Service Alert

Mazda North American Operations
Irvine, CA 92618-2922

Subject:	
TELEMATICS COMMUNICATION UNIT (TCU) REPLACEMENT / ACTIVATION PROCEDURE	**Service Alert No.: SA-070/24**
	Last Issued : 11/04/2024

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-070/24	09/12/24
SA-025/23	12/05/23 and 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

2019-2025 Mazda3	2021-2025 CX-5	2022-2023 MX-30	2024-2025 CX-90	2025 CX-70
2020-2025 CX-30	2021-2023 CX-9	2023-2025 CX-50	2024 MX-5	

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.
- If the Telematics Control Unit (TCU) replacement is necessary, check "Vehicle Communication Line Status Reference" status detail first.
  - The TCU can only be replaced under the following "Status Detail" conditions:
    - Open Completed (OK)
    - Closed Completed (OK)
  - If the TCU is replaced under the following "Status Detail" conditions, the customer may not be able to enroll into the replacement TCU.
    - Processing (NG)
    - Request Failed (NG)
    - Open Failed (NG)
    - Flag Setting Failed (NG)
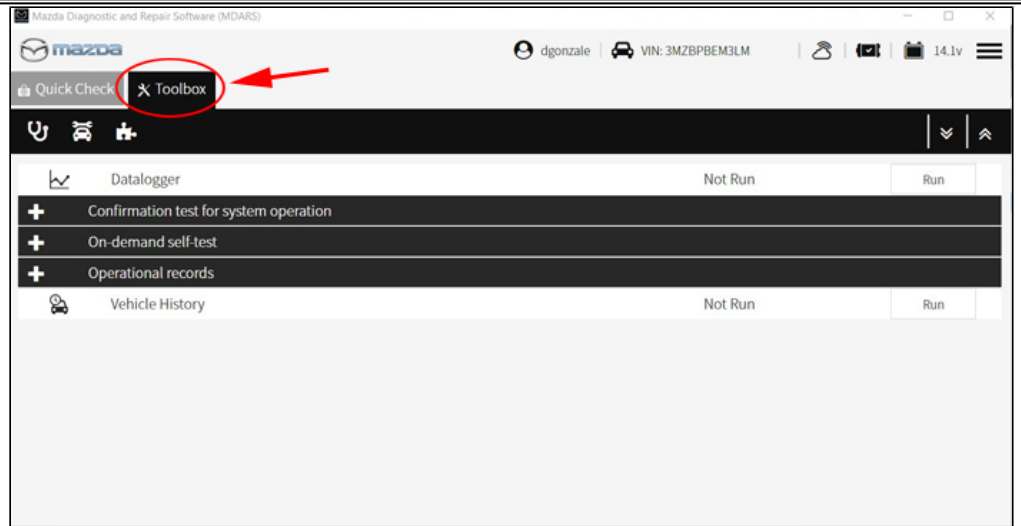   - Close Failed (NG)

TCU Activation

1. Install the new TCU.

- Mazda3 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- CX-30 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- CX-5 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- CX-9 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- MX-30 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- CX-50 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- CX-90 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
- MX-5 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION
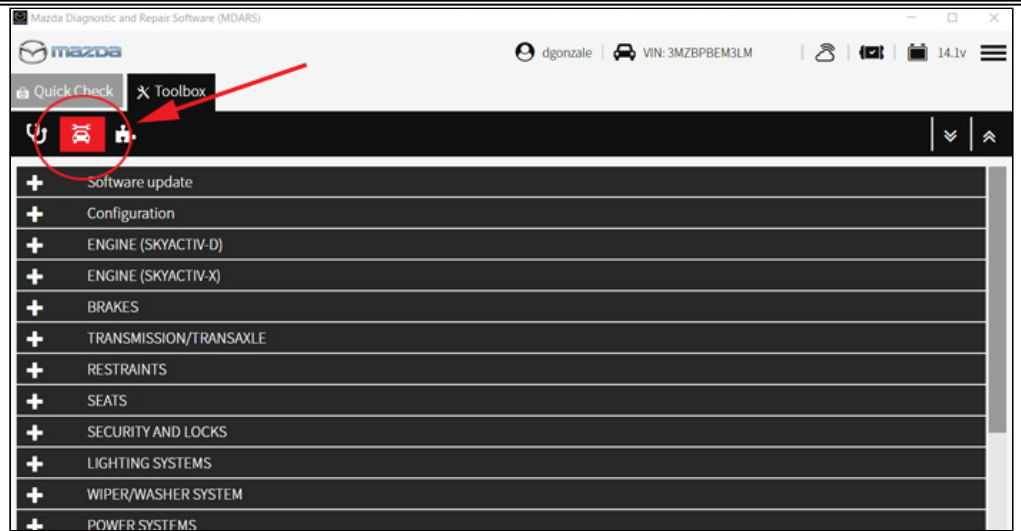- CX-70 - TELEMATICS COMMUNICATION UNIT REMOVAL/INSTALLATION

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).

5. Connect MDARS to the vehicle.

11/15/2024 09:09 AM tlawrenc

6. Select "Tool Box".	
7. Select the repair icon.	

11/15/2024 09:09 AM tlawrenc
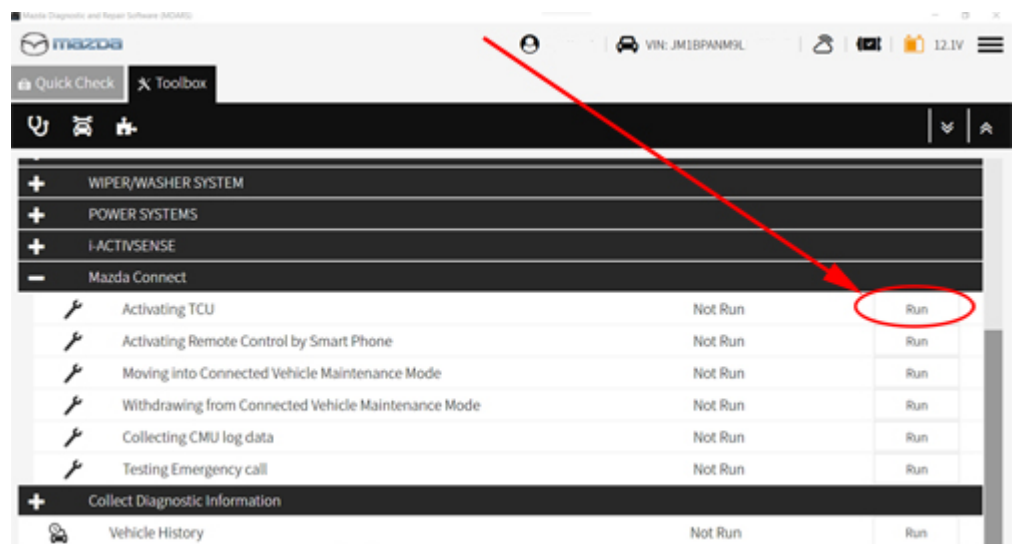
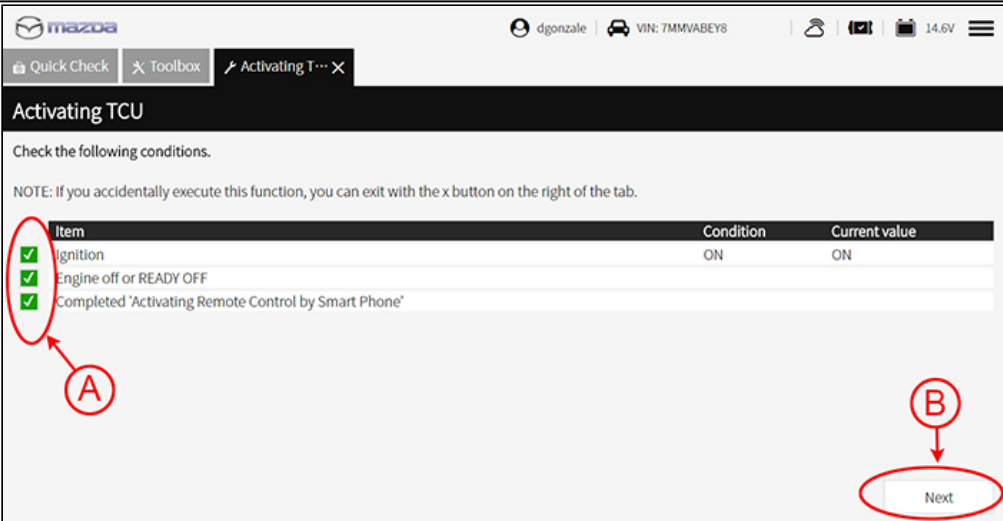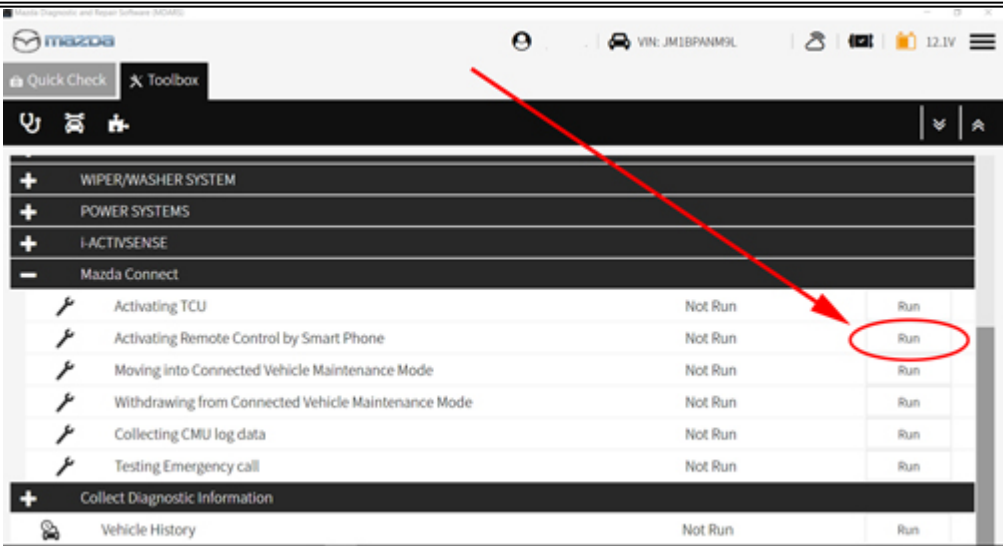|	
8. Select "Mazda Connect"	
9. Select Activating TCU (links TCU to server) -> "Run". Wait for "initialization complete" message. **NOTE:** MDARS may show "Incomplete". This may be caused by: • Advanced key is not in the vehicle. • Connected vehicle maintenance mode is enabled. • Pacemaker radio wave interference prevention is enabled. • key transmitter power saving function is enabled. See SA-020/21.	

11/15/2024 09:09 AM tlawrenc

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.

11/15/2024 09:09 AM tlawrenc

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 latest version listed on MGSS -> Infotainment/ TCU -> TCU updates.

	CX-5 and CX-9	**CX-30, Mazda3, MX-30, CX-90 and CX-70**
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.		
b. Select Service Information.	Factory/Service Inspection Diagnostic Test Functional Inspection/Adjustment **Service Information** Device Program Update End Diag Mode	
c. Select TCU Linked information.	Service Information Connected Device Information Backup Restore Personal Information Deletion **TCU Linked Information**	

11/15/2024 09:09 AM tlawrenc

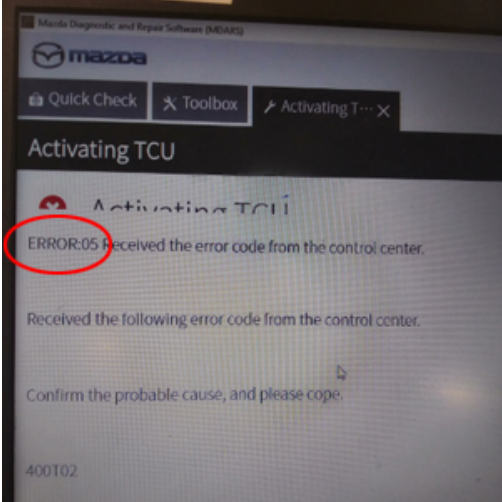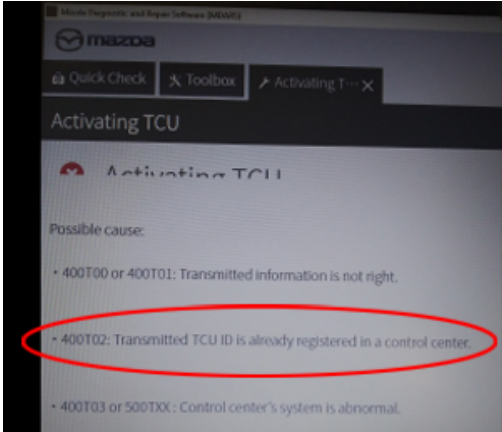|	
d. Scroll down to TCU Software Version and confirm the software version is at the latet version as listed on MGSS. **Is the TCU software version correct?** • **Yes:** Repair is complete. • **No:** Go to MGSS -> Infotainment/TCU -> Telematics Communication Unit (TCU) Updates to update the TCU software version. ◦ See Warranty Information for software update payment.	**TCU Linked Information** CMU Chip Serial No. : A E A I E Q A M F I TCU TEL Number : 5 2 5 6 2 0 1 3 2 0 TCU MEID : 3 5 7 6 9 1 0 9 9 5 7 2 3 2 **TCU Software Version** : 00010020 (CX-5, CX-9) : 00010004 (Mazda3, CX-30) Connection Server : P u b l i c S e r v e r Flag Information : 1 1 1 1

11/15/2024 09:09 AM tlawrenc

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

11/15/2024 09:09 AM tlawrenc

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 2019-2021 Mazda3 / 0.4 Hrs. (built before 7/1/21) 2021-2024 Mazda3 / 0.5 Hrs. (built on or after 7/1/21) 2020-2021 CX-30 / 0.5 Hrs. (built before 7/1/21) 2021-2024 CX-30 / 0.6 Hrs. (built on or after 7/1/21) MX-30 / 0.5 Hrs CX-5 / 0.6 Hrs. CX-9 / 0.7 Hrs. MX-5 / 0.5 Hrs
	T0533XRX CX-90 / 0.5 Hrs. CX-70 / 0.5 Hrs.
Operation Number / Hours (For Reprogramming)	T0524XRT / 0.4 Hrs. (Max)

NOTE:

- All claims will pend for adjuster review.
- TCU replacement with older software version and/or without proper troubleshooting documentation may result in a warranty claim debit.

11/15/2024 09:09 AM tlawrenc