



Subject: TELEMATICS COMMUNICATION UNIT (TCU) REPLACEMENT / ACTIVATION PROCEDURE	Service Alert No.: SA-025/23
	Last Issued : 12/05/2023

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-025/23	04/21/23
SA-034/22	05/20/22
SA-004/21	09/13/21, 06/02/21, 05/24/21 and 01/19/21
SA-010/20	06/29/20, 06/01/20, 05/08/20, 04/29/20 and 01/15/20

APPLICABLE MODEL(S)/VINS

2019-2024 Mazda3	2021-2024 CX-5	2022-2023 MX-30	2024 CX-90
2020-2024 CX-30	2021-2023 CX-9	2023-2024 CX-50	

DESCRIPTION

When the Telematics Control Unit (TCU) replacement is necessary due to a failure, use MDARS to activate the new TCU after replacement.

Use the information in this service alert to initialize the new TCU until the procedure on MGSS is updated..

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.
- If TCU activation is not performed, connected vehicle functions will not operate. This will have a negative impact on the customer because they will need to return to the dealer for repairs.

TCU Activation

1. Install the new TCU.

- Mazda3 - [TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION](#)
- CX-30 - [TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION](#)

2. Use the DCA8000 battery charger SST to maintain battery voltage. Go to [SA-034/21](#).

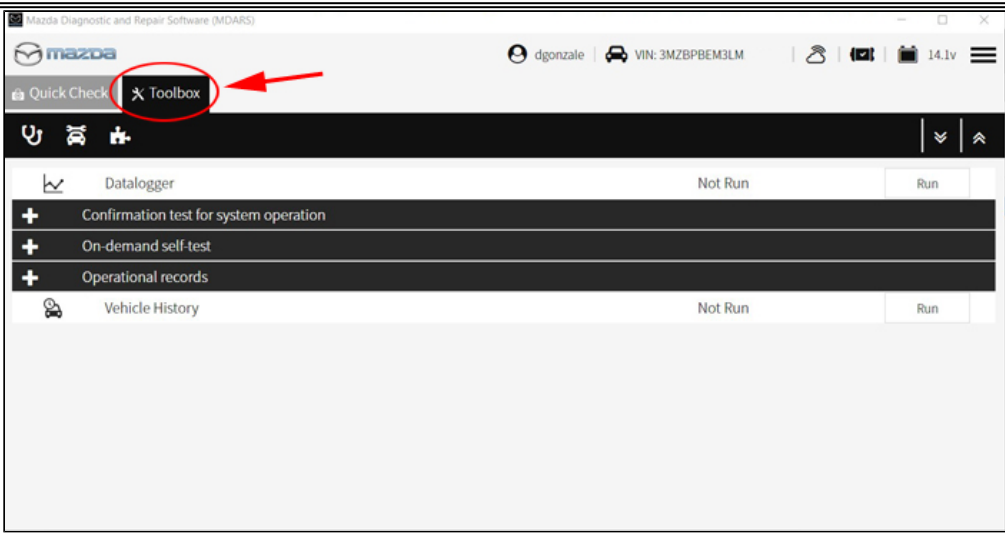
3. Confirm M-MDS hardware that is in good working condition. Go to [SA-066/20](#).

4. Turn the ignition ON (engine ON or OFF).

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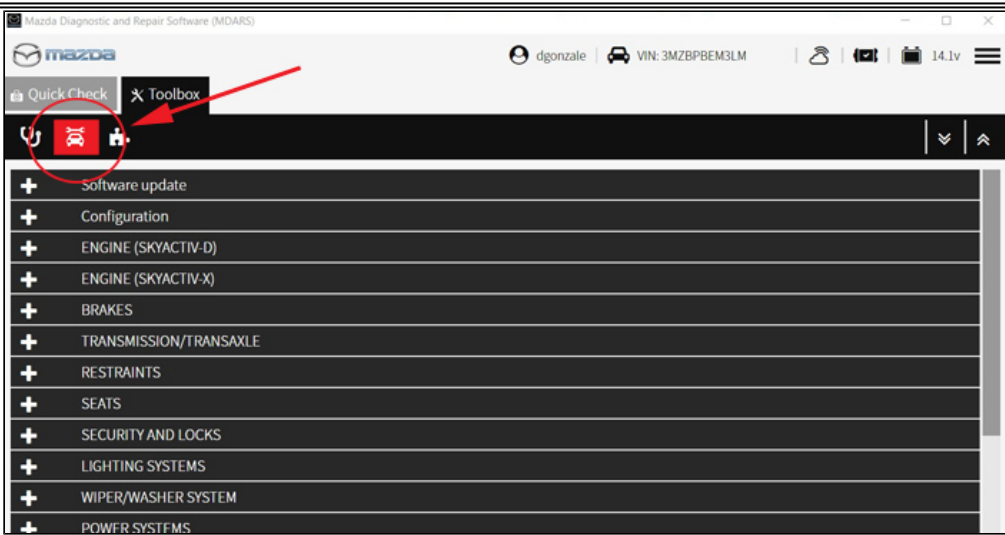
5. Connect MDARS to the vehicle.

6. Select "Tool Box".



The screenshot shows the Mazda Diagnostic and Repair Software (MDARS) interface. At the top, there is a navigation bar with the Mazda logo, the user name 'dgonzale', and the VIN '3MZBPBEM3LM'. Below the navigation bar, there are two main menu items: 'Quick Check' and 'Toolbox'. The 'Toolbox' item is circled in red, and a red arrow points to it. Below the menu items, there is a list of diagnostic tools and their status. The list includes 'Datalogger' (Not Run), 'Confirmation test for system operation', 'On-demand self-test', 'Operational records', and 'Vehicle History' (Not Run). Each item has a 'Run' button next to it.

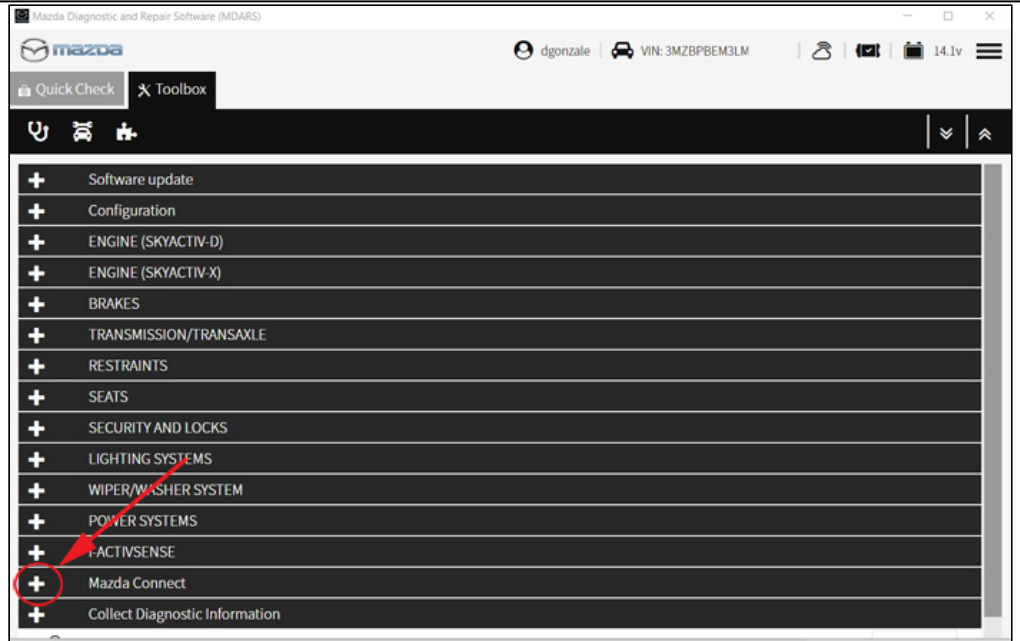
7. Select the repair icon.



The screenshot shows the Mazda Diagnostic and Repair Software (MDARS) interface. At the top, there is a navigation bar with the Mazda logo, the user name 'dgonzale', and the VIN '3MZBPBEM3LM'. Below the navigation bar, there are two main menu items: 'Quick Check' and 'Toolbox'. The 'Toolbox' item is circled in red, and a red arrow points to it. Below the menu items, there is a list of diagnostic tools and their status. The list includes 'Software update', 'Configuration', 'ENGINE (SKYACTIV-D)', 'ENGINE (SKYACTIV-X)', 'BRAKES', 'TRANSMISSION/TRANSAXLE', 'RESTRAINTS', 'SEATS', 'SECURITY AND LOCKS', 'LIGHTING SYSTEMS', 'WIPER/WASHER SYSTEM', and 'POWER SYSTEMS'. Each item has a '+' icon next to it.

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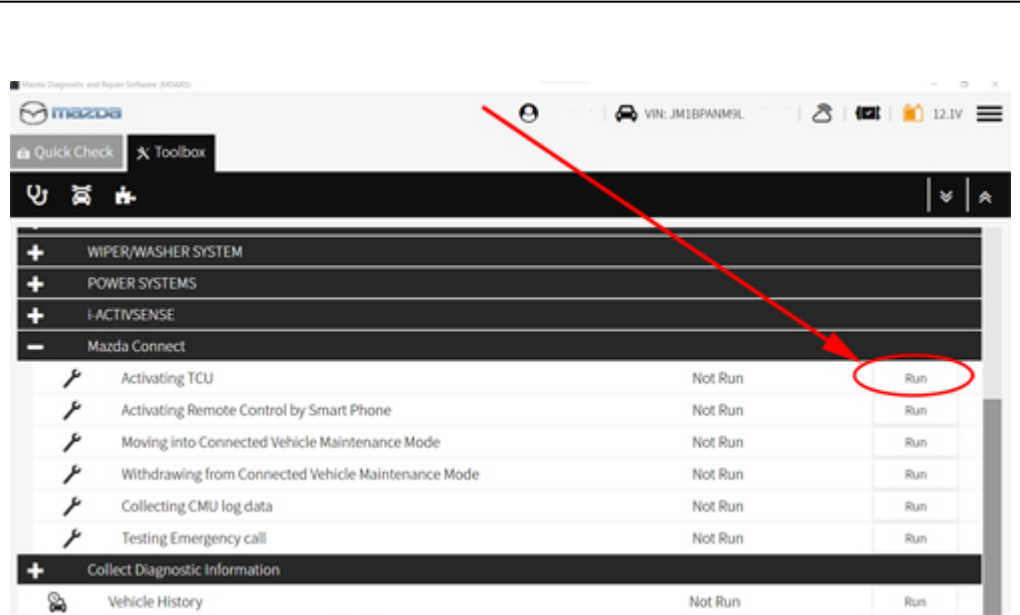
8. Select "Mazda Connect"



9. Select Activating TCU (links TCU to server) -> "Run".
Wait for "initialization complete" message.

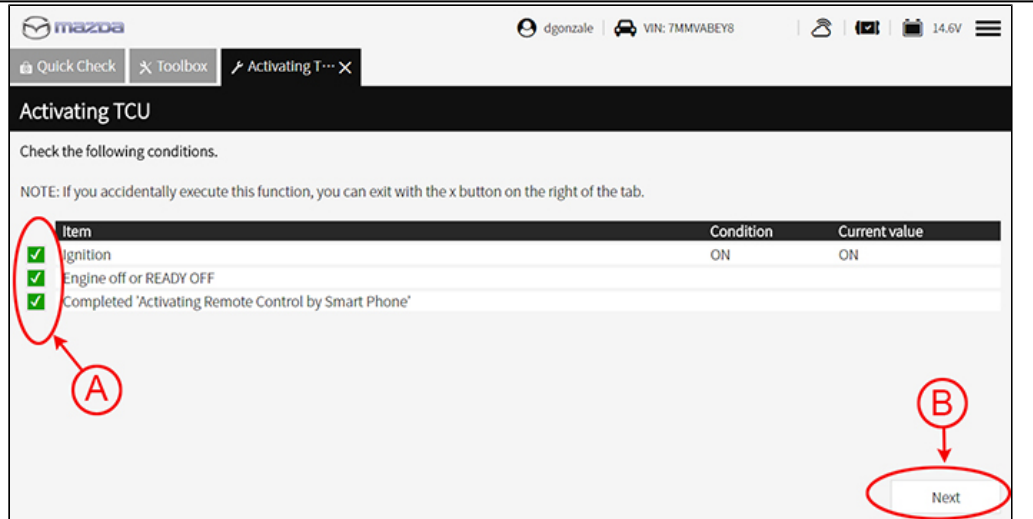
NOTE: MDARS may show "Incomplete". This may be caused by:

- Advanced key is not in the vehicle.
- Connected vehicle maintenance mode is enabled.
- Pacemaker radio wave interference prevention is enabled.
- key transmitter power saving function is enabled. See [SA-020/21](#).

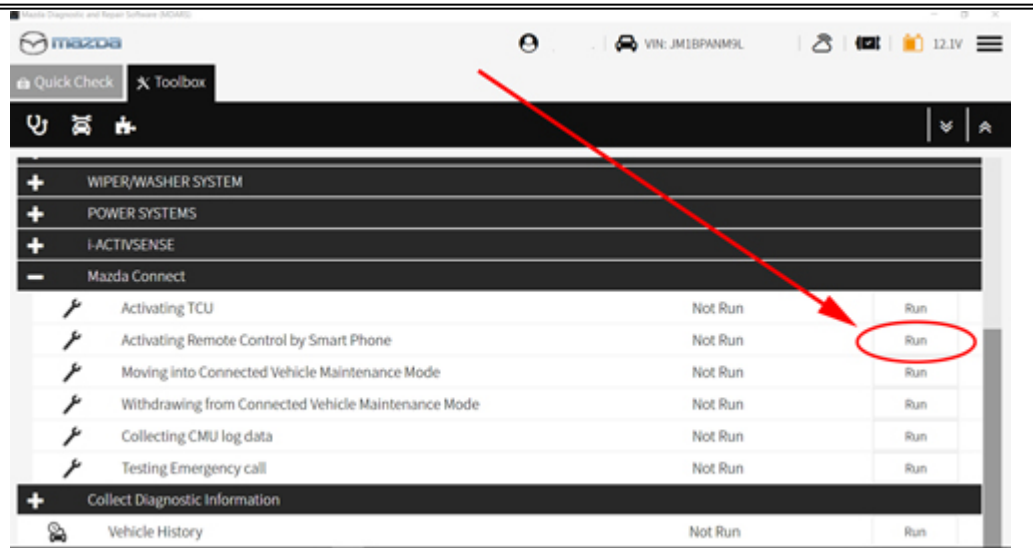


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10. Check the Items as shown (A) then select "Next" (B)



11. Select Activating Remote Control by Smart Phone (links TCU to BCM) -> "Run". Wait for "initialization complete" message.



12. Turn Ignition OFF and wait at least 2 minutes.
13. Turn Ignition ON and then check reception strength.

If customer was previously enrolled, reception strength icon will show normal



If customer was not previously enrolled, reception strength icon will show "X", this is a normal Deactivation Mode function.

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Customer/Dealer can activate CV services anytime via MyMazda app (there just might be a slight delay in making the backend connection since it was temporarily deactivated).

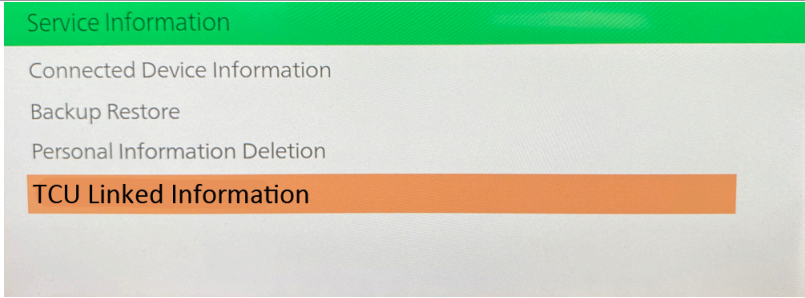
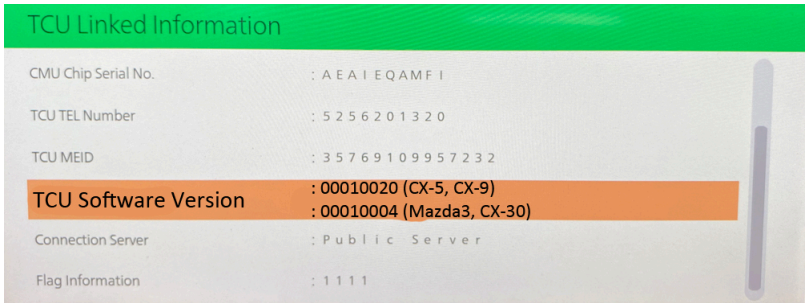
14. Clear DTC's

NOTE:

- New TCU replacement part may not have the latest software version installed. See Parts Information.
- Perform the following steps to confirm TCU software version is at:
 - 10006 or later for CX-30 and Mazda3
 - 10023 or later for CX-5 and CX-9
 - 10003 or later for CX-50
 - 10019 or later for MX-30

	CX-5 and CX-9	CX-30 and Mazda3
<p>a. 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.</p>		
<p>b. Select Service Information.</p>		

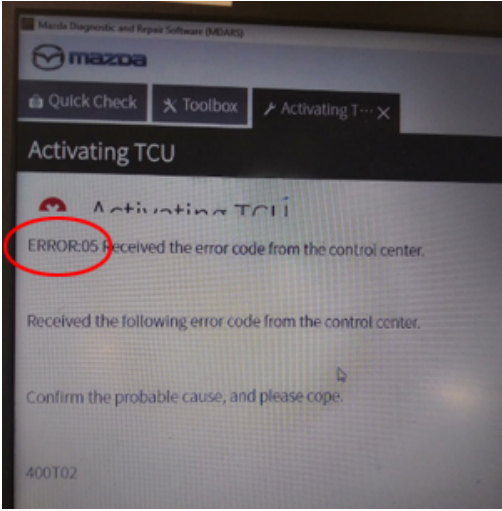
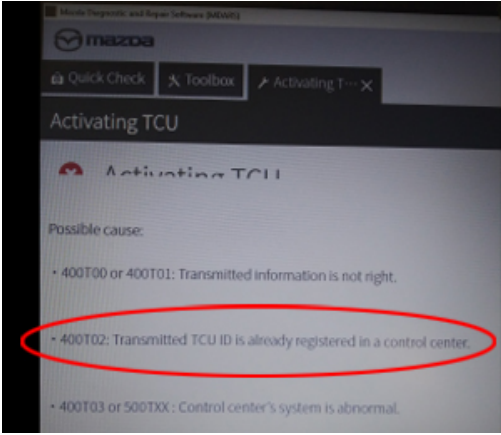
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<p>c. Select TCU Linked information.</p>	
<p>d. Scroll down to TCU Software Version and confirm the software version is at:</p> <ul style="list-style-type: none"> • 10006 or later for CX-30 and Mazda3 • 10023 or later for CX-5 and CX-9 • 10003 or later for CX-50 • 10019 or later for MX-30 <p>Is the TCU software version correct?</p> <ul style="list-style-type: none"> • Yes: Repair is complete. • No: Go to MGSS -> Infotainment/TCU -> Telematics Communication Unit (TCU) Updates to update the TCU software version. <ul style="list-style-type: none"> ◦ See Warranty Information for software update payment. 	

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NOTE:

- If DTC U2050:55-TCU (Activation of remote control not implemented) is stored, go to TSB [09-013/20 - DTC U2050:55 STORED AFTER REPLACING OR REPROGRAMMING TCU](#).
- If the TCU was not replaced and MDARS shows error code 400t02 and/or ERROR:05, TCU activation was previously completed. Ignore these errors as TCU activation is not required.

ERROR:05	Error code 400t02
 <p>The screenshot shows the 'Activating TCU' screen in the Mazda Diagnostic and Repair Software (MDARS). A red circle highlights the text: 'ERROR:05 received the error code from the control center.' Below this, it says 'Received the following error code from the control center.' and 'Confirm the probable cause, and please cope.' The error code '400T02' is visible at the bottom left of the screen.</p>	 <p>The screenshot shows the 'Activating TCU' screen in the Mazda Diagnostic and Repair Software (MDARS). Under the 'Possible cause:' section, a red circle highlights the text: '- 400T02: Transmitted TCU ID is already registered in a control center.' Other causes listed include '- 400T00 or 400T01: Transmitted information is not right.' and '- 400T03 or 500TXX: Control center's system is abnormal.'</p>

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PARTS INFORMATION

Model	Base Part Number	Description	Suffix	Action
CX-5	KJK9-67-CM0	DATA COMMUNICATION MODULE	"B" or earlier	Go to MGSS -> Infotainment/TCU -> Telematics Communication Unit (TCU) Updates to update the TCU software version.
			"C" or later	TCU software update <u>is not</u> required
CX-9	TC3M-67-CM0	DATA COMMUNICATION MODULE	"B" or earlier	Go to MGSS -> Infotainment/TCU -> Telematics Communication Unit (TCU) Updates to update the TCU software version.
			"C" or later	TCU software update <u>is not</u> required
Mazda3	BGMC-67-CM0	DATA COMMUNICATION MODULE	"A" or earlier	Go to MGSS -> Infotainment/TCU -> Telematics Communication Unit (TCU) Updates to update the TCU software version.
			"C" or later	TCU software update <u>is not</u> required
CX-30	DGH9-60-CM0	DATA COMMUNICATION MODULE	"F" or earlier	Go to MGSS -> Infotainment/TCU -> Telematics Communication Unit (TCU) Updates to update the TCU software version.
			"G" or later	TCU software update <u>is not</u> required

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WARRANTY INFORMATION**NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's New Vehicle Limited Warranty
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	99
Damage Code	99
Part Number Main Cause	**** -67-CM0 *
Quantity	1
Operation Number / Hours (For Replacement)	T0524XRX Mazda3 / 0.4 Hrs. '20 CX-30 / 0.5 Hrs. '21 CX-30 / 0.6 Hrs. CX-5 / 0.6 Hrs. CX-9 / 0.7 hrs.
Operation Number / Hours (For Reprogramming)	T0524XRT / 0.4 Hrs. (Max)

NOTE: All claims will pend for adjuster review.

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