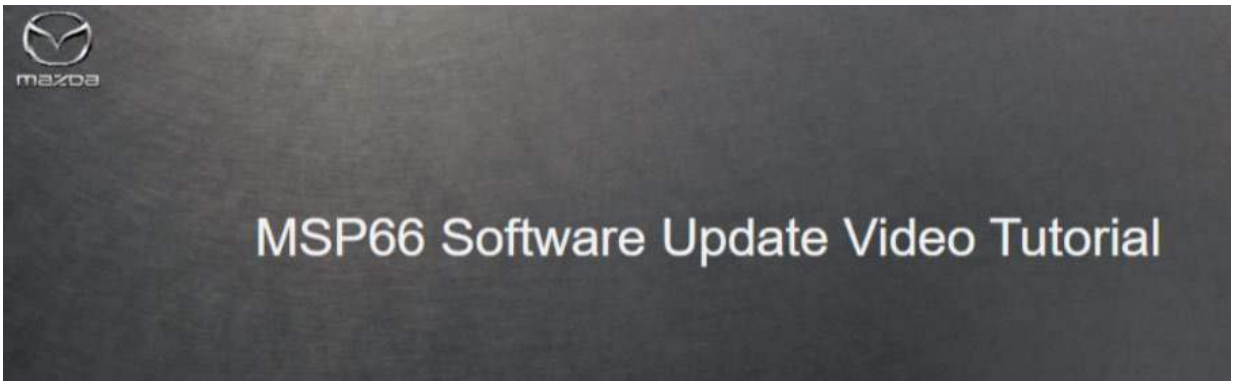
UPDATED JANUARY 23, 2026 – Added video tutorial for procedure. Modified to further highlight modules to be updated.



http://tsd.mazdausa.com/videos/MSP66%20Video%20Tutorial.mp4

The repair is a software update OR a check to make sure the software is at the current level with an ODR update.

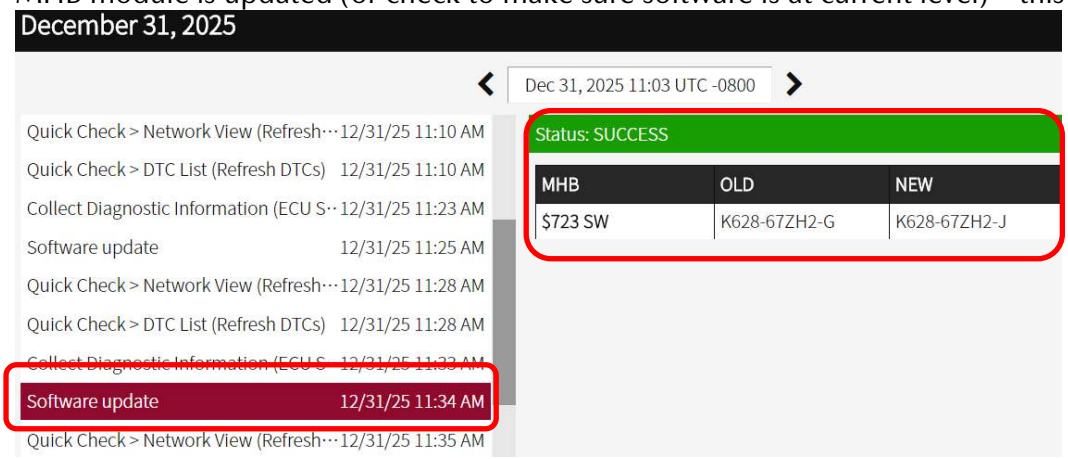
DO NOT STOP AT THE "SOFTWARE UPDATE SUMMARY" screen in MDARS. You must continue to finish all steps in the entire procedure. You must have a "Software Update" entry present in MDARS for both a MHB and PCM. If you don't, bring the vehicle back in immediately for repair.

Modules to be updated:

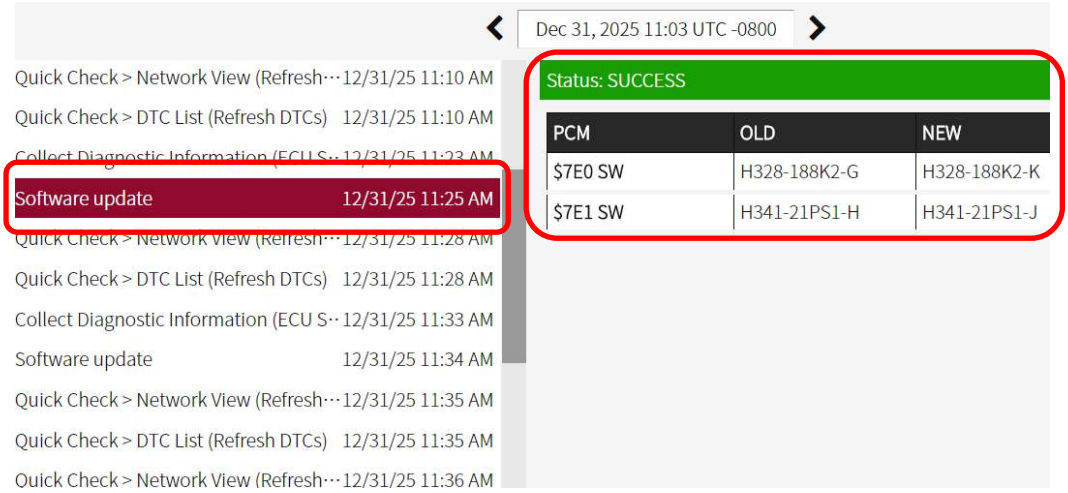
1. **The MHB Module**
2. **The PCM Module**

Optional for 2024-2025 vehicles is a TCM relearn. If a TCM relearn does not appear with the PCM update, do not perform a relearn. A TCM Relearn **is NOT** required for any 2026 model vehicles.

MHB module is updated (or check to make sure software is at current level) – this is only an example



PCM is updated (or check to make sure software is at current level) – this is only an example



Caution: MHB Battery replacement under Mazda Warranty

If the 48V Mild Hybrid Battery (MHB) needs replaced after MSP66 is completed. In this case, you must update the MHB module, even if the MSP66 repair was completed.

Click Here to go to the repair procedure

2024-2026 CX-90 and 2025-2026 CX-70
Engine Warning Light Illumination with DTC P0DAB

Table of Contents - Links in this document are provided for all steps below

Flowchart ..... **Section A**

Repair Procedure ..... **Section B**

Campaign Label Installation ..... **Section C**

Vehicle Inspection Procedure and Preparation for Repair

1. Verify that the vehicle is within the following ranges and there is an OPEN MSP66 campaign in eMDCS:

SUBJECT VEHICLES

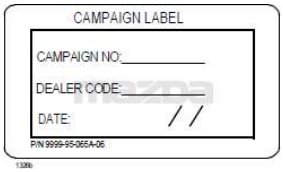
Model	Subject VIN range	Subject production date range
2024-2026 MY CX-90 H3T M Hybrid Boost	JM3KK**** R1 100044 - 189861 JM3KK**** S1 189862 - 261073 JM3KK**** T1 350010 - 367752	From December 27, 2022 through November 17, 2025
2025-2026 MY CX-70 H3T M Hybrid Boost	JM3KJ**** S1 100014 - 134448 JM3KJ**** T1 200004 - 202573	From December 5, 2023 through November 17, 2025

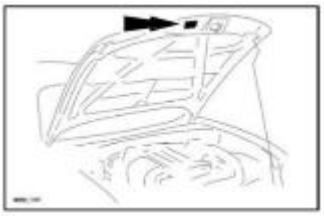
The asterisk symbol "*" can be any letter or number.

2. If the vehicle is in the range above and MSP66 is in OPEN status in eMDCS, proceed to Step 2. If the vehicle does not have an OPEN MSP66 status, return the vehicle to the customer or inventory.

3. Perform an eMDCS Warranty Vehicle Inquiry and inspect the vehicle for a Campaign Label with MSP66 attached to the vehicle's hood, driver door or firewall.

NOTE: Always be sure to verify the campaign number as the vehicle may have multiple campaign labels on the hood, radiator support, and firewall or driver door jamb.





eMDCS - Warranty Vehicle Inquiry Results

If eMDCS displays:	Campaign Label is:	Action to perform:
If no repair date is displayed on the line with CAMPAIGN MSP66, the campaign has not been completed on this vehicle	Present	Fill out Dealer Recall Help on OneMazda contact or the Mazda Warranty Department at warrantydept@mazdausa.com to review vehicle history.
	Not present	Proceed to "REPAIR PROCEDURE".

If repair date is displayed for CAMPAIGN MSP66, is "CLOSED"	Present	Return vehicle to inventory or customer.
	Not present	Complete a label and apply to vehicle's hood with repair date and dealer code from eMDCS Warranty Inquiry.
CAMPAIGN MSP66 is not displayed	See Action	**The vehicle is not affected by the MSP**

TECHNICIAN LEVEL REQUIRED: CERTIFIED OR ABOVE (DOES NOT HAVE TO BE HYBRID CERTIFIED). Note: Technician repairing needs to be Certified or above and does not need to be Senior or Master as long as they have had the required training for ODR – Collection of Diagnostic Information.

UPDATED: CAUTION PLEASE READ: If the vehicle arrives to your dealership with DTC P0DAB, CLEAR THE CODE AND SEE IF IT RETURNS RIGHT AWAY. IF THE CODE CLEARS PERFORM THE MSP66 REPROGRAMMING.

With the DTC P0DAB present, the code must be cleared first and confirmed no codes in the system, then perform the software update. Perform a test drive and release the vehicle if the code has not returned. If the code returns, please read the dealer email section "Alternate Transportation Information" (inserted below) as the customer can continue to drive the vehicle while the battery is on order. The warranty claim on the battery must be submitted separately under normal warranty rather than the MSP.

Always check for an aftermarket device connected to the DLC port and remove before proceeding with connection.

Alternative Transportation Information: Please refer to the parts and warranty information. For vehicles experiencing MHEV battery failure associated with DTC P0DAB, dealers are encouraged to explain to their customers to drive their vehicle while waiting for the replacement battery to arrive. Please explain to the customer the following functions maybe limited but does not affect the overall functionality of the vehicle, and it is still safe to drive.

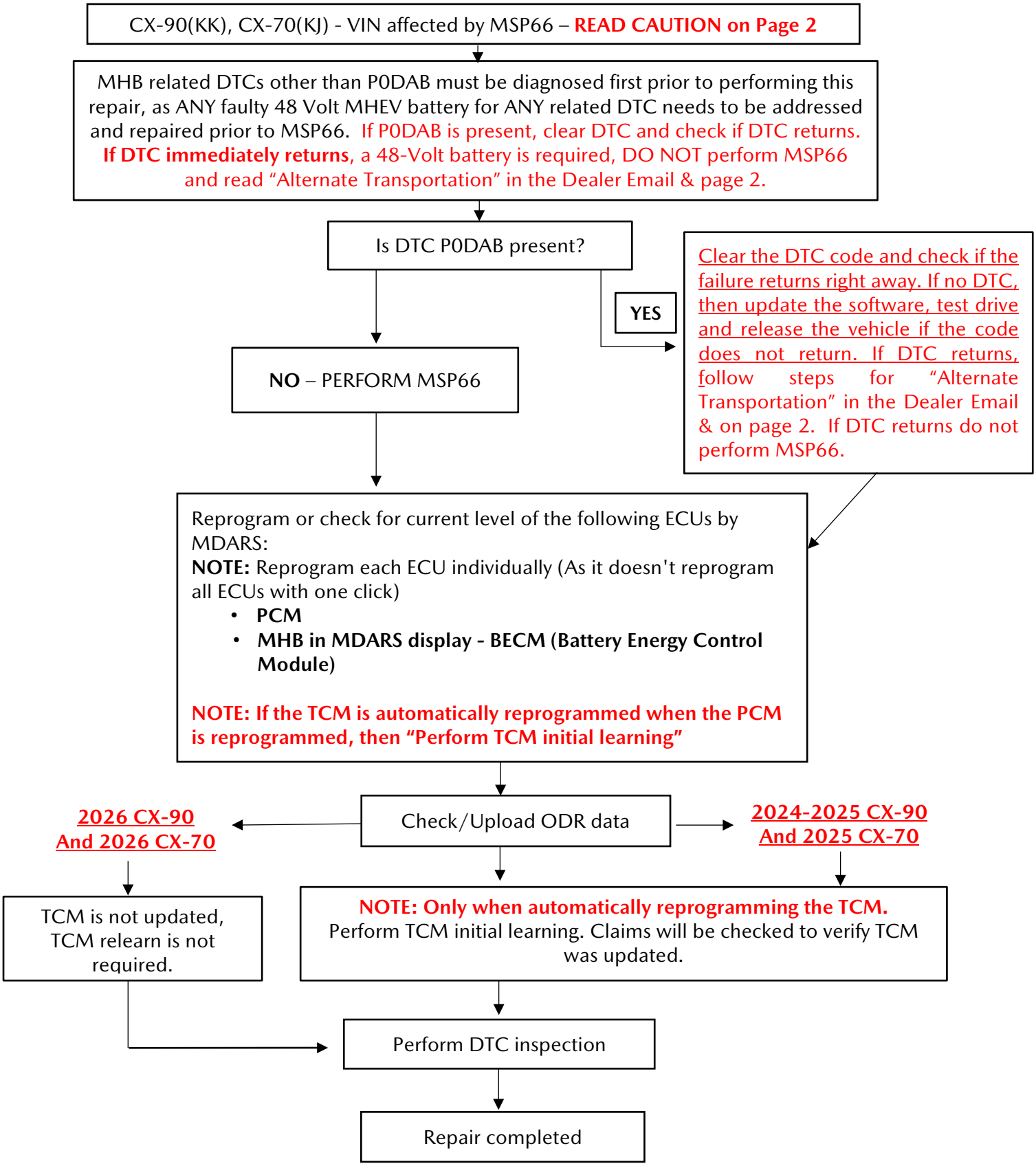
- The engine warning light may illuminate
- The vehicle may be limited to engine-only operation due to fail-safe activation
  - EV assist, i-stop and regeneration functions may be disabled

If the customer is uncomfortable with driving their vehicle, then please place them in a MCVP or other form of alternative transportation.

Section A: Flow Chart:

NOTE: This Flow Chart needs to be followed strictly and the CAUTION from page 2 must be read before proceeding

PLEASE WATCH THIS VIDEO PRIOR TO REPAIR:
http://tsd.mazdausa.com/videos/MSP66%20Video%20Tutorial.mp4



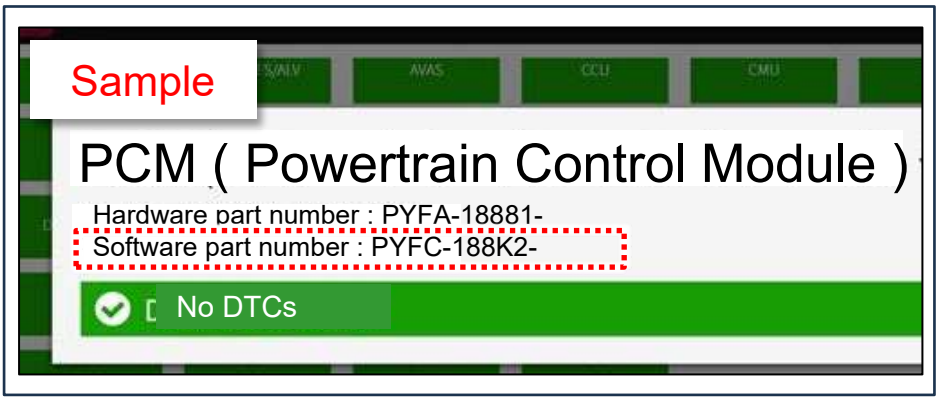
----------END OF SECTION A----------

Section B: Repair Procedure

Reprogram ECUs by MDARS and follow all steps as required.

https://s3.us-east-1.amazonaws.com/tsd.mazdausa.com/MDARS/MDARS_ECU_REPROGRAMMING_PROCEDURE.pdf

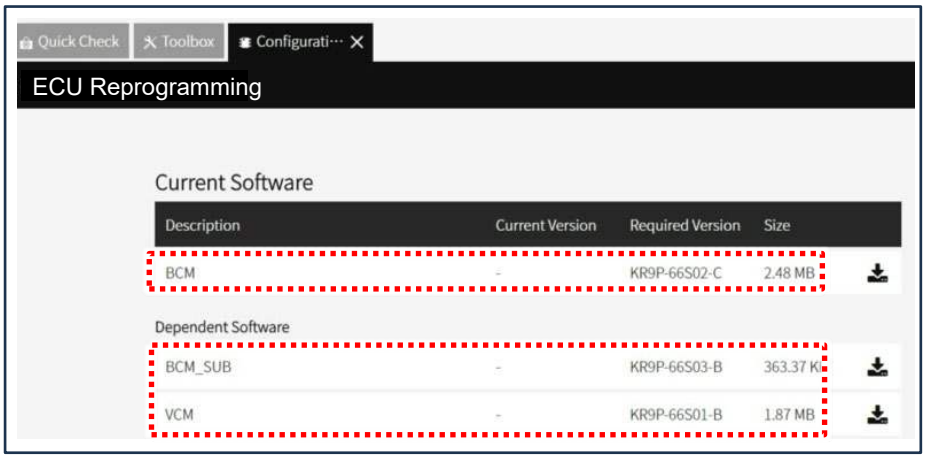
1. Check the file version of each ECU listed in the countermeasure repair procedure. Compare the software version of each ECU with the software version in the repair procedure.
   a. If the vehicle software version is newer, do not perform reprogramming.
   b. If the vehicle software version is older, perform reprogramming.



2. Select target ECU to be reprogrammed.
   - Required module
     - **PCM**
     - **MHB**

NOTE: One Package Reprogramming

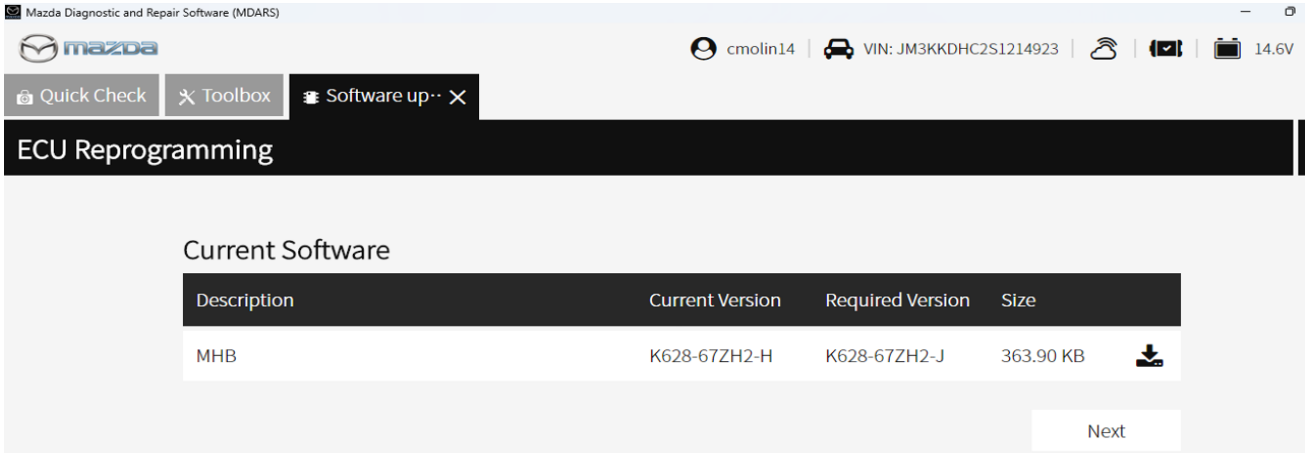
- MDARS automatically selects other ECUs related to the ECU to be reprogrammed. The selected ECUs may be reprogrammed together.
- Make sure that the ECU to be reprogrammed listed in the countermeasure repair procedure is displayed in MDARS.

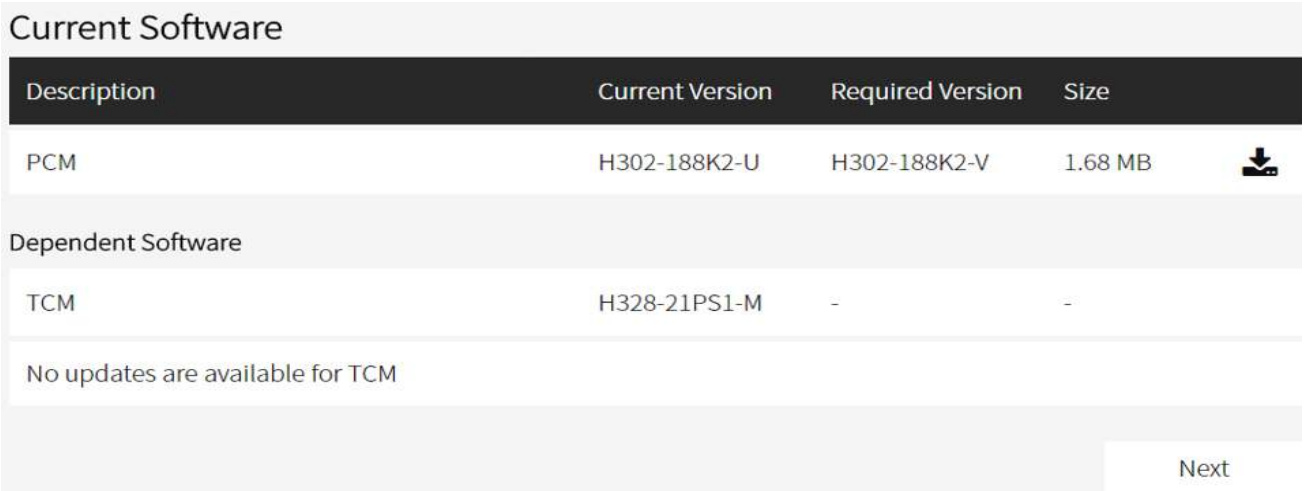


- If the ECU related to the one-pack reprogramming is not displayed in MDARS, reprogram the ECU that is displayed first.
- Check the software version of the ECU that has not been reprogrammed and reprogram that ECU if it is an older version.
- Depending on the TCM software version, TCM reprogramming may not be necessary.

NOTE: If the target ECU is not found, return to the Quick Check screen and click the refresh button. If the target ECU is not displayed in the Quick Check screen, start a new MDARS session, and try again.

3. Confirm the current and new software versions, click "Next". CX-90 Example shown. If the software is at the current level, do not stop repairing and continue with all remaining steps including Uploading ODR data and Campaign Label Installation.

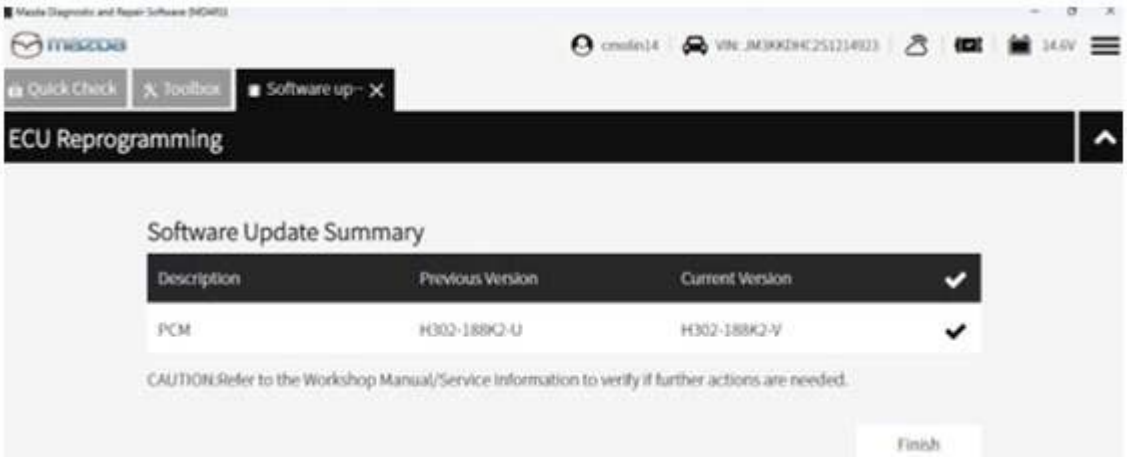




4. Wait for the download and click "Next".

5. After completion of software update, the previous and current software version are shown.
   - Check current version at ''Calibration File information below''.
   - Then, click on "Finish" to exit the ECU reprogramming.

CX-90 Example



Calibration file information

Note: If the calibration file is with the suffix in the table or later, unit is already modified. TCM Relearn is not required for 2026MY vehicles

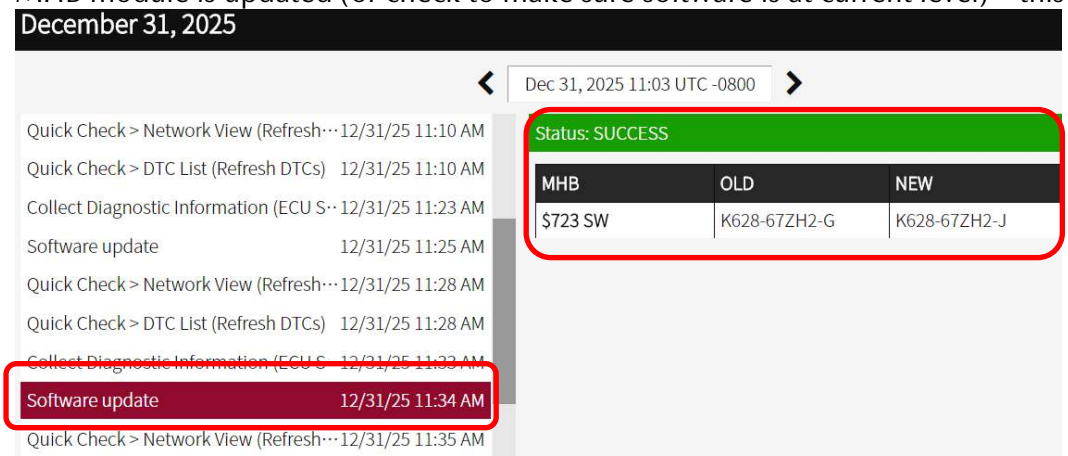
Calibration file information				
Model	Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.)
CX-90	MHB	K628-67ZBZ-	K628-67ZH2-J	3
		K629-67ZBZ-		
	PCM	H301-18881-	H333-188K2-D	3
		H301-18881-	H334-188K2-D	
		H301-18881-	H301-188K2-V	3 (Without TCM) or 8 (With TCM)
		H301-18881-	H302-188K2-V	
CX-70	MHB	K628-67ZBZ-	K628-67ZH2-J	3
		K629-67ZBZ-		
	PCM	H301-18881-	H335-188K2-C	3
		H301-18881-	H336-188K2-C	
		H301-18881-	H327-188K2-K	3 (Without TCM) or 8 (With TCM)
		H301-18881-	H328-188K2-K	

(Repair procedure is continued on next page)

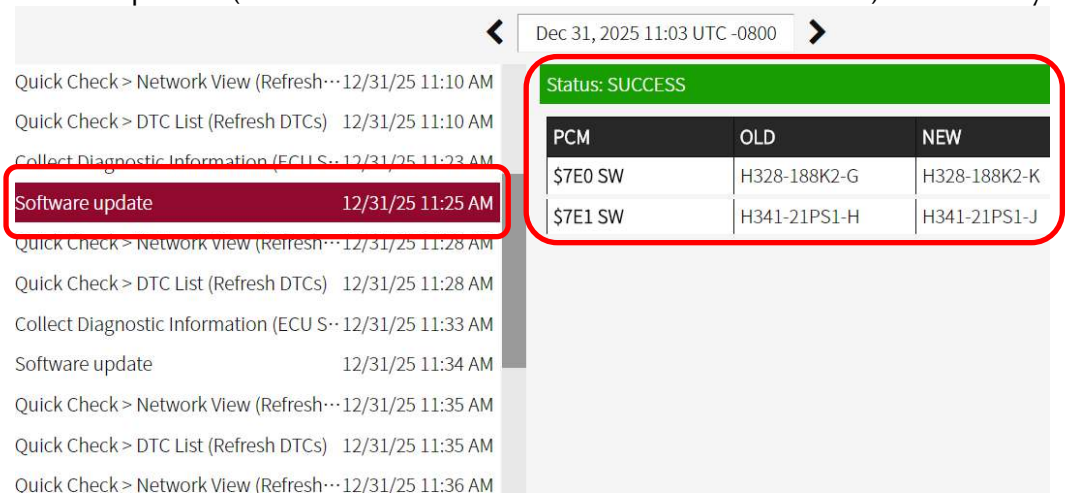
6. **Check to make sure MHB and PCM modules were updated OR at the current level. There must be a "Software Update" entry in MDARS for each module.**

If you <u>do not</u> have an entry for MHB and PCM, go back to step 1 of the repair.

MHB module is updated (or check to make sure software is at current level) – this is only an example



PCM is updated (or check to make sure software is at current level) – this is only an example



Upload ODR Data - Go to Mandatory Post-Reprogramming Section Step 7 and later.

7. Disconnect battery charger before going to next step.

TCM Initial Learning after TCM reprogramming (if TCM does not appear in MDARS it does not need updated and re-learn not required but continue with all repair steps. TCM Relearn is not required for 2026MY vehicles)

TCM Initial learning
CAUTION: If the VIN is affected by other campaigns besides MSP66 which also require 'TCM Initial Learning after TCM reprogramming', please only perform this MSP once all other campaigns have been completed (ECU software reprogramming for other campaigns has been completed).

DTC inspection – Go to Mandatory Post-Reprogramming Section in link

Note: On the test vehicle Hybrid System Malfunction appeared on screen

without DTC. Cycled key and message disappeared

1. Check and erase DTC by using MDARS.
2. Confirm all DTCs were erased.

   NOTE:
   If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate troubleshooting section of the Workshop Manual.

3. Disconnect the MDARS from the DLC-2.

Explanation to customers as provided in the repair link

----------END OF SECTION B, PROCEED TO SECTION C.----------

C. Check for CV Notification Message in Vehicle (the message states Special Service Program, but that is used in this case for MSP66).

NOTE: Not all customers will have this notice. If the message is not in the vehicle, please proceed to Section D. – Campaign Label Installation.

Step 1: Verify the message is in the View Status Monitor in Mazda Connect Inbox. Once at the main screen, select "View" then you will see photo 2.

Photo 1

Photo 2

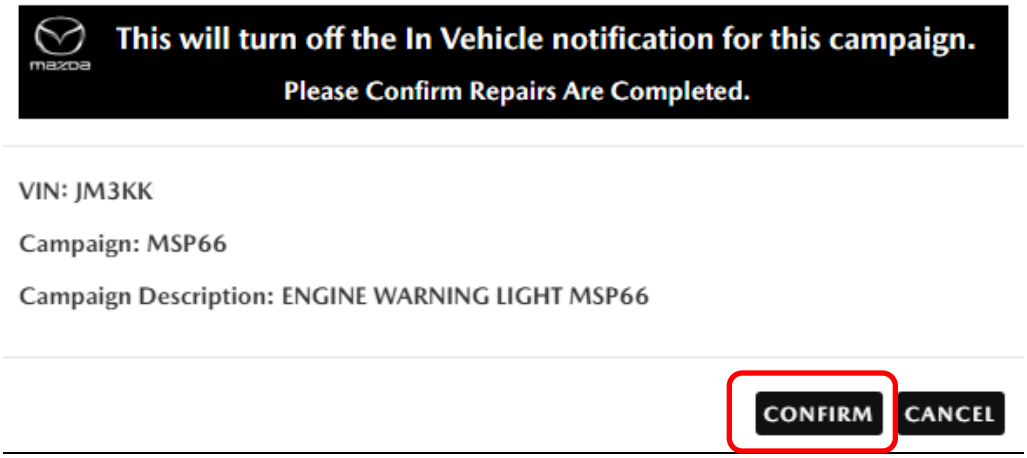
Step 2: After repair has completed, go to eMDCS Warranty Vehicle Inquiry. Go to the Recalls/Campaign Section

Step 3: Click the "Request" button under TURN OFF CV NOTIFY

CAMPAIGN	DESCRIPTION	START DATE	END DATE	STATUS	STATUS DATE	TURN OFF CV NOTIFY
MSP66	ENGINE WARNING LIGHT MSP66	12-12-2025		Open		REQUEST

Step 4: Click "CONFIRM" (Example below of a test vehicle) – *NOTE: TURNING OFF DOES NOT CLOSE THE CAMPAIGN, YOU MUST STILL SUBMIT A WARRANTY CLAIM.*

(last digits of VIN are masked here. The full VIN will appear in eMDCS)



Step 5: Make sure TURN OFF NOTIFY has today's date.

IMPORTANT – Once you see a date you selected Request OFF as below in the red square, exit eMDCS and let the customer know the CV message (Photo 1) will go away within 24 hours.

If the customer returns and the CV message does not turn off after Technician and Warranty Claim submission:

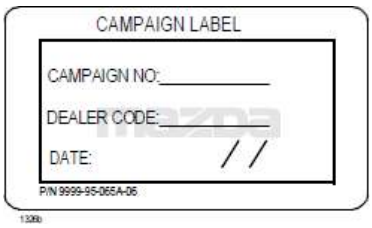
A. **Please have the technician verify steps 1 – 3 that the CV message still appears**
B. **If verified enrolled in CV, then contact technical hotline for next steps to remove the message.**

CAMPAIGN	DESCRIPTION	START DATE	END DATE	STATUS	STATUS DATE	TURN OFF CV NOTIFY
MSP66	ENGINE WARNING LIGHT MSP66	12-12-2025		Open		1-14-2026

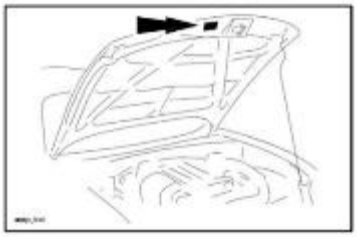
----------END OF SECTION C, PROCEED TO SECTION D.----------

D. Campaign Label Installation

1. Fill out a Black "Campaign Label" (9999-95-055A-06) with Campaign #: "MSP66", your dealer code, and the repair date. **It is OK to bundle multiple campaigns on one label as long as each campaign is legible as Mazda vehicles may have more than 1 campaign.** Use more than one label if necessary.



2. Affix it to the hood as shown. If you cannot place the label here, the radiator support, firewall or driver door jamb are acceptable locations:



END OF REPAIR PROCEDURE