Service Alert

Mazda North American Operations Irvine, CA 92618-2922



Subject:		
CONNECTED VEHICLE SYMPTOM TROUBLESHOOTING	Service Alert No.: SA-017/22	
	Last Issued : 04/04/2022	

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	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
	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

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

DESCRIPTION

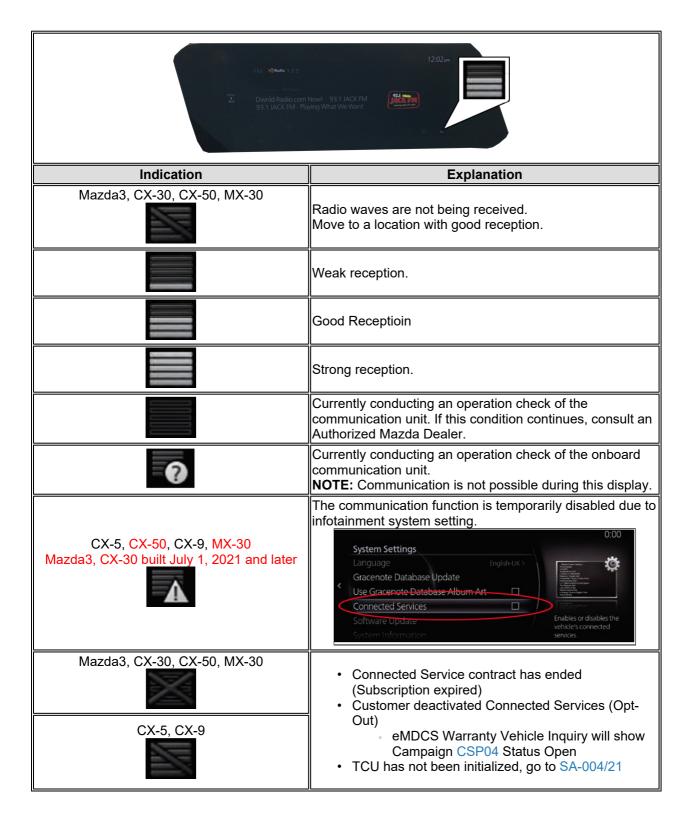
Some customers may complain about any of the following:

- 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 "\".

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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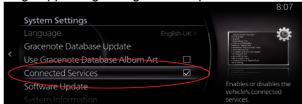
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Connected Services disabled (box unchecked)



Enable Connected Services (box checked) to prevent message appearing at engine start up.



Note: If customer Opted-Out (CSP04), advise customer to keep Connected Services box checked. The vehicle will not transmit data.

Connected Vehicle Maintenance Mode



Connected Vehicle Maintenance Mode enabled.
Go to MGSS SERVICE CAUTIONS FOR VEHICLES
WITH TELEMATICS COMMUNICATION SYSTEM to
disable Maintenance Mode.

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, CX-30, CX-50, MX-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		

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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)		
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.		
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: 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.

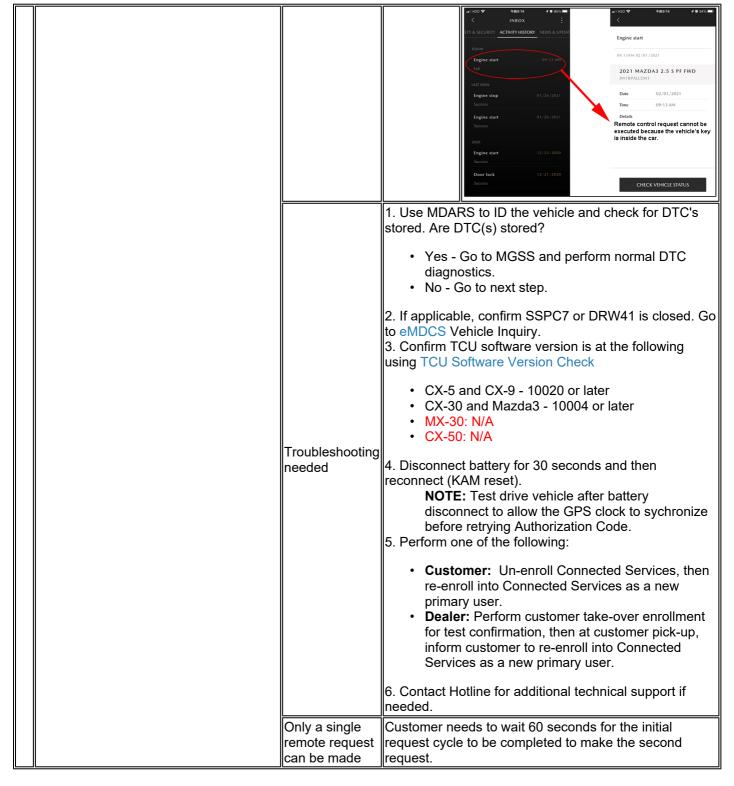
NOTE: Vehicles stored for long periods may loose GPS clock sychronization. If the vehicle is stored for a long period, test drive the vehicle to give the GPS clock time to sychronize before enrolling or testing connected vehicle functions.

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- 1. Remote function(s) inoperative
- 2. Unable to enroll into connected services
- 3. Connected vehicle reception strength icon shows "X" or "\"
- 4. MyMazda App displays incorrect tire pressures (Except CX-5 and CX-9)
- 5. Unable to activate Connected Services (2019 Mazda3)
- 6. Software Update Error (2020 Mazda3)
- 7. Functions inoperative (2021-> CX-30, CX-50, Mazda3 and MX-30)
- 8. First remote control attempt fails, second attempt works fine
- 9. Engine turns off when opening door
- 10. Low Tire pressure will not clear after correcting tire pressue

	Connected Vehicle Troubleshooting					
	Symptom	Cause		Actio	n	
1			Push Notification	User along Seglement 12 Bernalds Free Base Resident Free Base Residen	START START	Remote Explosibility 2019 MAYZOA 3 SOCIETY MAYZOA 3 SOCIE
	Lights ON / OFF			OS Lock Screen Tap the push notification	Home Tap the alert card	Inbox Detail Tap "check vehicle status"
			History	Go to the MyMaz ACTIVITY HISTO remote function f	ORY -> to vie	

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		per 60-second	
		Remote Transmitter Key(s) in the vehicle	Do not leave keys in vehicle.
		1. Aftermarket Remote Engine Start accessory installed. 2. Mazda Remote Engine Start (BCKA- V7-620) accessory installed.	1. Remove the aftermarket accessory. 2. The customer can use either the Mazda Remote Engine Start accessory or the MyMazda app function. Cannot use both. 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).
2	Unable to enroll into connected services. (Vehicle center display does not provide the Authorization Code during the MyMazda App enrollment)	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.

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			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 - Perform ODR Data Collection Procedure, then go to step 2. 2. Confirm TCU software version is at the following using TCU Software Version Check.
		Troubleshooting needed	 CX-5 and CX-9: 10020 or later CX-30 and Mazda3: 10004 or later MX-30: N/A CX-50: N/A 3. Retrieve MAZDA CONNECT CMU log data. Go to MGSS -> Infotainment -> MAZDA CONNECT CMU Data Retrieval 4. Perform "Activating Remote Control by Smart Phone" (links TCU to BCM) 5. Clear DTC(s). NOTE: If DTC 2050:55 is stored, go to SA-003/20 to clear DTC. 6. Perform KAM reset. NOTE: Test drive vehicle after a KAM reset to allow the GPS clock to sychronize before retrying Authorization Code. 7. Contact Hotline for additional technical support if needed.
3	MAZDA CONNECT connected vehicle reception strength icon shows "X" or "\". Mazda3, CX-30, CX-50, MX-30 CX-5, CX-9 Out of Balance Name 133 SAC FM 1999 (Violat Name Name Name Name Name Name Name Name	No reception	 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 step. Check for DTCs. Are there any DTC's stored? Yes: Go to MGSS for normal DTC diagnosis. No: Go to next step. Confirm TCU software version is at the following using TCU Software Version Check. CX-5 and CX-9: 10020 or later CX-30 and Mazda3: 10004 or later MX-30: N/A CX-50: N/A

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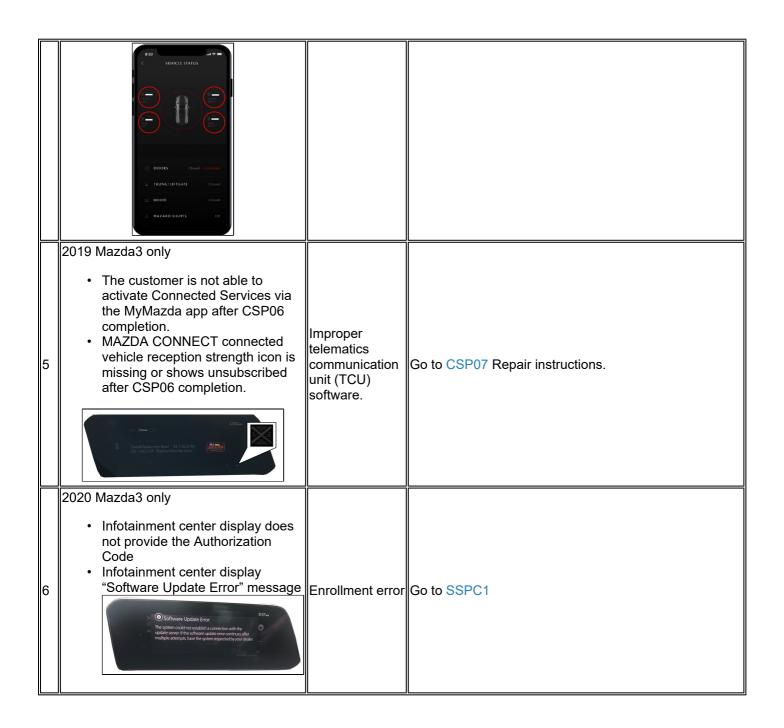
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CONSUMER NOTICE: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/ equipment and take training to correctly and safely maintain Mazda vehicles. These instructions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

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 Except CX-5 and CX-9 Incorrect calendar entry MAZDA CONNECT and/or MyMazda (month/day/ year) after a App displays incorrect tire pressures after battery disconnect and/or battery Go to SA-002/21 infotainment CMU software update. disconnect or infotainment system software update.

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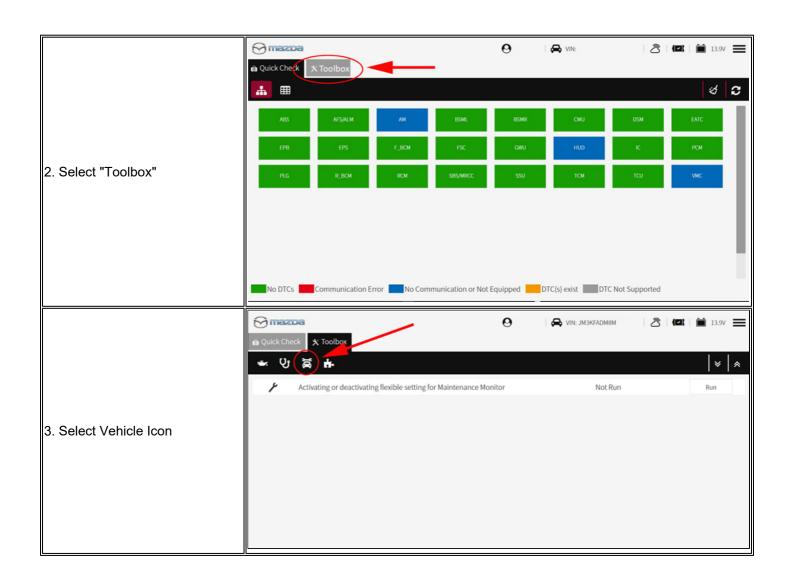
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7	 2021 Mazda3, CX-30, CX-50, and MX-30 functions inoperative Vehicle Status Alert Remote Engine Start / Stop Remote Door Lock / Unlock Remote Hazard Lights ON / OFF Vehicle Finder (vehicle location mapping function is available) 	Vehicle's electrical 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 SA-005/21.
8	First remote control attempt fails, second attempt works fine. • Engine Start / Stop • Door Lock / Unlock • Lights ON / OFF	Improper telematics	Go to TSB 16-002/20.
	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.
10	 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.

ODR Data Collection Procedure

1. ID the vehicle using MDARS	

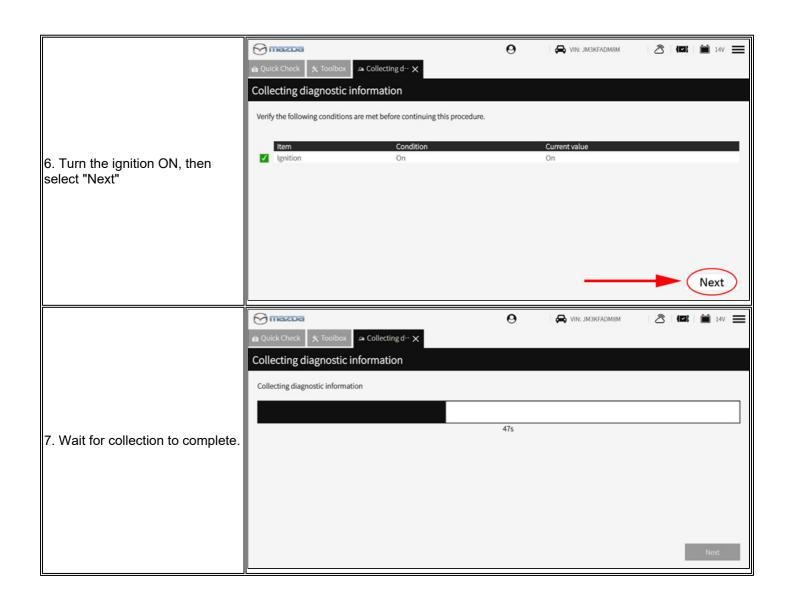
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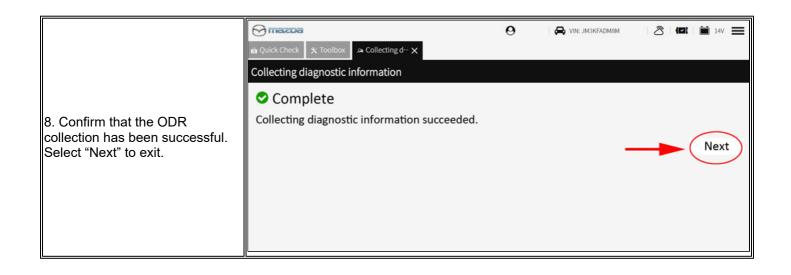
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Activating Remote Control by Smart Phone (links TCU to BCM)

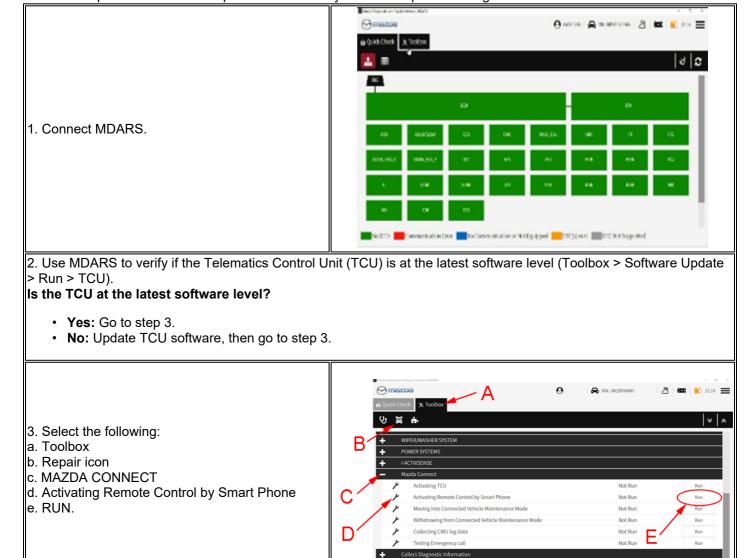
4. Follow the on-screen instructions and wait for

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

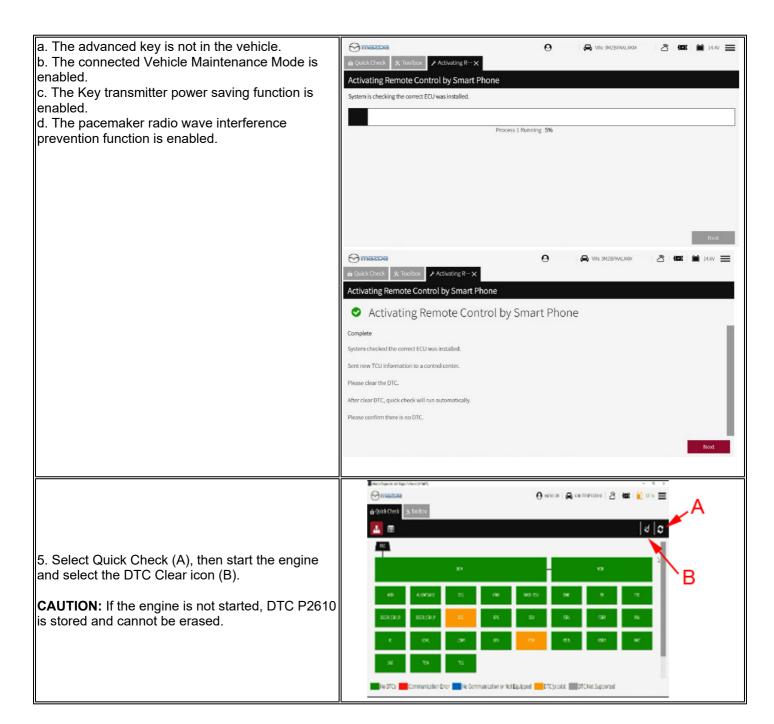
process to complete.

are:

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



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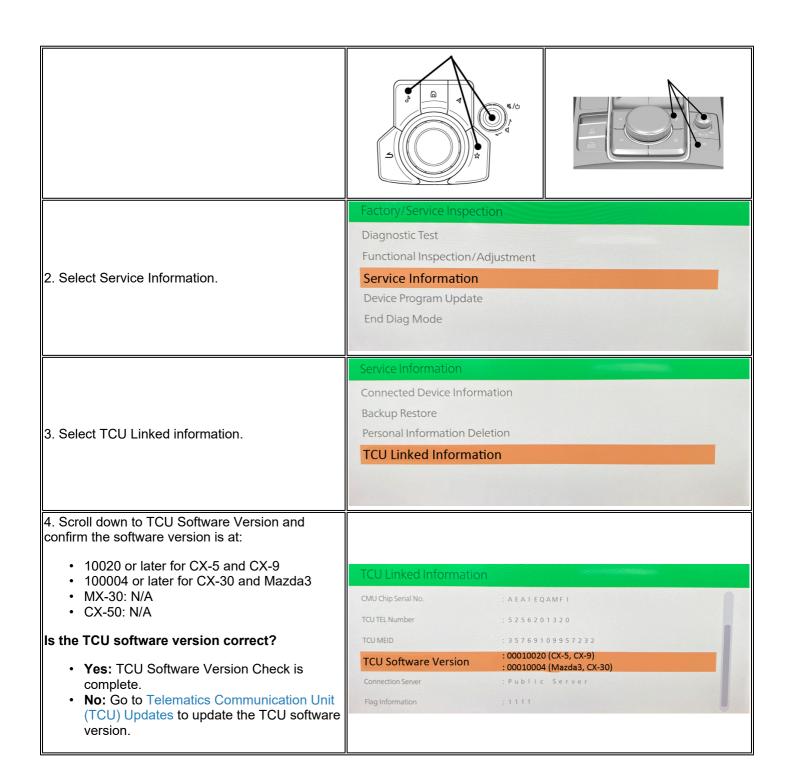
TCU Software Version Check

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

CX-30, CX-50, Mazda3 and MX-30

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