## Service Alert

## Mazda North American Operations Irvine, CA 92618-2922



Subject:

CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING

Service Alert No.: SA-017/22

Last Issued: 12/13/2022

#### **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	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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## 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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Vehicle is parked (stored) for approximately 1 week or longer or in deep sleep mode.

Drive the vehicle for a few miles to recover.

**DTC Stored** 

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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.
- 24 CSP04 Status Open

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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# REPAIR PROCEDURE CAUTION:

- Before continuing, confirm that the TCU is at the latest software level. Go to Telematics Communication Unit (TCU) Updates
- 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.

**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.

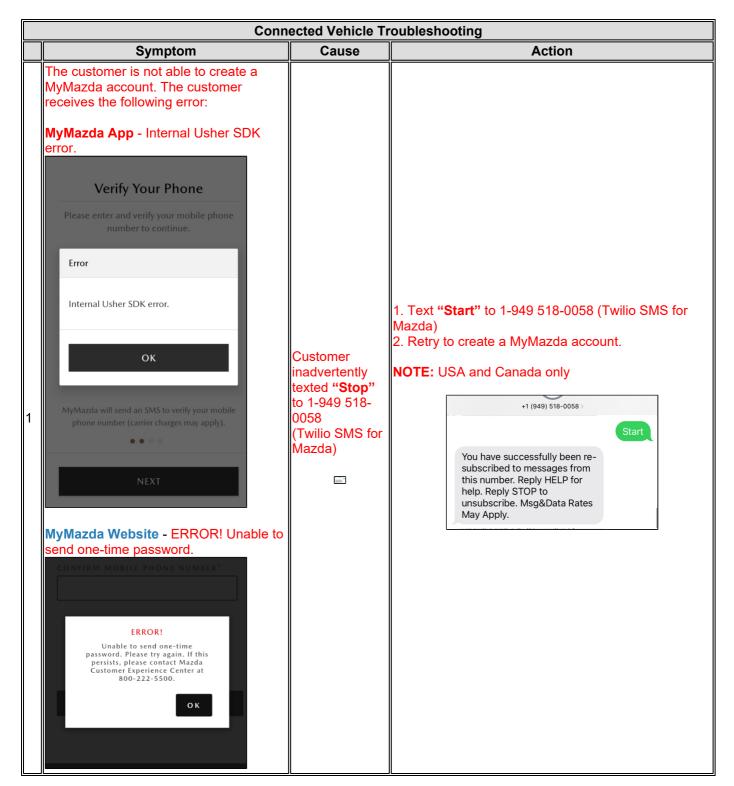
#### Index

- 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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**Push Notification** Remote function(s) inoperative. Go to the MyMazda App Engine Start / Stop to view the Door Lock / Unlock reason for · Lights ON / OFF remote function failure. Inbox OS Lock Home Detail Screen Tap the Tap Tap the push alert "check notification card vehicle status" Go to the MyMazda App INBOX -> ACTIVITY HISTORY -> to view reason for remote function failure. 2021 MAZDA3 2.5 S PF FWD **Activity History** 1. 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. 2. If applicable, confirm SSPC7 or DRW41 is closed. Go to eMDCS Vehicle Inquiry. 3. Confirm TCU software version is at the following Troubleshooting using TCU Software Version Check needed 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 4. Disconnect battery for 30 seconds and then reconnect (KAM reset).

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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.

**NOTE:** Test drive vehicle after battery

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		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.  6. 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.
II I	1. Aftermarket Remote Engine Start accessory installed. 2. Mazda	Remove the aftermarket accessory.     The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both.
	Remote Engine Start (BCKA- V7-620) accessory installed.	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.
II I	Vehicle is equipped with	Advise customer that vehicles with a manual transmission do not have the Remote Engine Start/

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		Manual Transmission	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).
		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.
3	No One Time Passcode (OTP) (Vehicle infotainment center display does not provide the Authorization Code during the MyMazda App enrollment)	Troubleshooting needed	<ol> <li>Use MDARS to ID the vehicle and check for DTC's stored. Are DTC(s) stored?         <ul> <li>Yes - Go to MGSS and perform normal DTC diagnostics.</li> <li>No - Perform ODR Data Collection Procedure, then go to step 2.</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>Retrieve MAZDA CONNECT CMU log data. Go to MGSS -&gt; Infotainment -&gt; MAZDA CONNECT CMU Data Retrieval</li> <li>Perform "Activating Remote Control by Smart Phone" (links TCU to BCM)</li> <li>Clear DTC(s).</li> <li>NOTE: If DTC 2050:55 is stored, go to SA-003/20 to clear DTC.</li> <li>Perform KAM reset.</li> <li>NOTE: Test drive vehicle after a KAM reset to allow the GPS clock to sychronize before retrying Authorization Code.</li> <li>Contact Hotline for additional technical support if needed.</li> </ol>
4	MAZDA CONNECT connected vehicle reception strength icon shows "X" or "\". Mazda3, CX-30, CX-50, MX-30	No reception	Go to eMDCS Vehicle Inquiry. Does eMDCS show CSP04 status closed?

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CX-5, CX-9



- Yes Customer opt-out. No action needed.
- · No CSP04 is not shown. Go to next step.
- 2. Check for DTCs. Are there any DTC's stored?
  - · Yes: Go to MGSS for normal DTC diagnosis.
  - · No: Go to next step.
- 3. 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: N/A
- 4. Disconnect battery terminal for 30 seconds, then test drive the vehicle. Is the reception strength signal normal?
  - 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

Good - Contact Hotline for technical support



**No Good** - Swap Tel antenna No. 1 with known good vehicle

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Service Alert No.: SA-017/22 Last Issued: 12/13/2022 Except CX-5 and CX-9 MAZDA CONNECT and/or MyMazda App displays incorrect tire pressures after battery disconnect and/or Incorrect infotainment CMU software update. calendar entrv (month/day/ year) after a batterv 5 Go to SA-002/21 disconnect or infotainment system software update.

## 2019 Mazda3 only

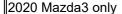
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- The customer is not able to activate Connected Services via the MyMazda app after CSP06 completion.
- MAZDA CONNECT connected vehicle reception strength icon is missing or shows unsubscribed after CSP06 completion.

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Improper telematics communication unit (TCU) software.

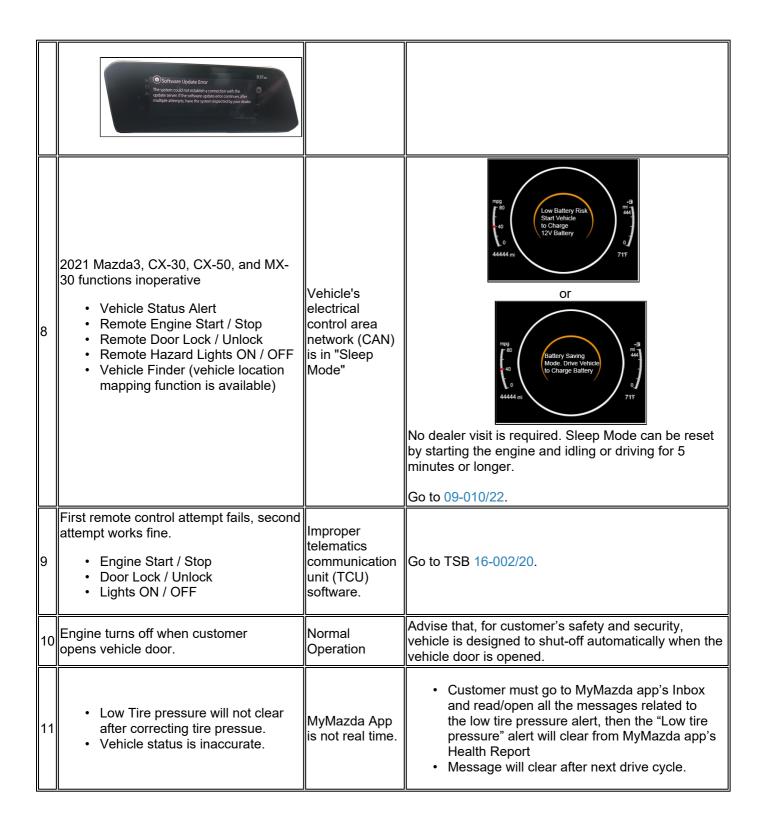
Go to CSP07 Repair instructions.



- Infotainment center display does not provide the Authorization Code
- Infotainment center display "Software Update Error" message

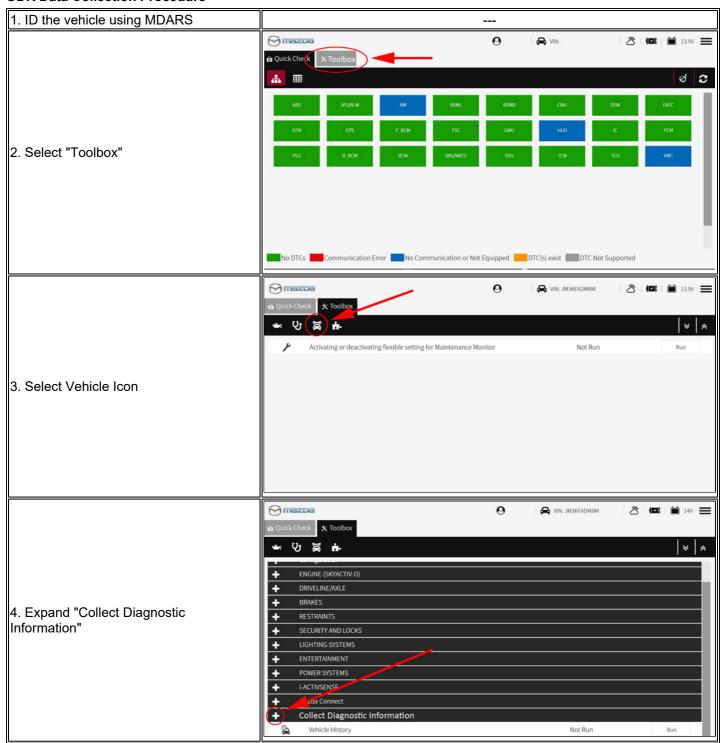
Enrollment error Go to SSPC1

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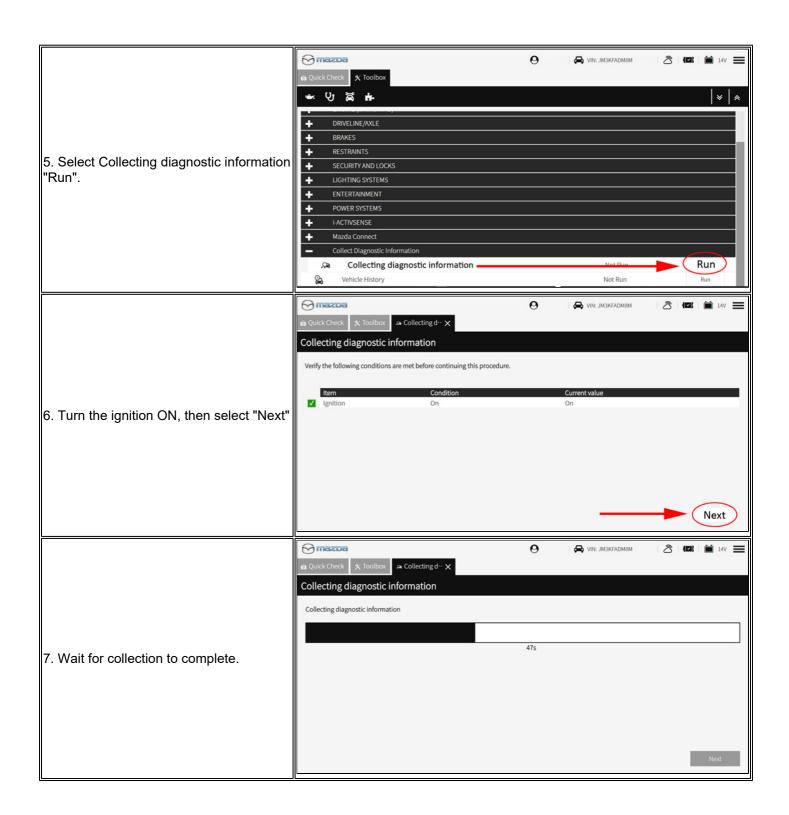


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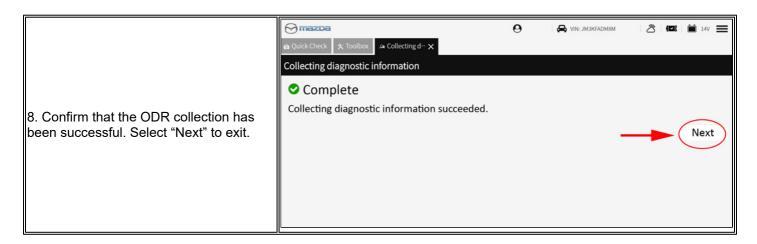
#### **ODR Data Collection Procedure**



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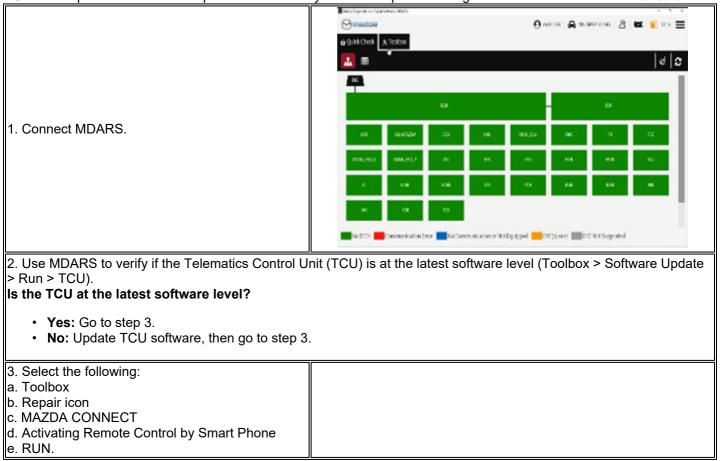


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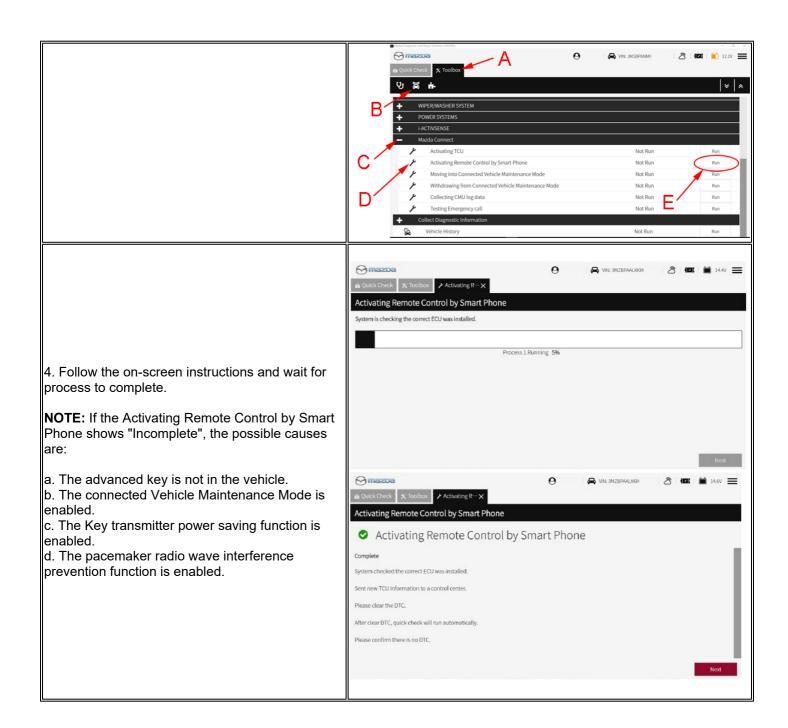


## Activating Remote Control by Smart Phone (links TCU to BCM)

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



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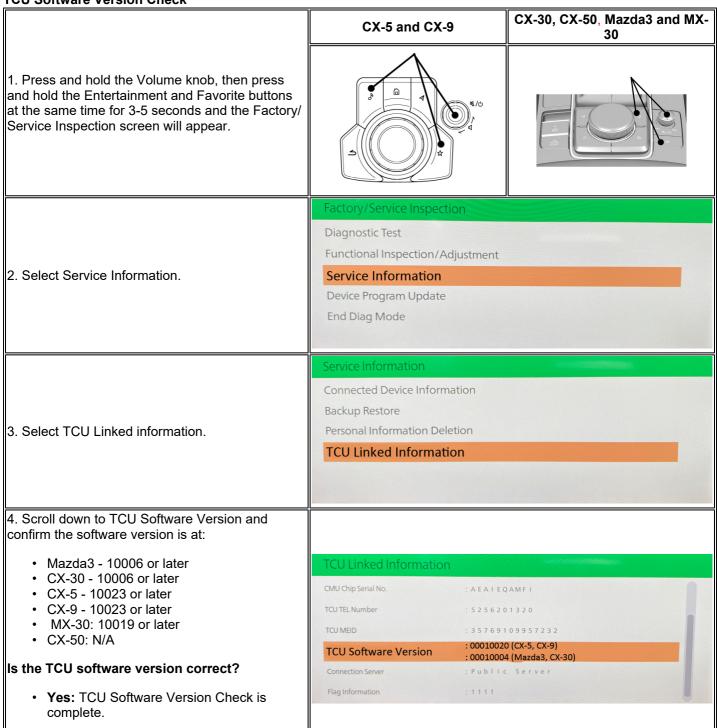
5. Select Quick Check (A), then start the engine and select the DTC Clear icon (B).

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

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



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 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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