# Service Alert

# Mazda North American Operations Irvine, CA 92618-2922



Subject:

CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING

Connected Vehicle Symptom Troubleshooting

Last Issued: 02/06/2023

#### **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-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:**

2019-2023 Mazda3 2020-2023 CX-30 2021-2023 CX-5 2021-2023 CX-9 2022-2023 MX-30 2023 CX-50

## **DESCRIPTION**

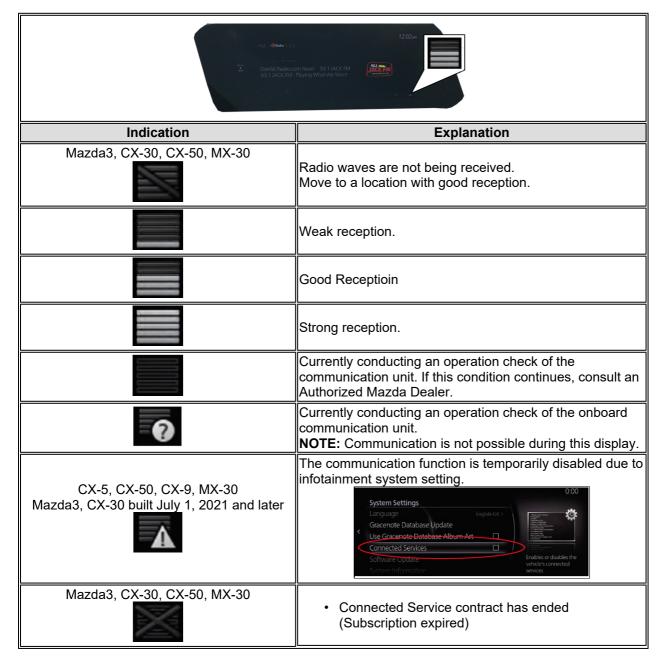
Some customers may complain about any of the following:

- 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 "\".

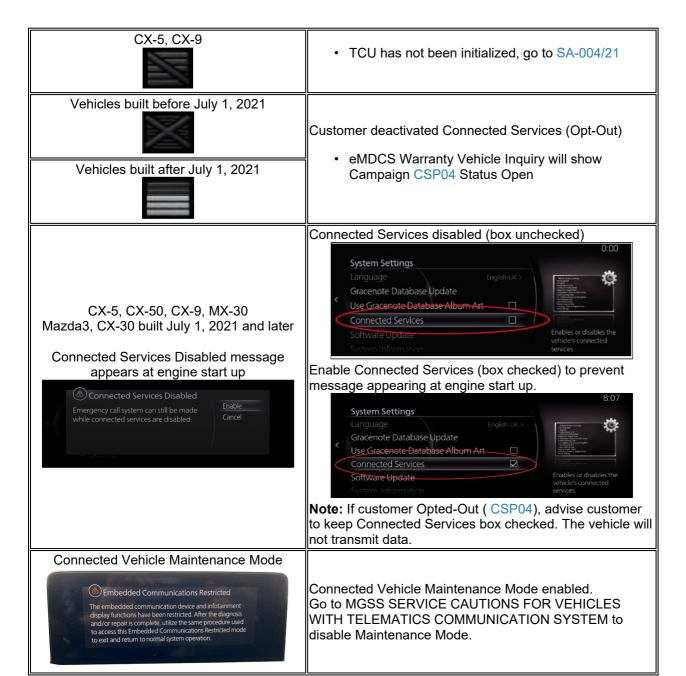
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Confirm the customer's phone and vehicle have good to strong reception during the concern as shown in the table below.

- 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.



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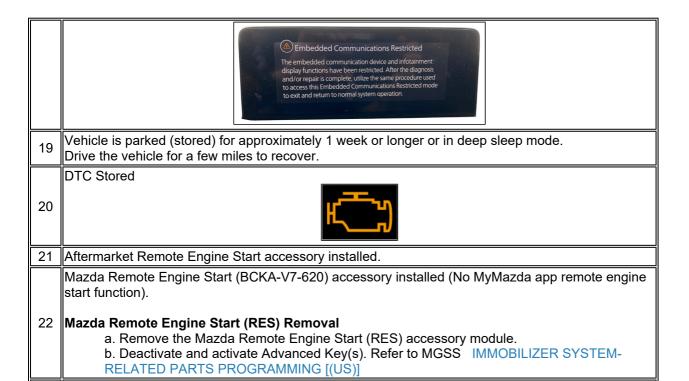


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Remote Engine Start Will Not Function under the following conditions

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

First remote control attempt fails, second attempt works fine.

Go to TSB 16-002/20.

CSP04 Status Open

24

remote Engine Start Function <u>vviii</u> turn engine STF 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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#### 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.

#### REPORATION:

- 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
- Go to eMDCS Vehicle Inquiry and confirm CSP04 is not shown.

**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.

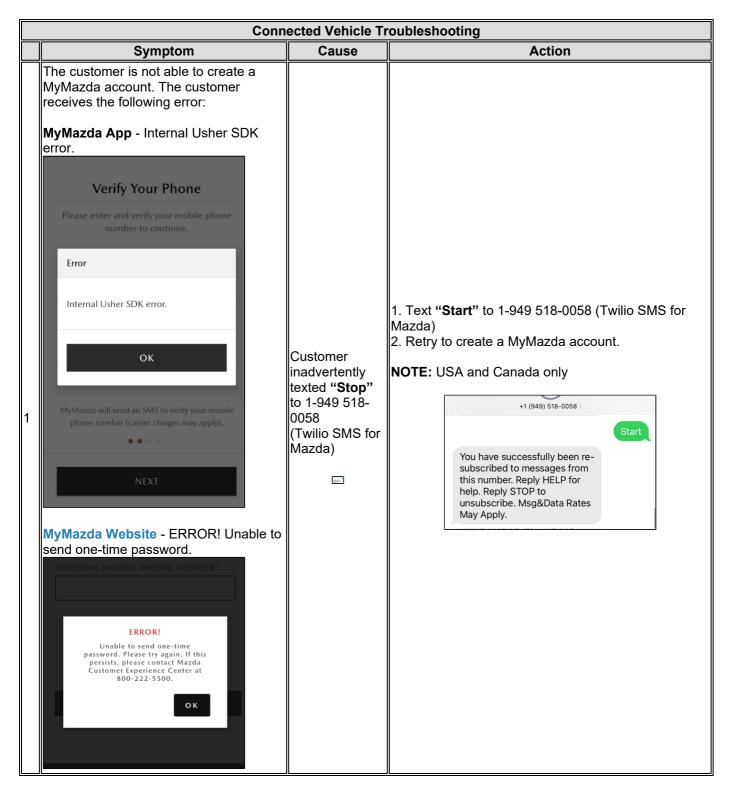
#### Index

- 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

**Educational Videos** 

Resources

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Go to the MyMazda App INBOX > ACTIVITY HISTORY -> to view
reason for remote function failure.

Home

Tap the

card

OS Lock

Screen

notification

Tap the push alert

Inbox

Detail

Тар

"check

vehicle

**Activity History** 

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Campain Status

Go to eMDCS Vehicle Inquiry and confirm the following campains are not shown or closed:

- CSP06
- CSP07
- SSPC7
- DRW41

 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.

Troubleshooting needed

- 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

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_			
			CX-9 - 10023 or later  MX-30: 10019 or later  CX-50: N/A  3. 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.  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.
			Remove the aftermarket accessory.     The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both.
	ll e	Remote Engine	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)].
	<b>II</b>	TCU in "deep sleep" mode due to vehicle being parked for a long	Advise customer to drive the vehicle as normal (at least several miles) and the Connected Services should start working again.

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	<u> </u>	
	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).
	Campain Status	Go to eMDCS Vehicle Inquiry and confirm the following campains are not shown or closed:  CSP06 CSP07 SSPC7 DRW41
	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.
		<ol> <li>Use MDARS to ID the vehicle and check for DTC's stored. Are DTC(s) stored?</li> <li>Yes - Go to MGSS and perform normal DTC diagnostics.</li> <li>No - Perform ODR Data Collection Procedure, then go to step 2.</li> <li>Confirm TCU software version is at the following using TCU Software Version Check.</li> <li>Mazda3 - 10006 or later</li> <li>CX-30 - 10006 or later</li> <li>CX-5 - 10023 or later</li> <li>CX-9 - 10023 or later</li> <li>MX-30: 10019 or later</li> <li>CX-50: N/A</li> <li>2019 Mazda3 Only - Confirm CMU software version is at 11012 or later.</li> </ol>
<b>'</b>	o One Time Passcode (OTP) ehicle infotainment center display ues not provide the Authorization Code	Vehicle is equipped with Manual Transmission  Engine started with key transmitter instead of MyMazda App.  Campain Status  Customer deactivate Connected Services (Opt-Out))  One Time Passcode (OTP) ehicle infotainment center displayies not provide the Authorization Code rring the MyMazda App enrollment)  Troubleshooting

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		4. 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. Perform KAM reset.  NOTE: Test drive vehicle after a KAM reset to allow the GPS clock to sychronize before retrying Authorization Code. 8. Contact Hotline for additional technical support if needed.
	Campain Status	Go to eMDCS Vehicle Inquiry and confirm the following campains are not shown or closed:  CSP06 CSP07 SSPC7 DRW41
IIVIAZDA GUNINEGT CONNECTEO VENICIE - II	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.
	No reception	<ol> <li>Check for DTCs. Are there any DTC's stored?         <ul> <li>Yes: Go to MGSS for normal DTC diagnosis.</li> <li>No: Go to next step.</li> </ul> </li> <li>Confirm TCU software version is at the following using TCU Software Version Check.         <ul> <li>Mazda3 - 10006 or later</li> <li>CX-30 - 10006 or later</li> <li>CX-5 - 10023 or later</li> <li>CX-9 - 10023 or later</li> <li>MX-30: 10019 or later</li> <li>CX-50: N/A</li> </ul> </li> <li>2019 Mazda3 Only - Confirm CMU software version is at 11012 or later.</li> <li>Disconnect battery terminal for 30 seconds, then test drive the vehicle. Is the reception strength signal normal?</li> </ol>

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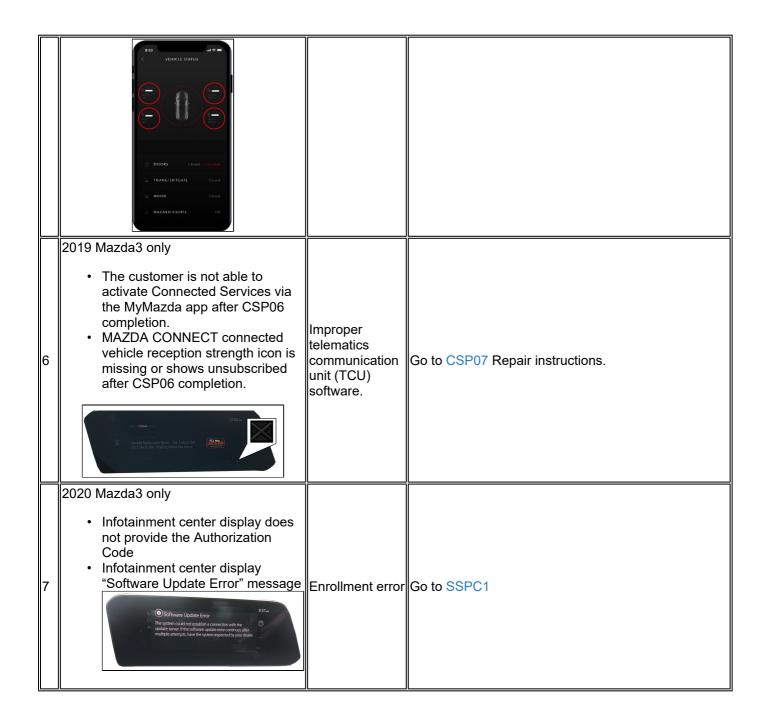
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CONSUMER NOTICE: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/ equipment and take training to correctly and safely maintain Mazda vehicles. These instructions 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.

system software update.

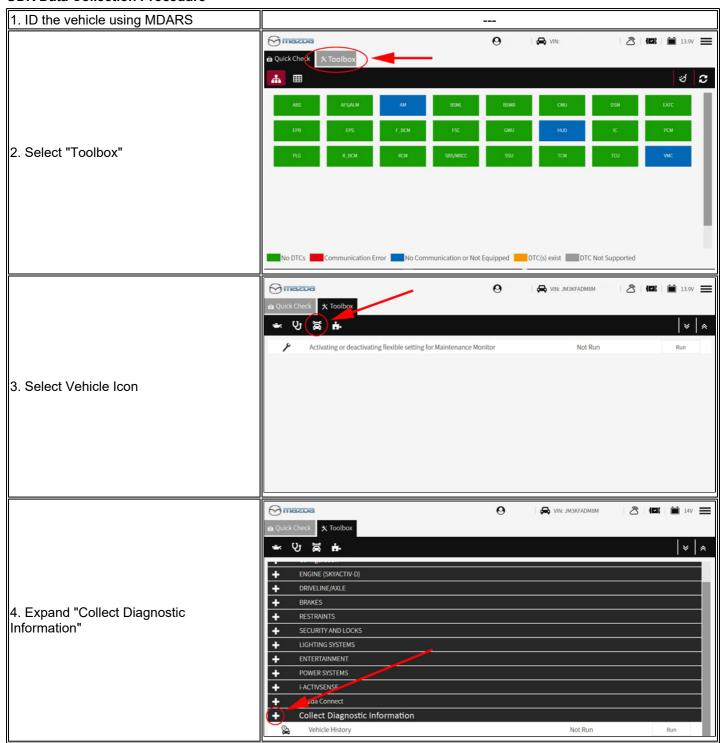


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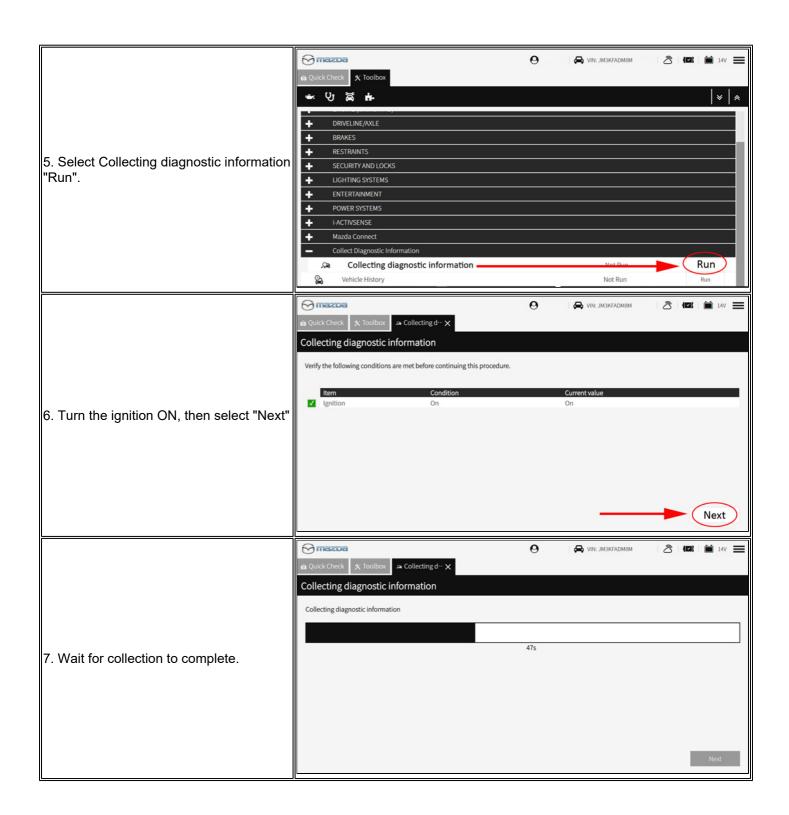
8		Vehicle's electrical control area network (CAN) is in "Sleep Mode"	No dealer visit is required. Sleep Mode can be reset by starting the engine and idling or driving for 5 minutes or longer.  Go to 09-010/22.
9	First remote control attempt fails, second attempt works fine.  • Engine Start / Stop • Door Lock / Unlock • Lights ON / OFF	Improper telematics communication unit (TCU) software.	Go to TSB 16-002/20.
10	Engine turns off when customer opens vehicle door.	Normal Operation	Advise that, for customer's safety and security, vehicle is designed to shut-off automatically when the vehicle door is opened.
11	<ul> <li>Low Tire pressure will not clear after correcting tire pressue.</li> <li>Vehicle status is inaccurate.</li> </ul>	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.

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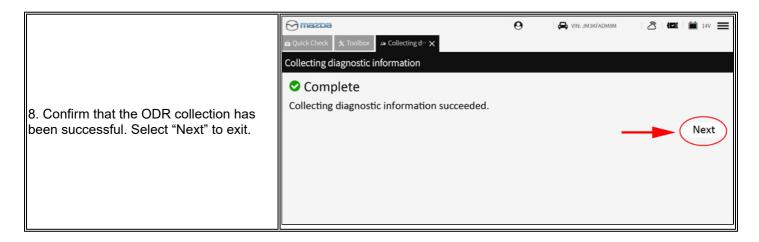
### **ODR Data Collection Procedure**



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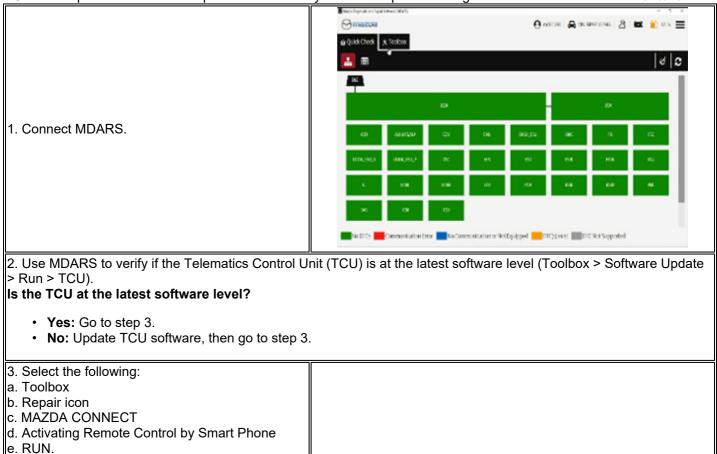


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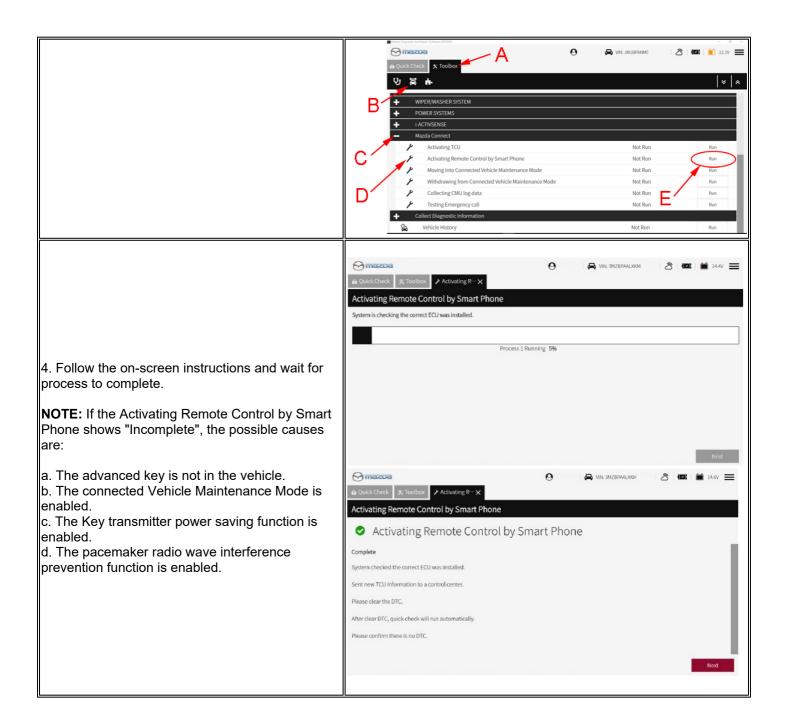


# Activating Remote Control by Smart Phone (links TCU to BCM)

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



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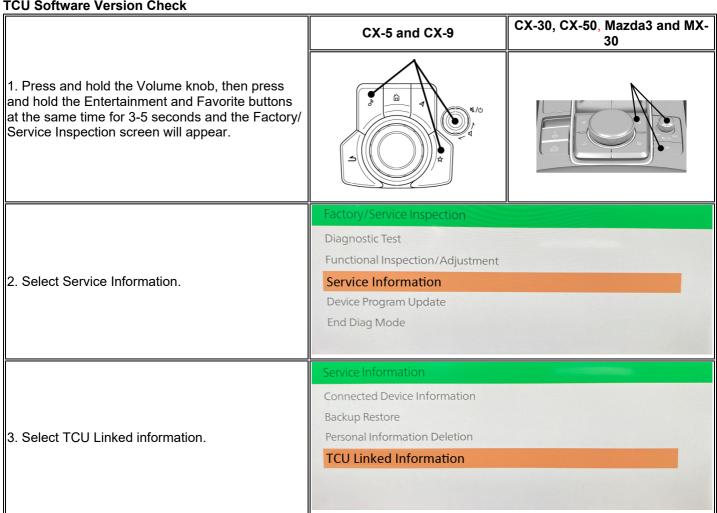
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5. Select Quick Check (A), then start the engine and select the DTC Clear icon (B).

**CAUTION:** If the engine is not started, DTC P2610 is stored and cannot be erased.



#### **TCU Software Version Check**



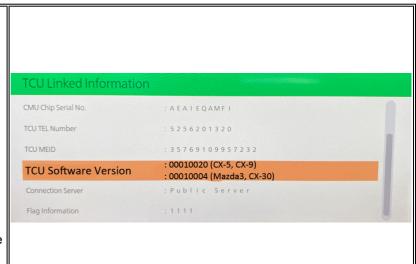
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# 4. Scroll down to TCU Software Version and confirm the software version is at:

- 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: N/A

#### Is the TCU software version correct?

- Yes: TCU Software Version Check is complete.
- No: Go to Telematics Communication Unit (TCU) Updates to update the TCU software version.



#### **Educational Videos**

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

### Resources

SA-019/22 - 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 WBT (30076)

MAZDA CONNECT & CONNECTED SERVICES FOCAL POINT (30093FOC)

MAZDA CONNECTED SERVICES SMART CARDS

MAZDA CONNECTED SERVICES: CUSTOMER OUTREACH

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