

****** All Dealers: Please watch for continuous updates to this procedure ******

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**

WARNING FOR VEHICLES REPAIRED WITH PRIOR-RELEASED RECALL OR OTHER MAZDA CAMPAIGNS WITH ECU UPDATES:



- If not performed, please perform any prior released Recall or other campaign ECU reprogramming.
- If 7024J is unrepaired and not performed, 7325C will be completed by performing the 7024J repair. Please check the 7325C Warranty information for repair times with a repaired or unrepaired 7024J campaign.

PHEV - Vehicle Inspection Procedure and Preparation for Repair

1. Verify that the vehicle is within the following ranges and there is an Announced or OPEN 7325C campaign in eMDCS:

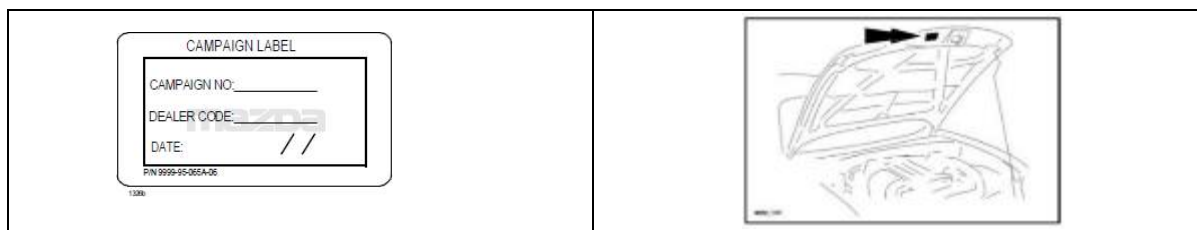
SUBJECT VEHICLES

Model	Subject VIN range	Subject production date range
2024-2025 CX-90 PHEV	JM3KK**** R1 100054 - 189844 JM3KK**** S1 189864 - 237374	From December 28, 2022 through March 14, 2025
2025 CX-70 PHEV	JM3KJ**** S1 100013 - 128359	From December 5, 2023 through March 14, 2025

*Only the vehicles in this range and with a "Announced" or "Open" status in eMDCS are affected. If the vehicle is in the range above and 7325C is either in OPEN or Announced status in eMDCS, proceed to Step 2. If the vehicle does not have an OPEN or Announced 7325C campaign, return the vehicle to the customer or inventory.

2. Perform an eMDCS Warranty Vehicle Inquiry and inspect the vehicle for a Campaign Label with **7325C** 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 7325C, 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 7325C, 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 7325C is not displayed	See Action	The vehicle is not affected by the Recall

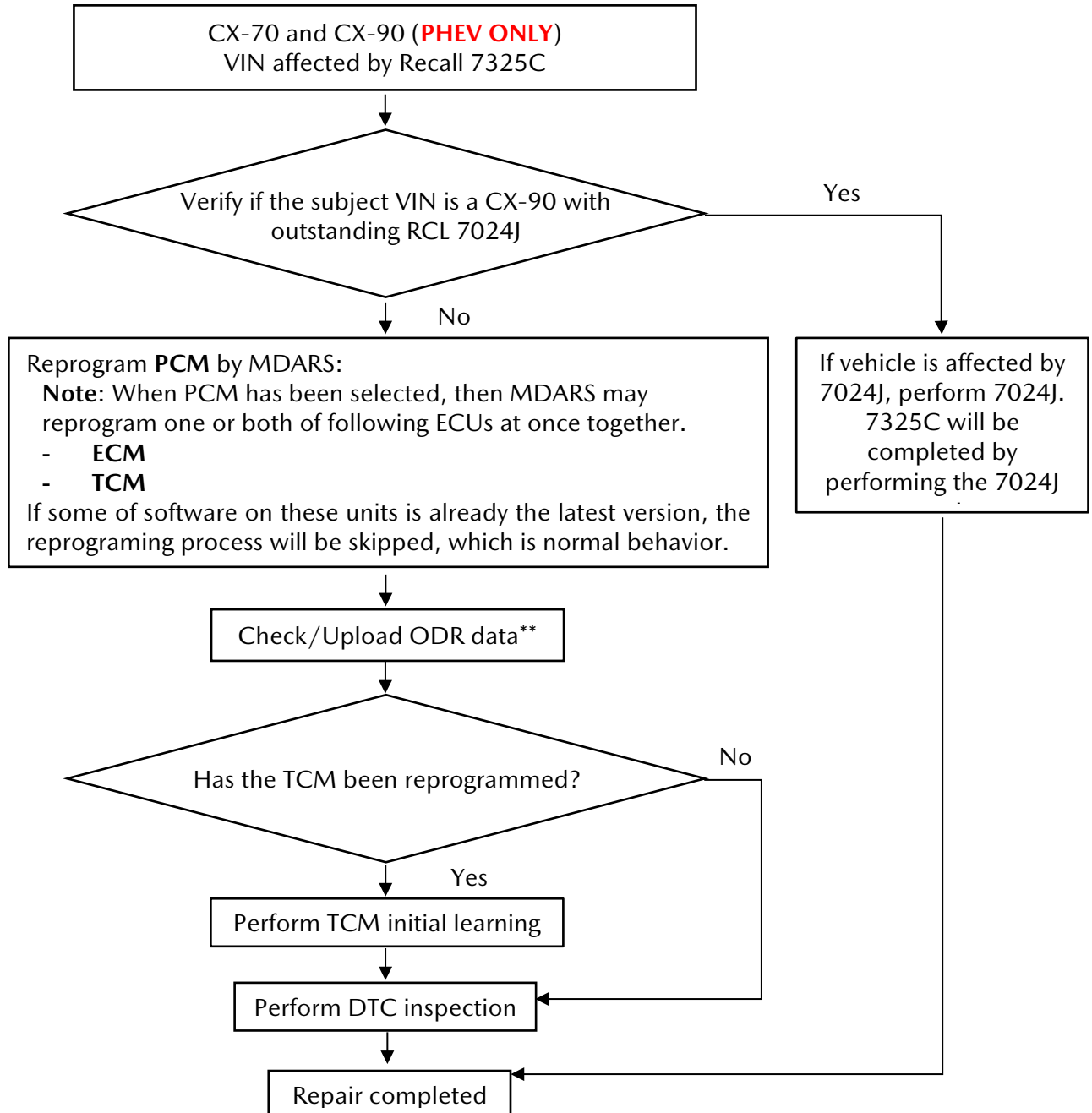
TECHNICIAN CERTIFICATION LEVEL REQUIRED: CERTIFIED OR ABOVE (DOES NOT HAVE TO BE HYBRID CERTIFIED).

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

Section A: Flow Chart – **PHEV vehicle ONLY**



NOTE: This Flow Chart needs to be followed strictly



****NOTE: All vehicles require the upload of ODR (Manual) after the technician has completed all software updates. If ODR is not uploaded successfully, or if one or more software updates are missed, the applicable campaign(s) will remain open, the warranty claim will not accept, and your dealer will have to contact the customer to bring back the car to correct the concern. You must do a ODR Update (Manual) even if the module software is up to date.**

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

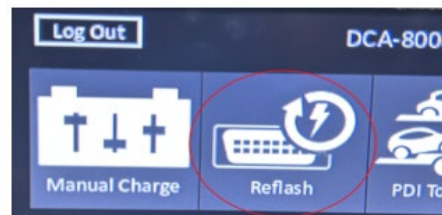
Section B: Repair Procedure Recall 7325C

Reprogram PCM by MDARS

- **Caution:** Please read before repair.

Service caution during reprogramming for ECU(s)

During reprogramming, connect battery charger to the vehicle to stabilize voltage fluctuation. If missing, it may cause damage to ECUs due to decreasing voltage. 7th generation vehicle will control to turn on headlight forcibly during reprogramming due to change CAN communication. **Please use the “Reflash” setting in the charger, which will keep the voltage stable. The setting voltage must be between 12 -13V.**



- PHEV VEHICLE NOTE:

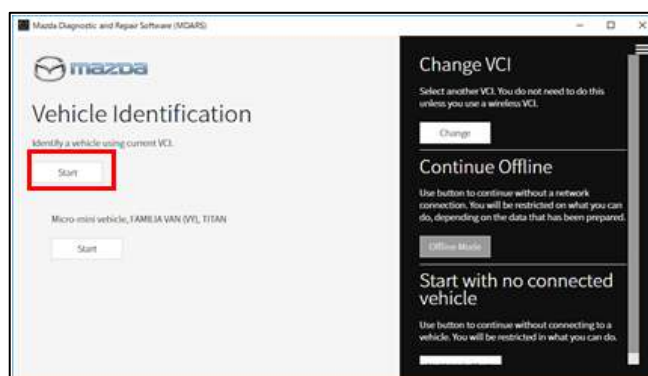
- Make sure that HV charging cable is not connected to HV battery charging port.
- Do not start the engine with connected 12V battery charger because the power supply from the DCDC converter and the power supply from 12V battery charger may interfere, which causes warning light to come up and DTCs to be stored.
- If any DTCs should remain after deleting DTC, diagnose the DTCs according to the appropriate Troubleshooting section of the Workshop Manual or follow TSB.

1. Vehicle Identification

Connect MDARS with the DLC cable and VCM- II to the vehicle, then set the ignition to the ON position.

CAUTION: Connect the DLC cable and the VCM- II to the vehicle with the ignition OFF. The CAN bus line might detect some noise and it might cause a diagnostic error when connecting the DLC cable with the ignition ON.

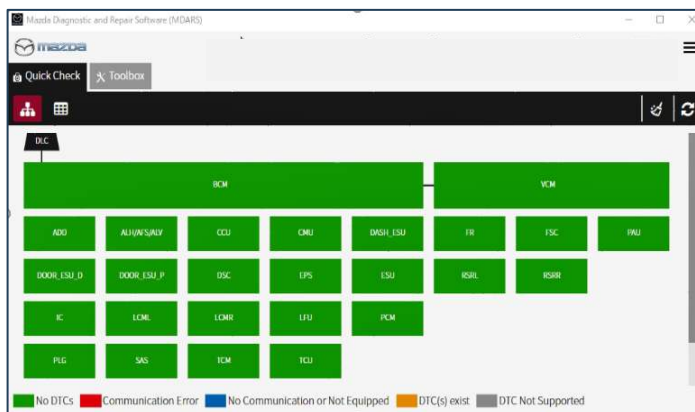
2. Click the “Start” button.



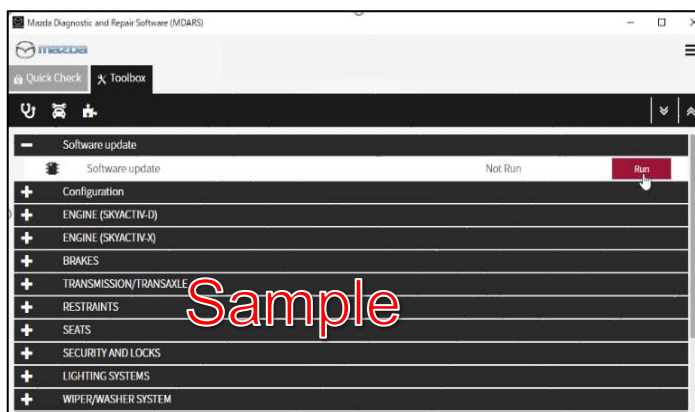
3. The Vehicle Identification process will start and automatically inspect every connection and then collect the vehicle information.



4. Verify the DTC according to the directions on the quick check screen. **If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.**



5. Reprogram ECUs as below.
 - At 'Software update' on 'Toolbox' tab, select 'Run'.



6. Select **PCM** on 'ECU Reprogramming' screen. Start Reprogramming.

IMPORTANT NOTE:

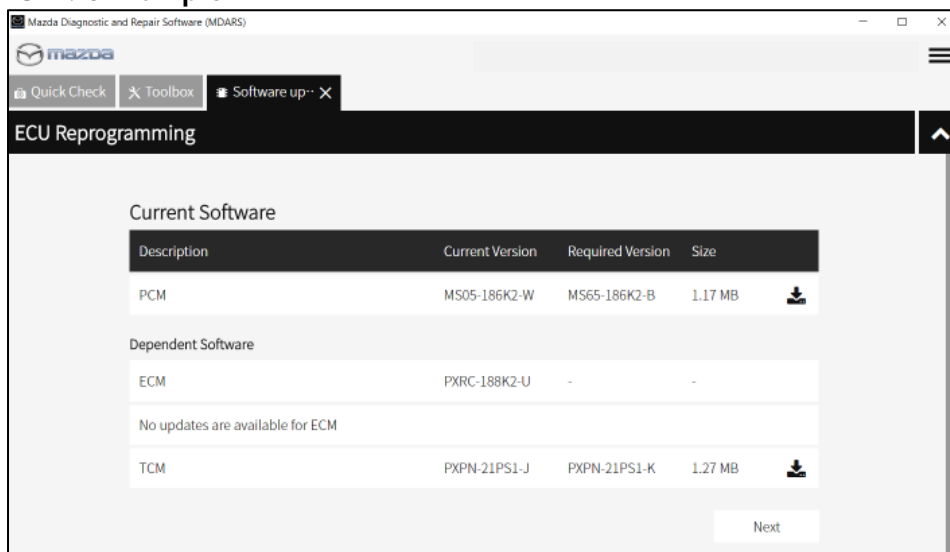
- If PCM has been selected, then MDARS may reprogram one/some of following ECUs at once together.
 - ECM
 - TCM
- If TCM is reprogrammed by PCM reprogramming, be sure to perform initial TCM learning after TCM reprogramming.

- If current calibration file name in the ECU FILENAME screen is the same as shown in Calibration Files Information or with a later suffix, reprogramming is not necessary.
- MDARS reads the current file name of the modules to be reprogrammed and then reprograms the required modules only. (MDARS does not reprogram modules that are not needed)

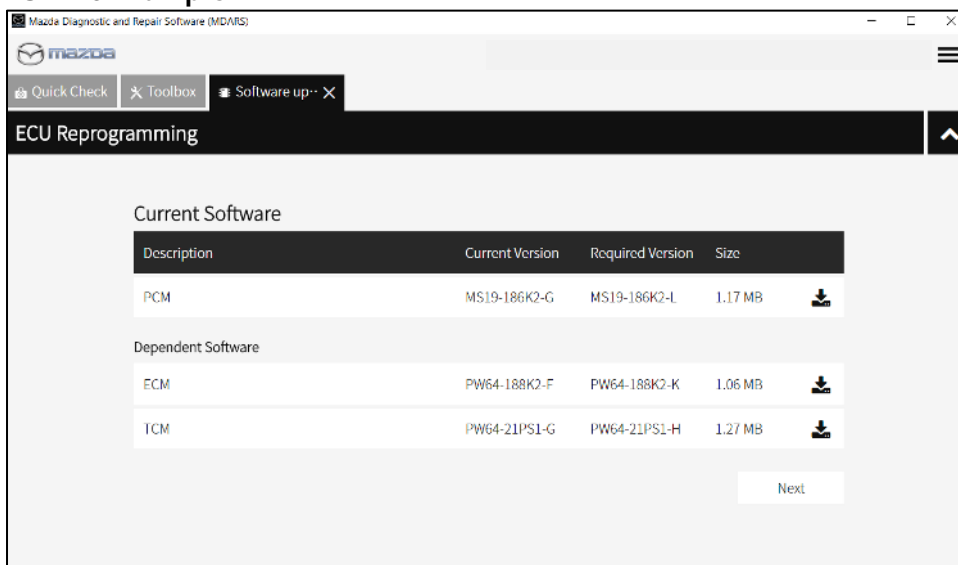
CAUTION:

- Please be careful about the behaviour of MDARS when reprogramming an ECU. Depending on the reprogramming ECU, IG-ON and IG-OFF may be repeated several times due to MDARS. This operation is normal operation.
- If module is up to date or current version, proceed to ODR Update.

CX-90 Example



CX-70 Example



EMISSIONS RECALL 7325C
PHEV VEHICLE REPAIR PROCEDURE

Mazda Diagnostic and Repair Software (MDARS)

Quick Check

Toolbox

Software up...

ECU Reprogramming

Be sure to check the following and perform the software update with MDARS.

☒

 Have you checked the Dealer letter or Technical Service Bulletin?

☒

 Do you understand the work involved?

Next

CX-90 Example

Mazda Diagnostic and Repair Software (MDARS)

Quick Check

Toolbox

Software up...

ECU Reprogramming

Downloading Vehicle Flash Files

Complete

Downloading TCM PXP1-21PS1-K

Complete

Downloading PCM MS65-186K2-B

Complete

Next

CX-70 Example

Mazda Diagnostic and Repair Software (MDARS)

Quick Check

Toolbox

Software up...

ECU Reprogramming

Current Software

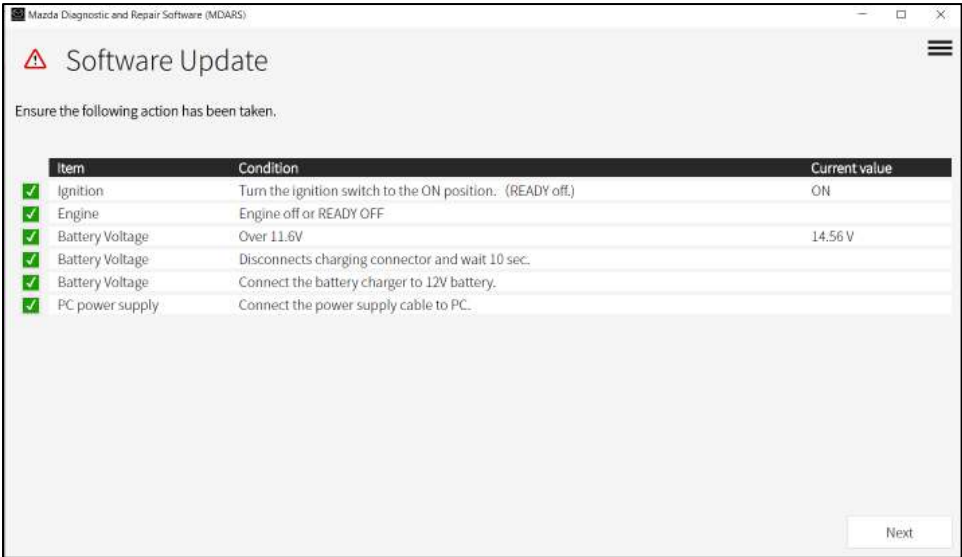
Description	Current Version	Required Version	Size	
PCM	MS19-186K2-G	MS19-186K2-L	1.17 MB	

Dependent Software

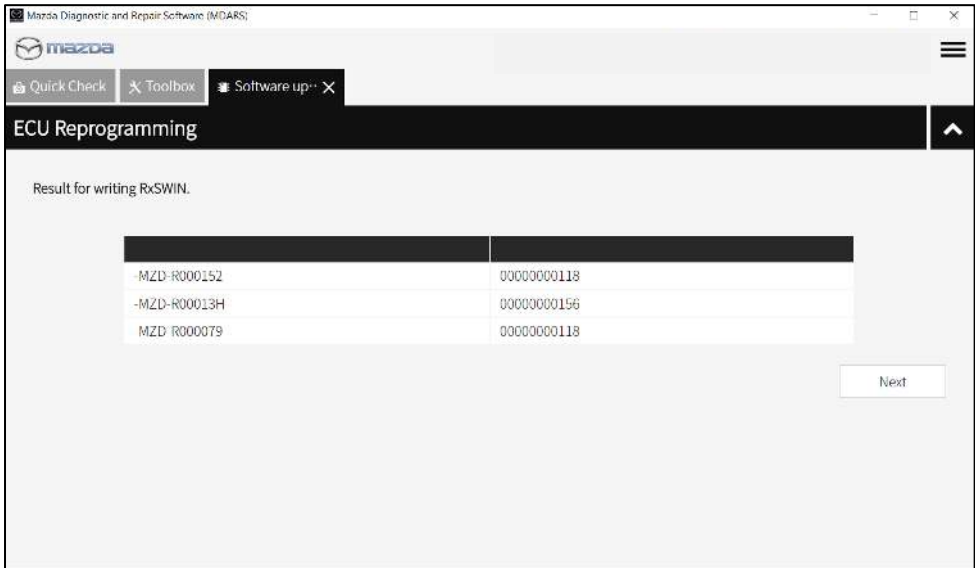
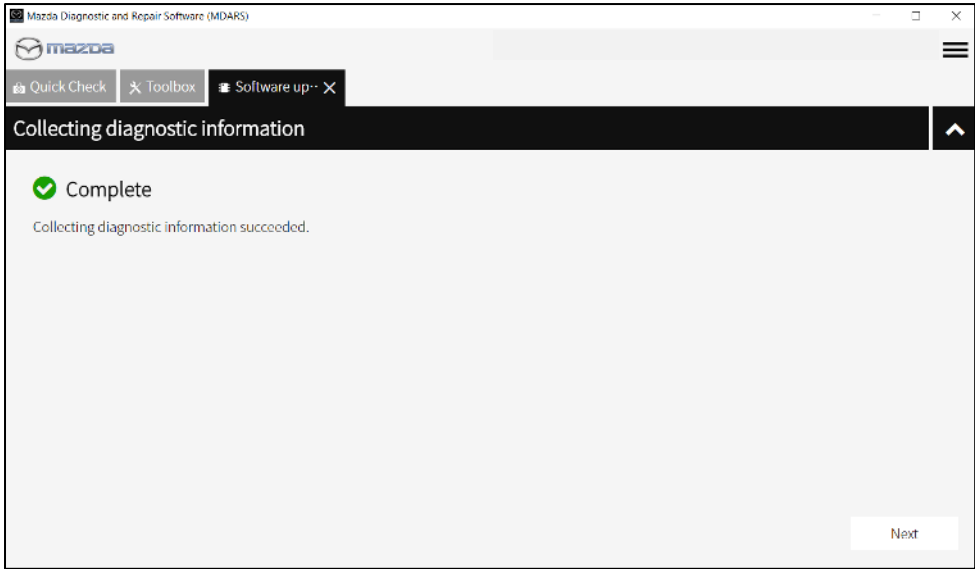
ECM	PW64-188K2-F	PW64-188K2-K	1.06 MB	
TCM	PW64-21PS1-G	PW64-21PS1-H	1.27 MB	

Next

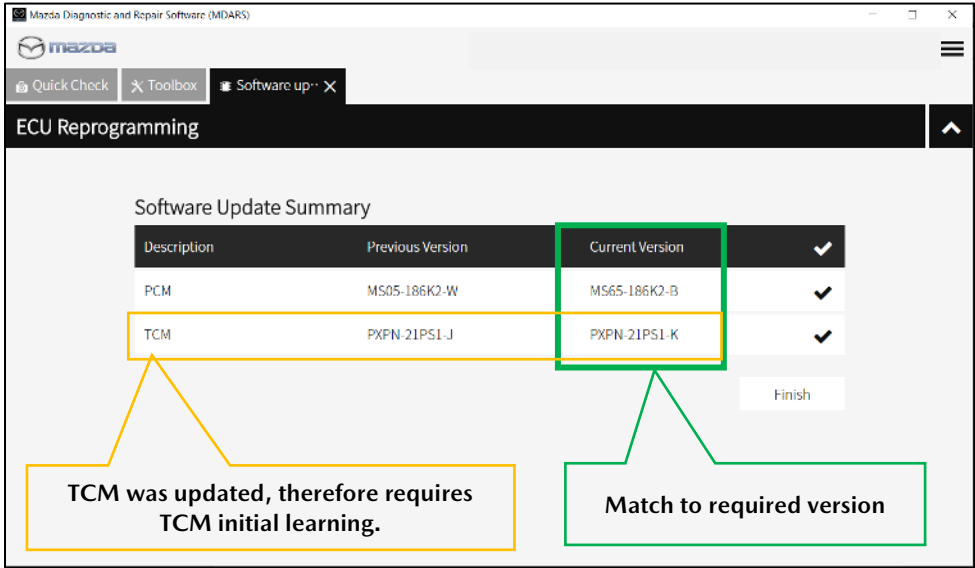
EMISSIONS RECALL 7325C
PHEV VEHICLE REPAIR PROCEDURE



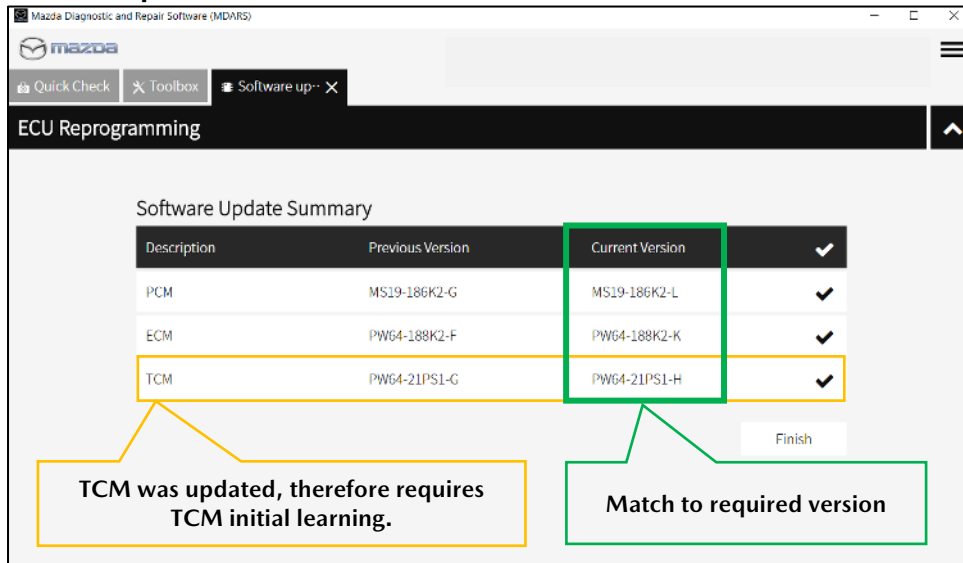
EMISSIONS RECALL 7325C
PHEV VEHICLE REPAIR PROCEDURE



CX-90 Example



CX-70 Example



Calibration file information

Note:

- If the calibration file is with the suffix in the table or later, unit is already modified.
- Depending on the vehicle production date, and repair history in the market, the TCM software may be updated by performing PCM reprogramming, which is normal behavior. If the TCM is updated, TCM initial learning TCM learning needs to be performed.

Model	Module	Target ECU Hardware #	NEW Target Software file # (Software Spec.)	Reprogramming Time (min.)	Module to be reprogrammed automatically.
CX-70 (PHEV)	PCM	MS01-186B1-	MS18-186K2-L (Without 1500W PSU)	8	ECM
			MS19-186K2-L (with 1500W PSU)		
	ECM	PXGH-18881-	PW64-188K2-K	3	PCM
CX-90 (PHEV)	PCM	MS01-186B1-	MS65-186K2-B (Without 1500W PSU)	8	-
			MS66-186K2-B (with 1500W PSU)		

Check/Upload ODR Data



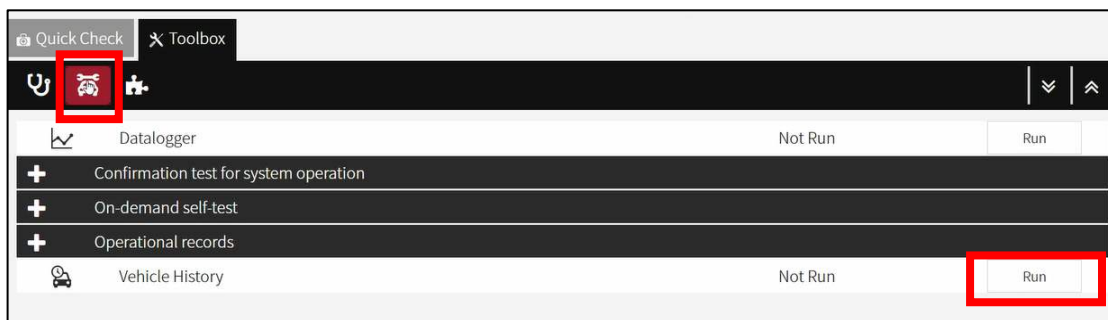
WARNING!

IF THIS PROCESS HAS BEEN SKIPPED, IT MAY RESULT IN CLAIM DENIAL. CAMPAIGN REMAINING IN OPEN STATUS AND VEHICLE HAVING TO COME BACK TO REDO THIS PROCESS.

IF MODULES ARE NOT UPDATED, THE WARRANTY CLAIM WILL NOT BE APPROVED EVEN FOLLOWING PROCEDURE WAS CORRECTLY PERFORMED. PLEASE MAKE SURE ALL MODULES ARE UPDATED.

Check ODR collection result after reprogramming all required modules with vehicle verification.

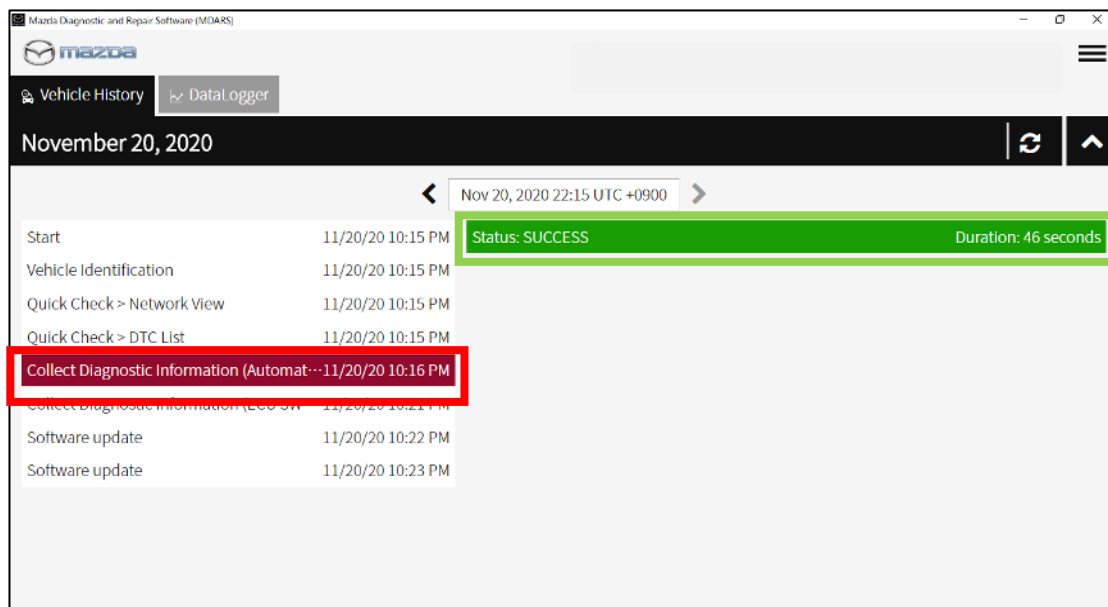
7. Open the vehicle history on toolbox tab.



8. Click the 'Collect Diagnostic Information' and the status has "SUCCESS" on green.

Note:

- Verify the "Collect Diagnostic Information" after all required modules are updated. Not necessary to confirm the 'Collect Diagnostic Information' after required module reprogram every time.
- Only the latest "Collect Diagnostic Information" is the valid one and that needs to show "SUCCESS"



※If the status is 'FAILURE', the ODR (latest vehicle information) has not been submitted to the server.

Status: FAILURE

Duration: 1 seconds

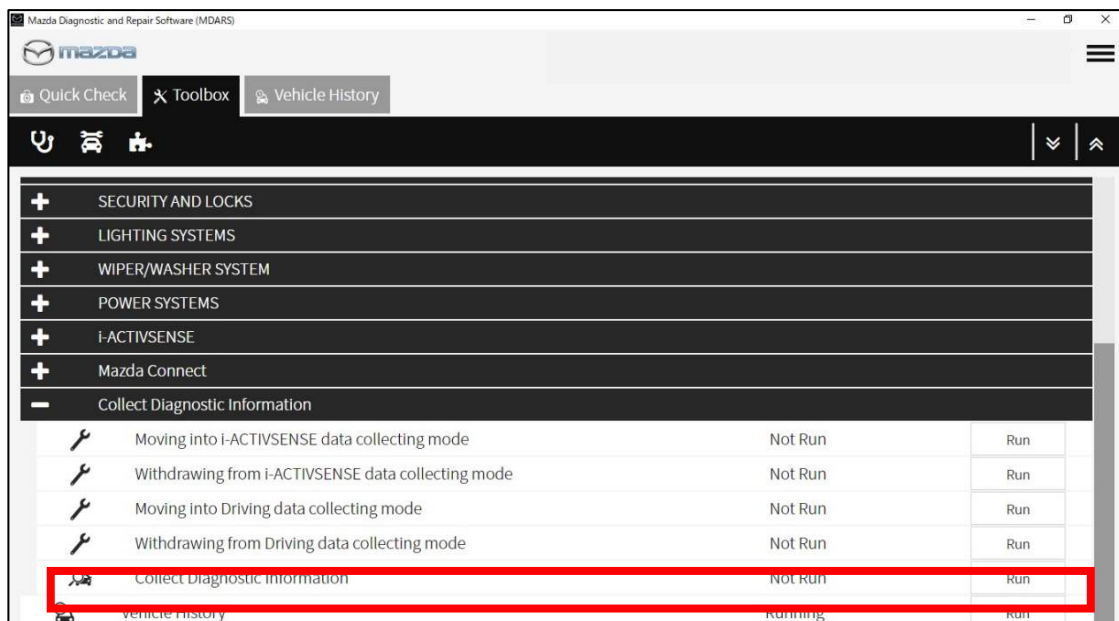
9. Confirm with Quick Check the PCM are highlighted in Green after updating the modules.

NOTE: If any DTCs exist in yellow follow the Workshop Manual or applicable TSB for the concern.

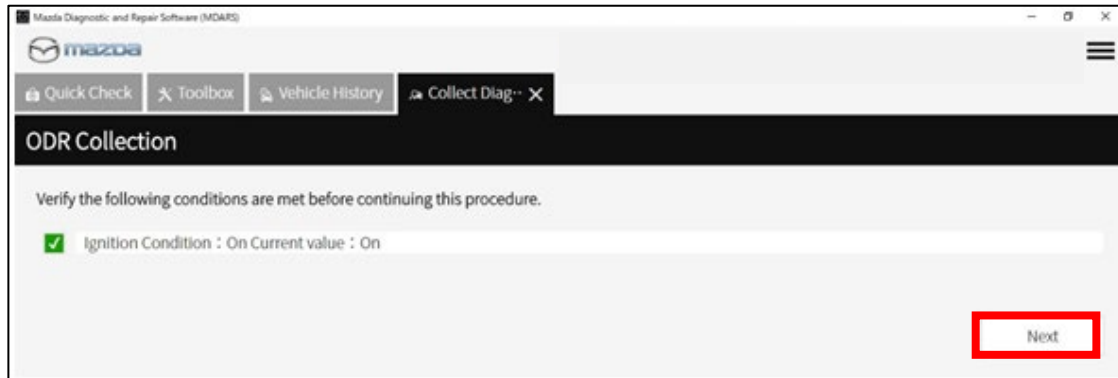


10. Perform following steps when status, as shown above, shows "FAILURE".

(1) At the toolbox tab, select "Collect Diagnostic information" then click 'Run'.



(2) Click 'Next'.



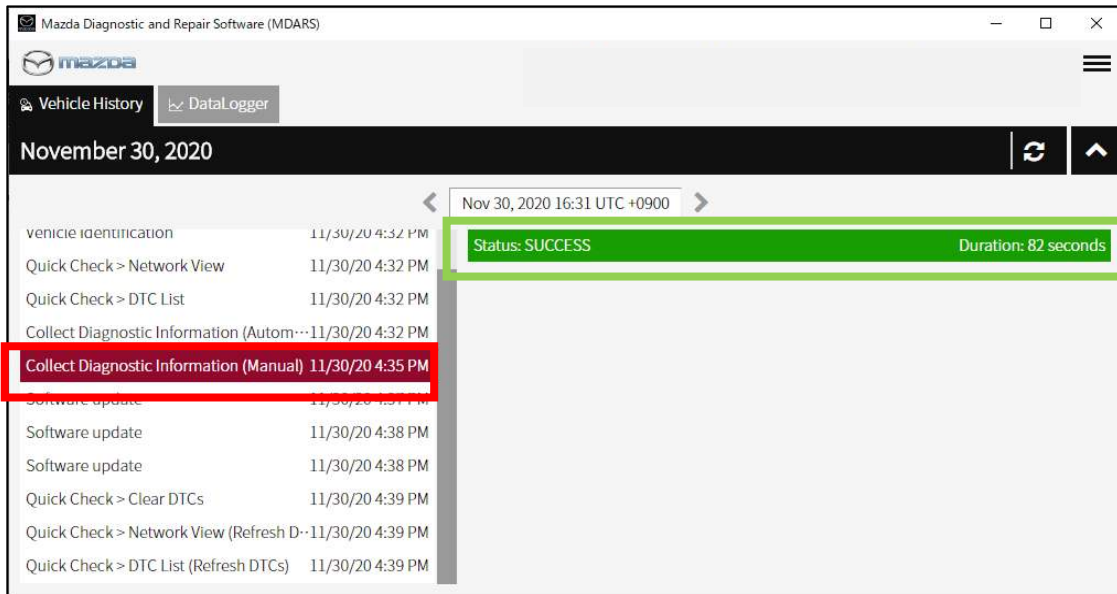
(3) It takes around 60 seconds.



(4) MDARS will collect ODR and send to the server.



- (5) Go back to step 8 and 9 to confirm the 'Collect Diagnostic Information (Manual)' status shows "SUCCESS" on green.



11. Disconnect battery charger before going to next step.

TCM Initial Learning after TCM reprogramming

CAUTION:

- If the VIN is affected by campaigns other than this Recall 7325C which also requires 'TCM Initial Learning after TCM reprogramming', please only perform it once when all concerned ECU software reprogramming has been completed.

Warning

- When performing the initial learning, apply the parking brake securely and block the front and rear wheels using wheel blocks so that the vehicle does not move. Otherwise, the vehicle may move which could lead to an accident because the gears are forcibly changed with the engine running and the shift lever in the drive position while in the initial learning.

Note:

- While the initial learning is being performed, the following phenomena may occur.
 - Shift shock occurs intermittently.
 - Indications such as selector lever positions differ from those displayed normally.

Preparation prior to beginning

12. Switch the ignition ON (engine on)/main power ON (READY on).
13. Apply the parking brake.
14. Shift the selector lever to P range and set the wheel blocks for both the front and rear wheels.
15. The ATF temperature is 45°C to 105°C as an execution condition for AT initial learning, but after learning starts, the ATF temperature may drop to 44°C and learning may be interrupted, so learning should be started after raising the temperature to 50°C or higher.

Initial learning procedure

16. Connect the M-MDS to the DLC-2 (if it was disconnected for any reason).
17. Open the engine hood. (To ensure that the engine starts. If engine hood is opened, EV mode does not work)
18. Switch the ignition ON (engine off)/main power ON (READY on).
19. Perform the following procedure using the M-MDS.
 - (1) Press [Start] for the vehicle identification.
 - (2) Press the [Toolbox] tab.
 - (3) Press the [Work Support] icon. 
 - (4) Press [TRANSMISSION/TRANSAXLE].
 - (5) Press [Run] for Initial learning of AT.
20. Perform the automatic transmission initial learning.
21. Using the M-MDS, verify that TCM DTC P06B8:00 has not been stored. (See DTC INSPECTION.)
 - If DTC P06B8:00 is displayed, switch the ignition off/main power OFF and repeat the procedure from Step 18.
 - If any other DTCs are displayed, repair or replace the malfunctioning location according to the applicable DTC troubleshooting of workshop manual.
22. Additionally, perform the following.

Shift range learning.

23. Start the engine.

24. Switch to 'Sport Mode'



25. While idling, depress the brake and perform the following steps.

- i) Move the shift lever in "D".
- ii) Move the shift lever from "D" to "R" and wait 5 seconds *
- iii) Move the shift lever from "R" to "D" and wait 5 seconds *
- * Do not stop in N range while moving the shift lever.
- iv) Repeat steps from i) to iii) 5 times.

Note:

- In addition to the above learning, TCM also performs learning while driving automatically.
- Immediately after reprogramming and initial learning, the above driving learning will be reset. Therefore, it is important to explain the following to customers.

Explanation to customers

- To improve shift feel, the vehicle learns the timing of engaging the clutch while driving.
- This reprogramming will improve the shift feel and optimize by learning.
- However, the learning values will be reset to the initial one.
- Once the learning values are initialized, a slight shift shock might be felt intermittently, however with learning by driving it will be improved, but it may take a few days.

DTC inspection

26. Check and erase DTC by using MDARS.
27. 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 or follow TSB.
- After the reprogramming, pending DTC P2610:00 [PCM] may be stored without MIL illumination. Since this DTC may turn to a current DTC depending on operations after the reprogramming, clear this DTC after all repair work is done.
- Perform the following engine start and stop procedure to clear DTC P2610:00:
 - i. Start the engine (5 seconds).
 - ii. Stop the engine.
 - iii. Clear the DTC recorded in the memory by MDARS.
 - iv. Perform the KOER self-test by MDARS.

28. Disconnect the MDARS from the DLC-2.

Explanation to customers

- Any ECU reprogramming resets the BCM's average fuel economy (remaining miles).
- Therefore, the remaining miles may change when customer drives after reprogramming. After learning the customer's average fuel consumption calculated over several drives, the remaining miles will be displayed correctly.

-----END OF SECTION B-----

C. Campaign Label Installation

1. Fill out a Black "Campaign Label" (9999-95-055A-06) with Campaign #: "7325C", 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.

CAMPAIGN LABEL

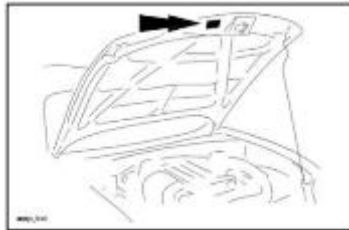
CAMPAIGN NO: _____

DEALER CODE: _____

DATE: / /

P/N 9999-95-055A-06

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 SECTION C-----

END OF REPAIR PROCEDURE