2. Register your user information

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5. Switch the ignition ON in your Mazda vehicle.6. Wait 30 seconds.7. Tap Next.

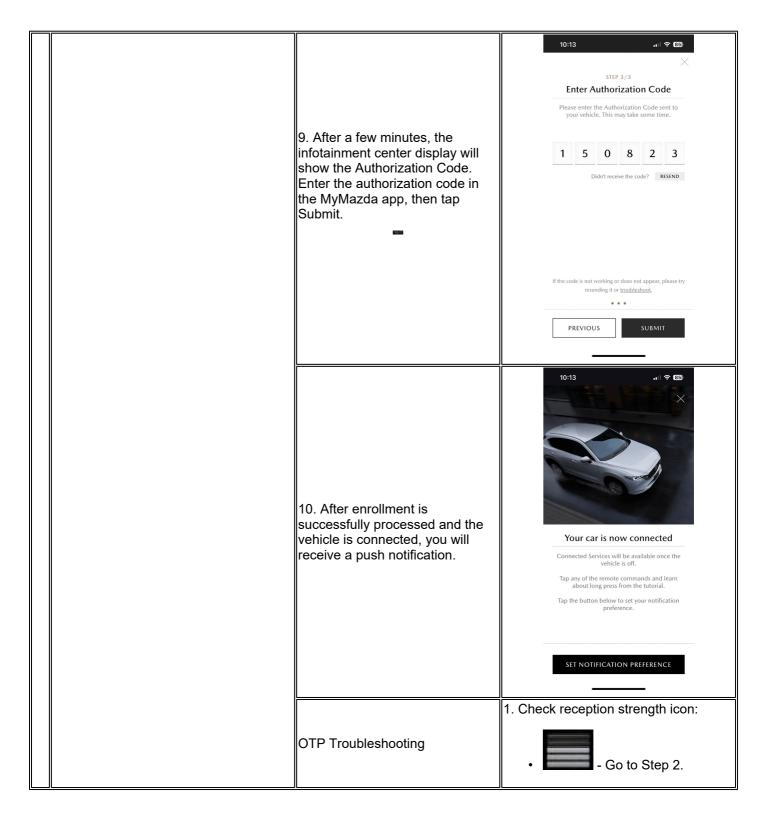


8. Tap Request to receive authorization code on your vehicle's Mazda Connect center display.

Wait a few minutes for the infotainment center display to show the Authorization Code.



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- Go to MCVV OTP
Troubleshooting

- 2. Use MDARS to ID the vehicle and check for DTC's stored. Are DTC(s) stored?
 - Yes Go to MGSS and perform normal DTC diagnostics.
 - No Perform ODR Data Collection Procedure, then go to step 3.
- 3. Confirm TCU software version. Go to Telematics Communication Unit (TCU) Updates
- 4. 2019 Mazda3 Only Confirm CMU software version is at 11012 or later.
- 5. Retrieve MAZDA CONNECT CMU log data. Go to MGSS -> Infotainment -> MAZDA CONNECT CMU Data Retrieval
- 6. Perform "Activating Remote Control by Smart Phone" (links TCU to BCM) 7. Clear DTC(s).

NOTE: If DTC 2050:55 is stored, go to SA-003/20 to clear DTC.

- 8. Check TCU Remote Service Flag Information
 - Remote Service Flag Information 1101... - go to step o
 - Remote Service Flag Information 0000... - go to step 10.
- 9. Disconnect 12V battery for 5-10 minutes, then retry connected vehicle enrollment.

NOTE: Test drive vehicle after battery disconnect to allow the GPS clock to sychronize before retrying Authorization Code.

- 10. Fill out Dealer Connected Vehicle Questionnaire
- 11. Contact Hotline for additional technical support if needed.

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4	MAZDA CONNECT connected vehicle reception strength icon shows "X" This is a normal condition if the customer has not enrolled into connected vehicle services.	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
		Customer deactivate Connected Services (Opt-Out))	Go to eMDCS Vehicle Inquiry. Does eMDCS show CSP04 status closed? • Yes - Customer opt-out. No action needed. • No - CSP04 is not shown. Go to next Action below.
			Check for DTCs. Are there any DTC's stored? Yes: Go to MGSS for normal DTC diagnosis.
			No: Go to next step. 2. Confirm TCU software version. Go to Telematics Communication Unit (TCU) Updates 3. 2019 Mazda3 Only - Confirm CMU software version is at 11012 or later. 4. Disconnect battery terminal for 5-10 minutes, then test drive the vehicle. Is the reception strength signal normal?
		No reception	 Yes: Repair complete. No: Go to next step. 5. Perform TCU activation. Go to SA-004/21. Is the reception strength signal normal?
			Yes: Repair complete. No: Go to next step. 6. 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

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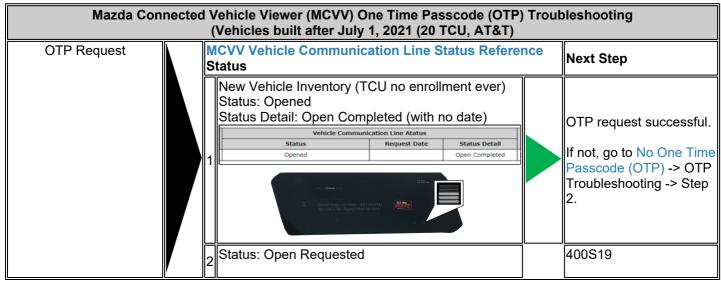
Good - Contact Hotline for technical support No Good - Swap Tel antenna No. 1 with known good vehicle Except CX-5 and CX-9 MAZDA CONNECT and/or MyMazda App displays incorrect tire pressures after battery disconnect and/or infotainment CMU software update. Incorrect calendar entry (month/ day/year) after a battery 5 Go to SA-002/21 disconnect or infotainment system software update. 2019 Mazda3 only · The customer is not able to activate Connected Services via the MyMazda app after CSP06 Improper telematics Go to CSP07 Repair instructions. 6 completion. communication unit (TCU) MAZDA CONNECT connected software. vehicle reception strength icon is missing or shows unsubscribed after CSP06 completion.

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	10. Name 17		
	S Doubl Reduced Hood - 331 ACC RV STATE OF THE STATE OF T		
7	Infotainment center display does not provide the Authorization Code Infotainment center display "Software Update Error" message Software Update Error	Enrollment error	Go to SSPC1
	2021 Mazda3, CX-30, CX-50, and MX-30 functions inoperative • Vehicle Status Alert • Remote Engine Start / Stop • Remote Door Lock / Unlock • Remote Hazard Lights ON / OFF • Vehicle Finder (vehicle location mapping function is available)	Vehicle's electrical control area network (CAN) is in "Sleep Mode"	No dealer visit is required. Sleep Mode can be reset by starting the engine and idling or driving for 5 minutes or longer. Go to 09-010/22.
9	First remote control attempt fails, second attempt works fine. • Engine Start / Stop • Door Lock / Unlock • Lights ON / OFF	Improper telematics communication unit (TCU) software.	Go to TSB 16-002/20.
10	Engine turns off when customer	Normal Operation	Advise that, for customer's safety and

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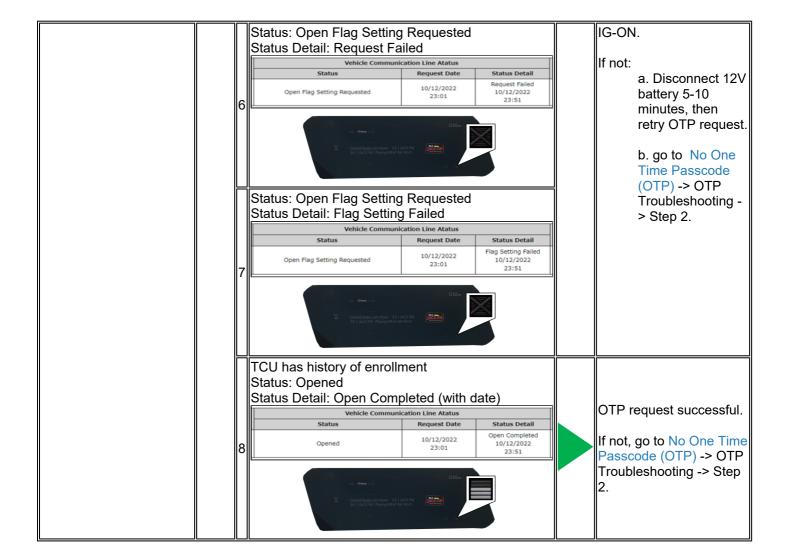
	opens vehicle door.		security, vehicle is designed to shut-off automatically when the vehicle door is opened.
11	 Low Tire pressure will not clear after correcting tire pressue. Vehicle status is inaccurate. 	MyMazda App is not real time.	Customer must go to MyMazda app's Inbox and read/open all the 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 DOORS Charlet Indiana Charlet In	CX-5 and CX-9 Normal Operation	No action Needed



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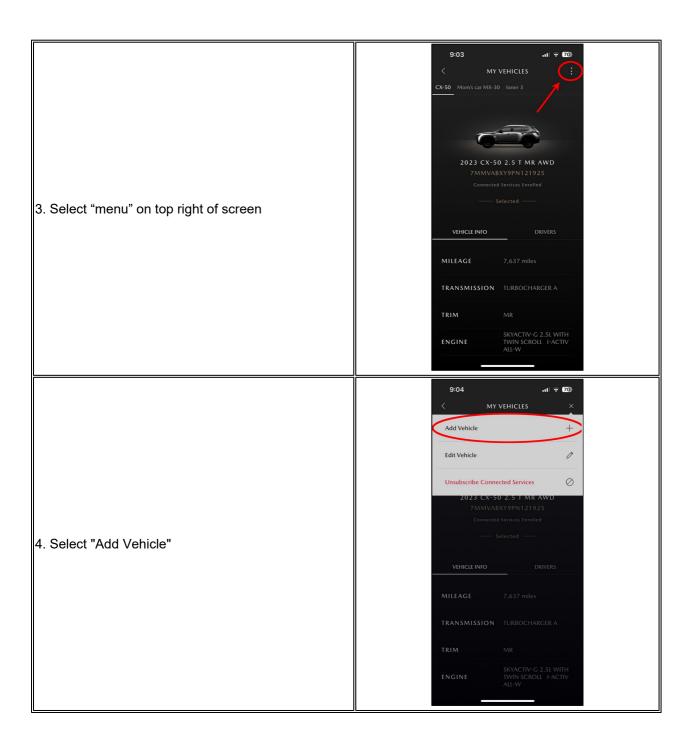


TCU Activation

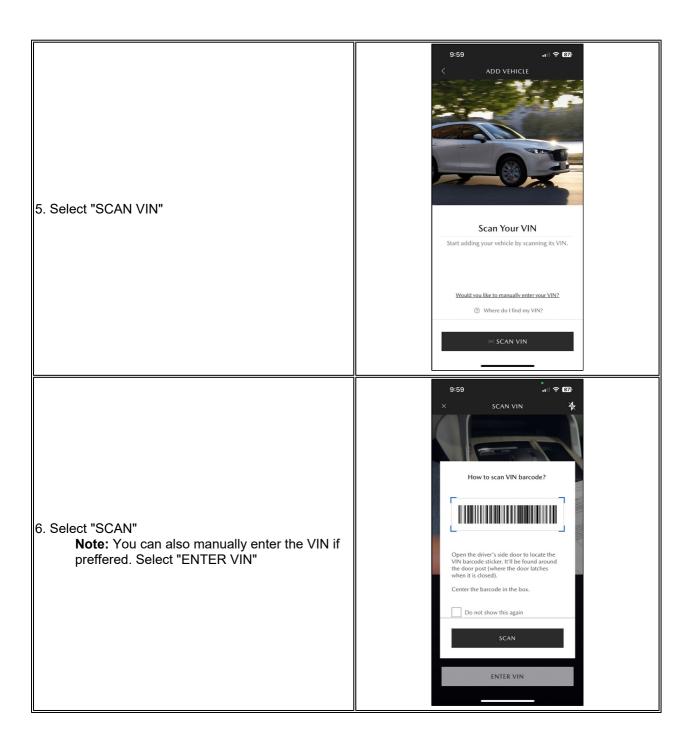
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0 1. Select "hamburger menu" on top right of screen START INBOX MYMAZDA 2. From the MYMAZDA dropdown, select My Vehicles Schedule Service ROADSIDE ASSISTANCE SUPPORT V EXPLORE MAZDA

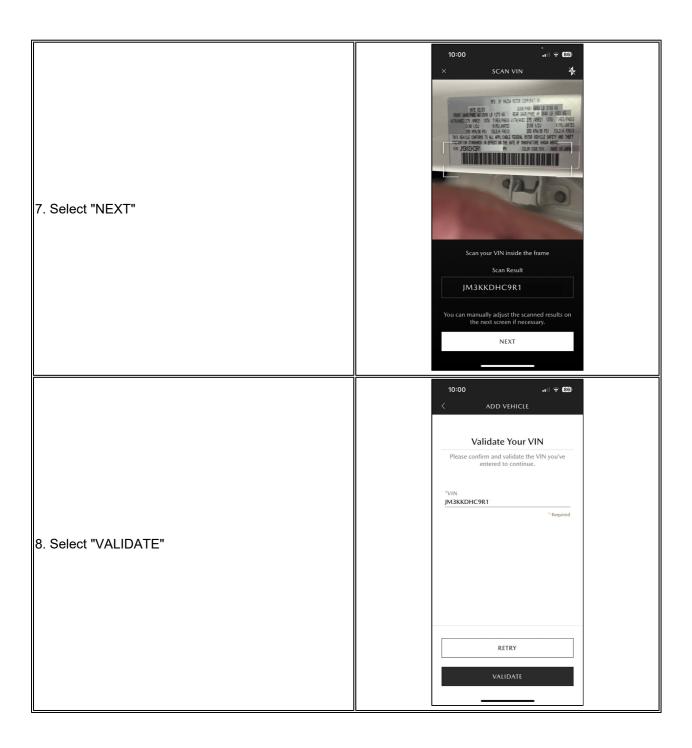
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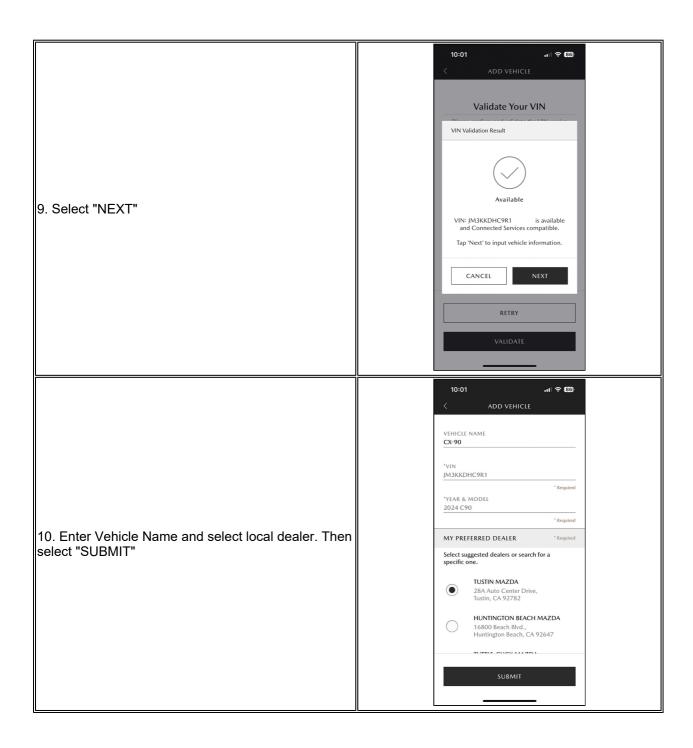
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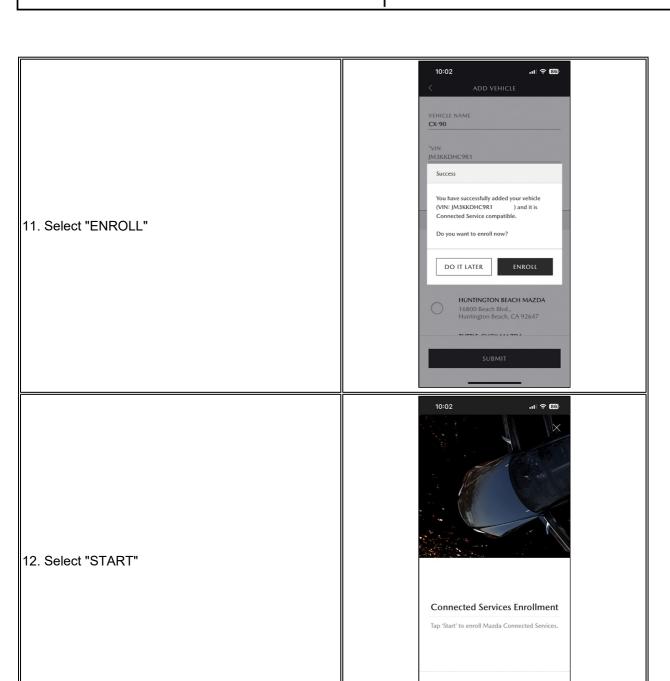
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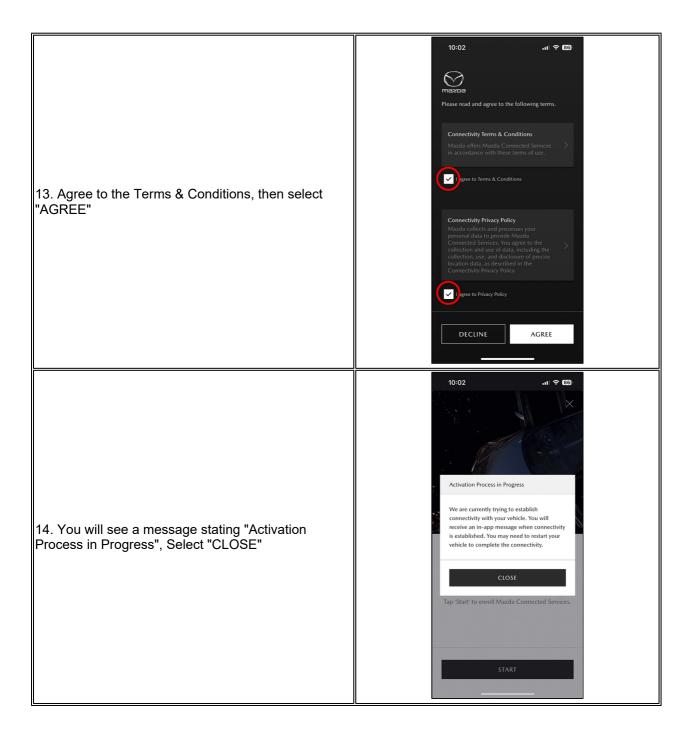
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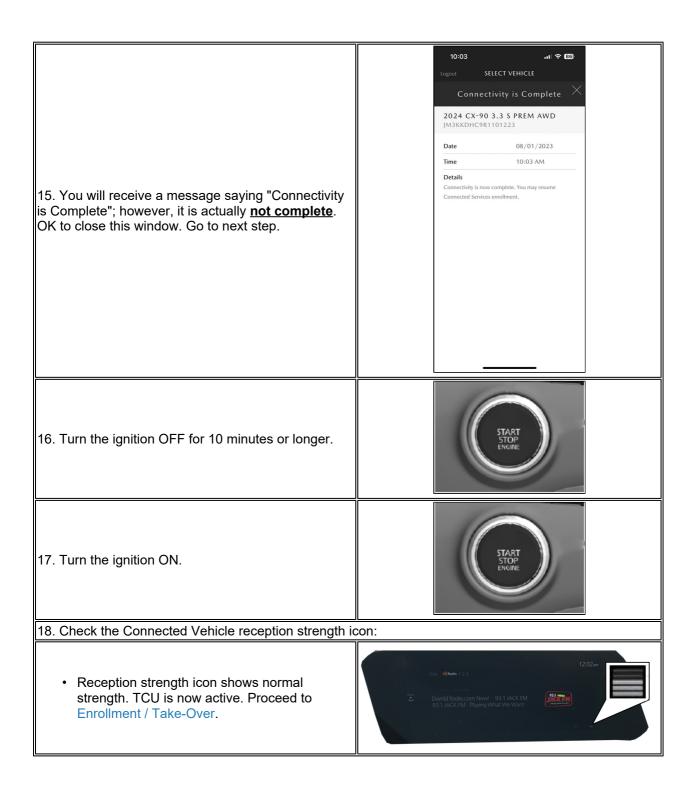
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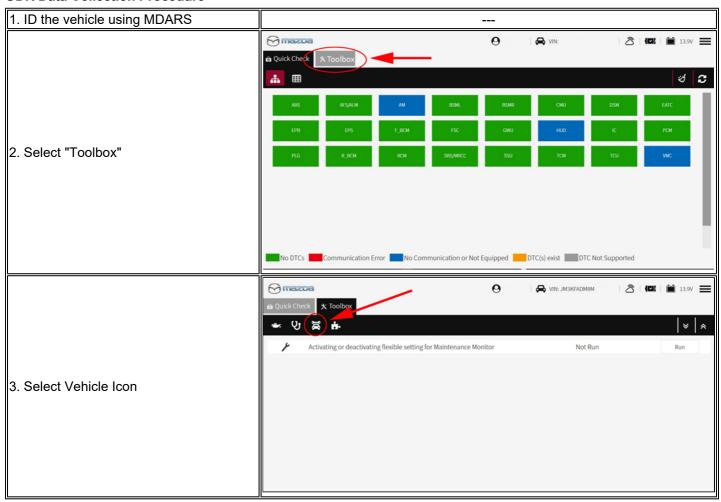
 Reception strength icon shows "X". TCU activation is still processing. Repeat steps 16 -18.

Note:

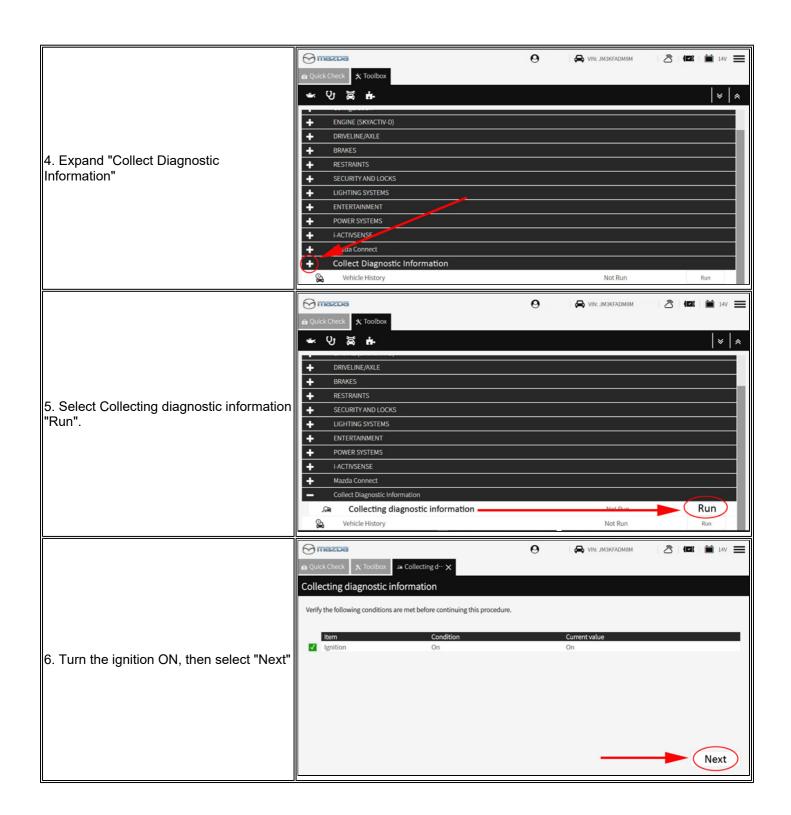
- This step may need to be repeated a few times until normal strength is shown.
- If steps 16-18 was repeated several times with no change, disconnect 12V battery for 5-10 minutes, then recheck reception strength icon.



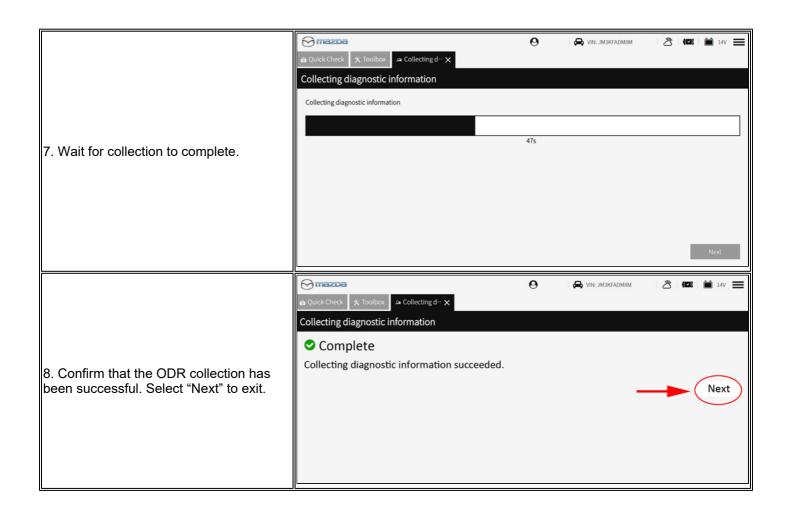
ODR Data Collection Procedure



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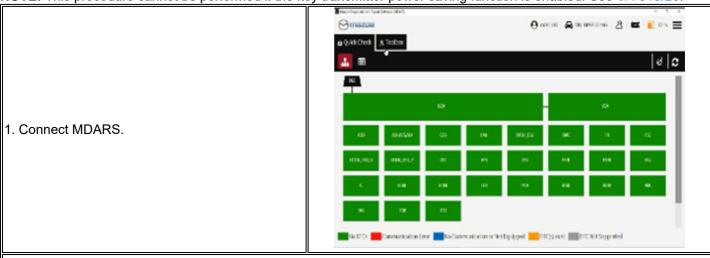
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Activating Remote Control by Smart Phone (links TCU to BCM)

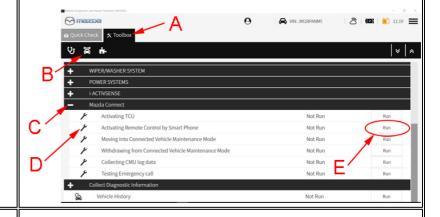
NOTE: This procedure cannot be performed if the key transmitter power saving function is enabled. See SA-040/20.



2. 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.

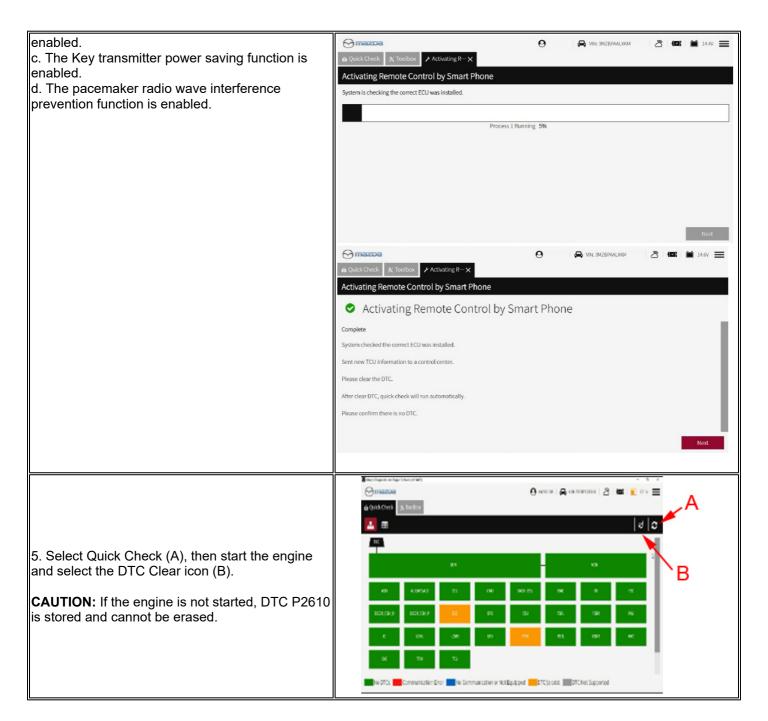


4. Follow the on-screen instructions and wait for process to complete.

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

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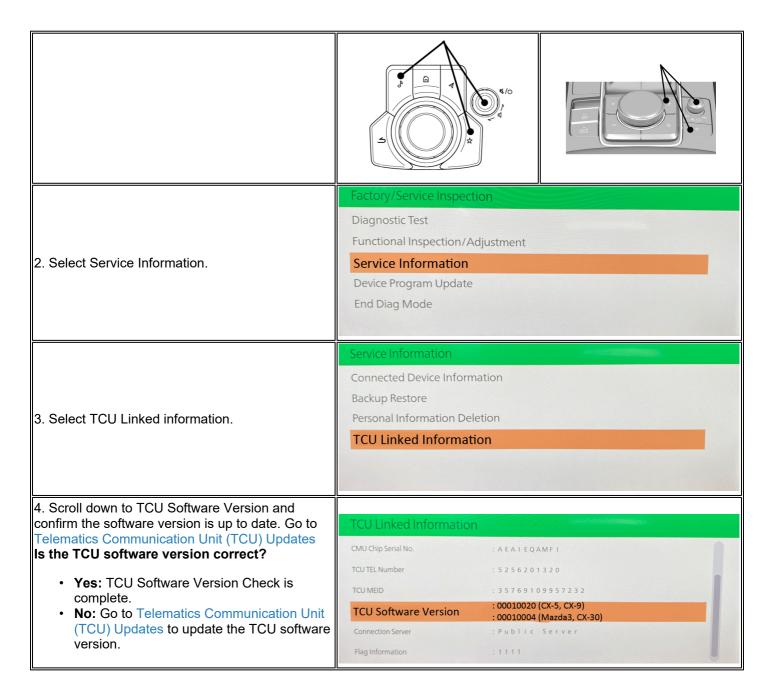
TCU Software Version Check

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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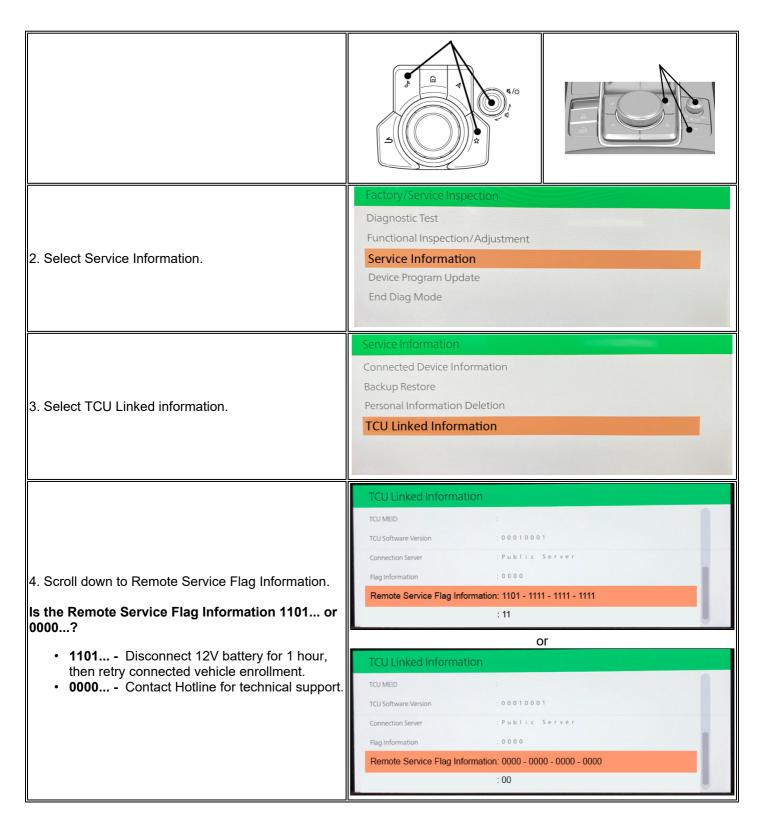
TCU Remote Service Flag Information Check

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

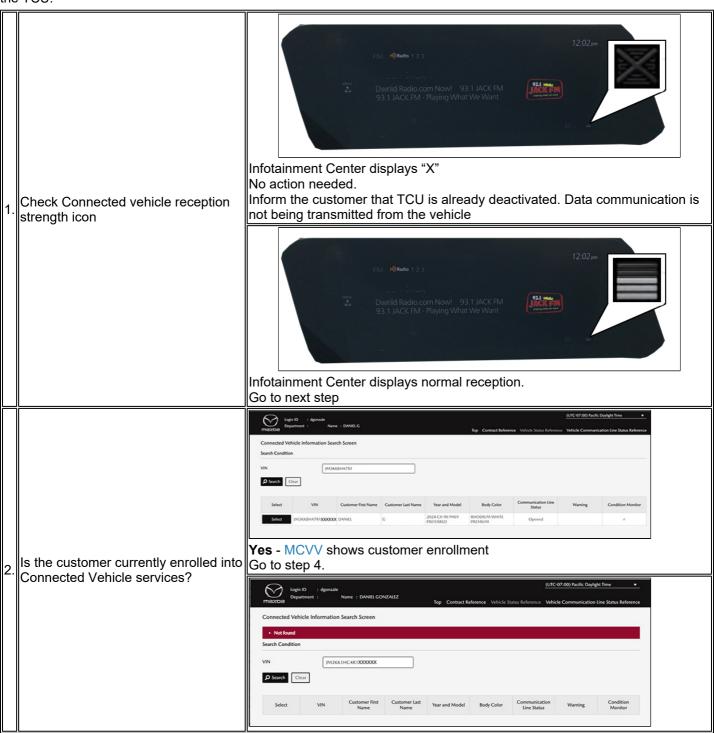
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Customer Opt-Out

Some customers may request to stop data communication from their vehicle. Use this procedure to manually deactivate the TCU.



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No - MCVV shows no customer enrollment Go to next step 3.

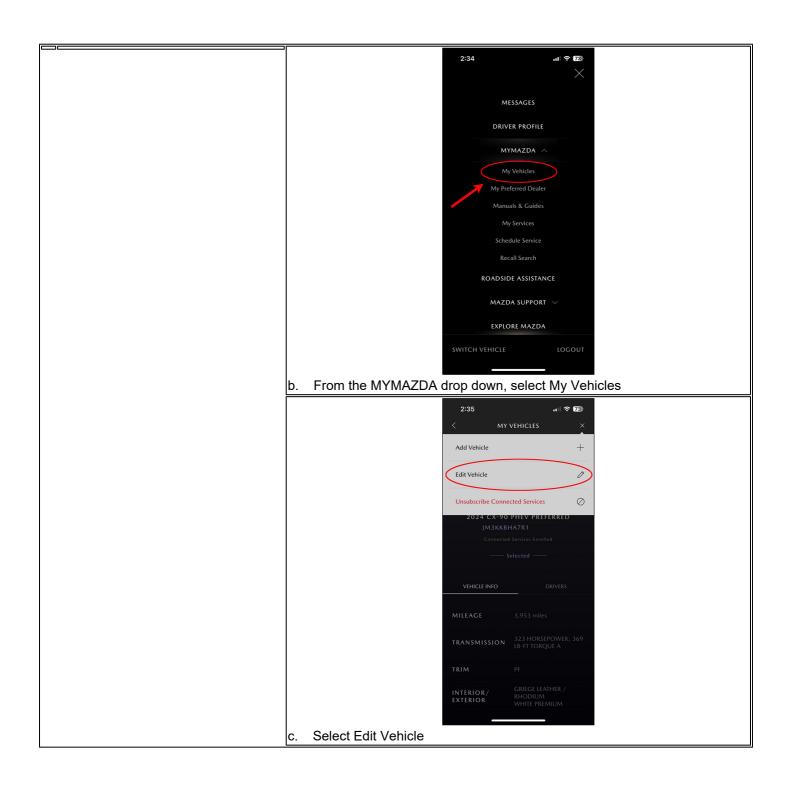
Enroll into Connected Vehicle services.

Note: This step can be performed by dealer or customer.

4. After enrollment, using the MyMazda App, delete VIN.

App, delete VIN.

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d. Select Delete Vehicle

5. Turn the ignition OFF and wait 5-10 minutes



Turn the ignition on and confirm that the connected vehicle reception strength icon shows "X"

Inform the customer that TCU is deactivated. Data communication is not being transmitted from the vehicle

Note: The following functions have been disabled

- Connected Vehicle Services (Remote Functions, Find My Car...etc)
- In-car WiFi
- · Recall Notifications
- · Over the Air (OTA) software updates*
- Alexa*
- Hybrid Navigation*

*Some Models

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Educational Videos

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

Resources

Connected Vehicle Online Enrollment Information

- 1. Installing the MyMazda APP
- 2. Registering Your User Information
- 3. Registering Vehicle Information
- 4. Registering Connected Service

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

Dealer Connected Vehicle Questionnaire

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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