Safety Recall – 2024 CX-90 Pedestrian Alert System Warning Sound Error

A. VEHICLE INSPECTION PROCEDURE – AND PREPERATION FOR REPAIR

1. Verify that the vehicle is within the following ranges and there is a Not Launched or OPEN 6123H recall in eMDCS:

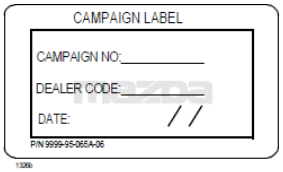
SUBJECT VEHICLES

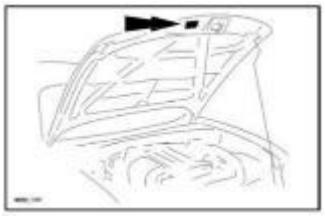
Model	Subject VIN range	Subject production date range
2024 CX-90	JM3 KK****R1 100045 – 120588	From December 27, 2022 through July 5, 2023

***Only the vehicles in this range and with a "Not Launched" or "Open" status in eMDCS are affected. All vehicles produced after July 5, 2023, are not affected. If the vehicle is in the range above and 6123H is OPEN or Not Launched in eMDCS, proceed to Step 2. If the vehicle does not have an OPEN or Not Launched 6123H campaign, return vehicle to the customer or inventory.**

2. Perform an eMDCS Warranty Vehicle Inquiry and inspect the vehicle for a Campaign Label with **6123H** attached to the vehicle's hood, driver door or firewall.

NOTE: Always sure to verify the campaign number as the vehicle may have multiple campaign labels on the hood, radiator support, 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 6123H, it 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 6123H 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 6123H is not displayed	See Action	**The vehicle is not affected by Recall 6123H**

GENERAL CAUTIONS/WARNINGS – PLEASE READ:

Air Bag Connectors and Battery Disconnect: Unless a battery connection or engine running is required, do not work on the vehicle without disconnecting the vehicle battery as this could result in damage to the vehicle or safety systems.

Customer Personal Items: If personal belongings need to be removed from vehicle interior trunk area or inside, please remember to neatly replace any customer items in the same location after the repair is completed. If items need to be removed, please kindly ask the customer to remove prior to beginning work on the vehicle.

Damage to interior or exterior: Care should be taken, and protective cover(s) used when working on any Mazda vehicle. Damage to any components, interior trim, vehicle accessories, body panels and paint will not be reimbursed by Mazda (including OEM or aftermarket).

All of these items above could delay repairs, compromise safety, as well as negatively affect the customer experience and Mazda dealer-customer relationship.

B. REPAIR PROCEDURE

This repair will reprogram or add and update the Approaching Vehicle Audible System Information Sound Box "AVAS ISB" amplifier software in the vehicle, by MDARS

CAUTION: THE INSTRUCTION BELOW MUST BE READ PRIOR TO BEGINNING REPAIR STEP #1

Service caution during reprogramming for ECU(s)

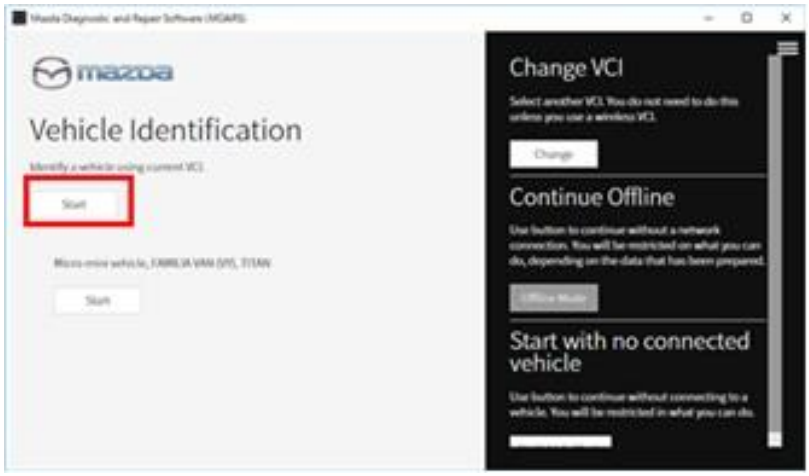
During reprogramming, connect 12V battery charger to the vehicle to stabilize voltage fluctuation. If missing, it may cause damage to ECUs due to decreasing voltage.

7th generation vehicle will control to turn on headlight forcibly during reprogramming due to change CAN communication.

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 may detect some noise which could cause a diagnostic error when connecting the DLC cable while the ignition is in the ON position.

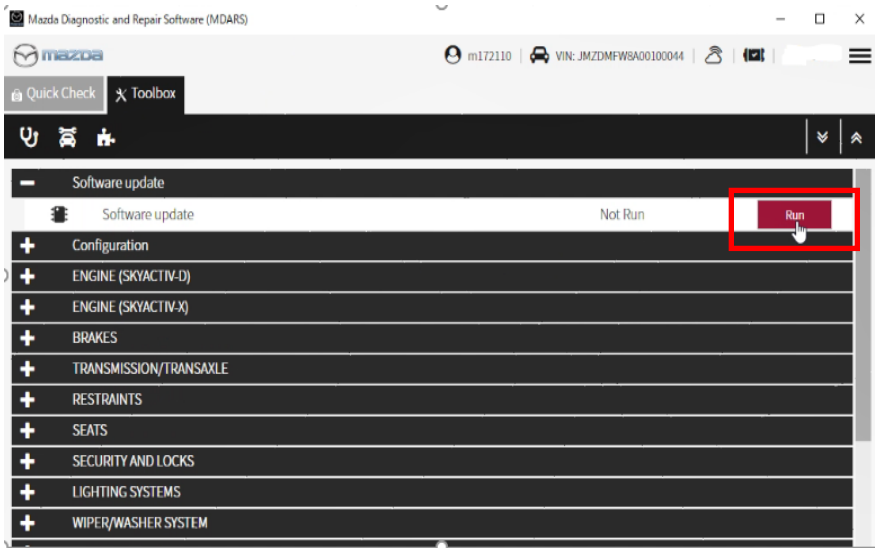
2. Click the "Start" button.



3. The Vehicle Identification process will start and automatically, checking for proper connections. If successful, then you can proceed to the next step.

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.

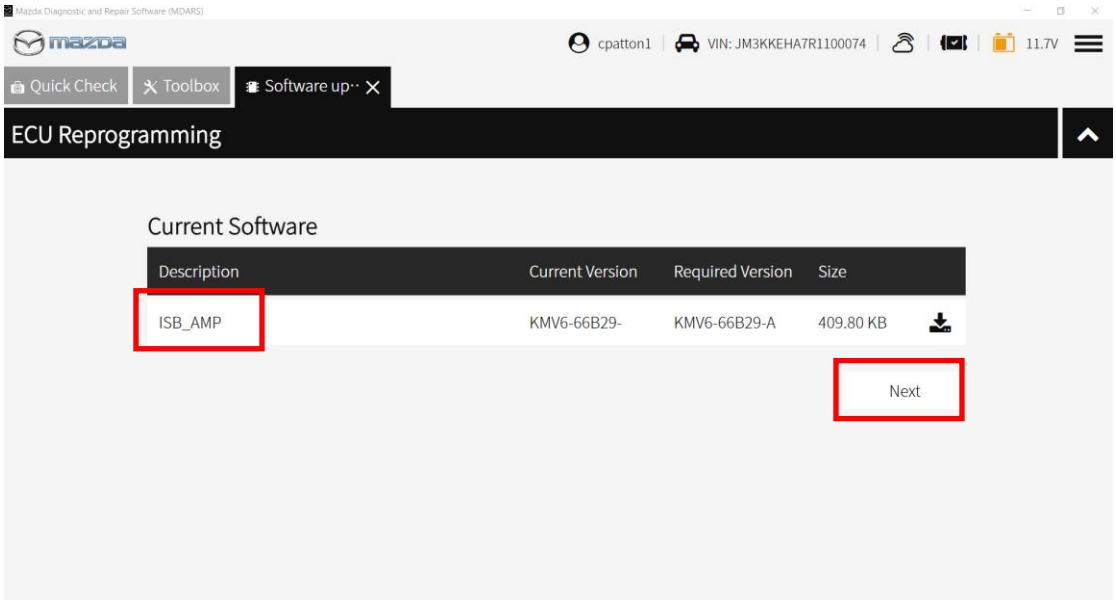
5. Reprogram the "AVAS ISB Amplifier" device as below. At the "Software update" screen on the "Toolbox" tab, select "Run".

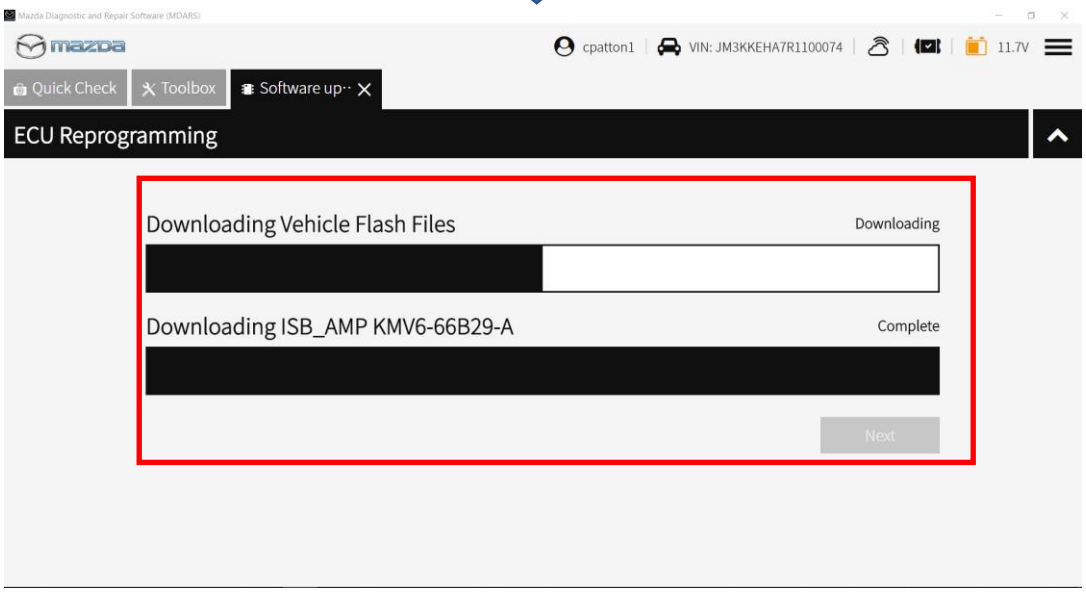


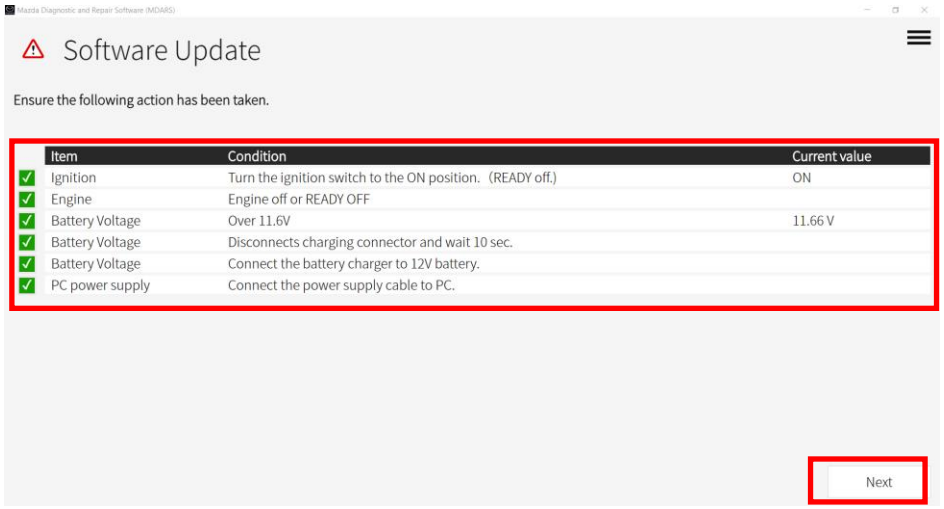
6. Select ISB_AMP on "ECU Reprogramming" screen. Start Reprogramming.

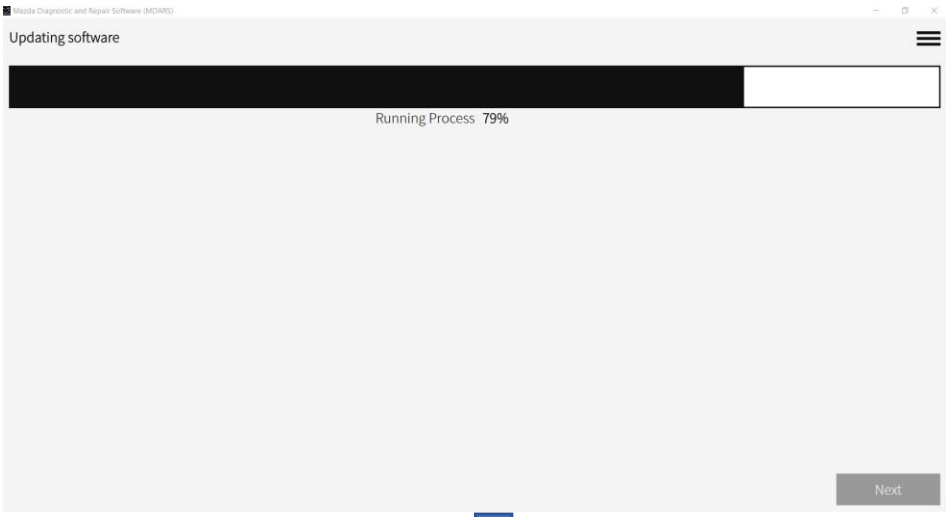
   NOTE: MDARS reads the current file name of the modules to be reprogrammed and then reprograms the required modules only. MDARS does not reprogram modules that are not needed.

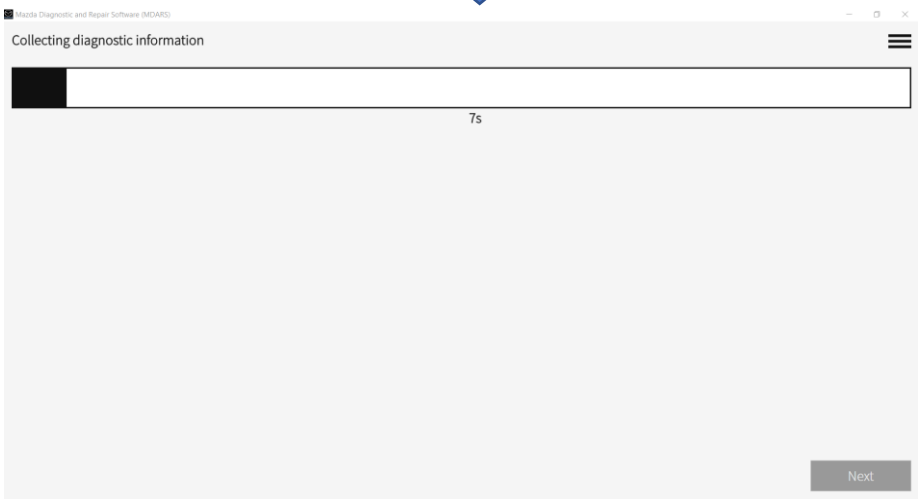
7. After completion of the software update, the previous and current software version are shown. Check **Current Version** at and **Required Version** below. Once you go through all steps, then click on "Finish" to exit the ECU reprogramming.

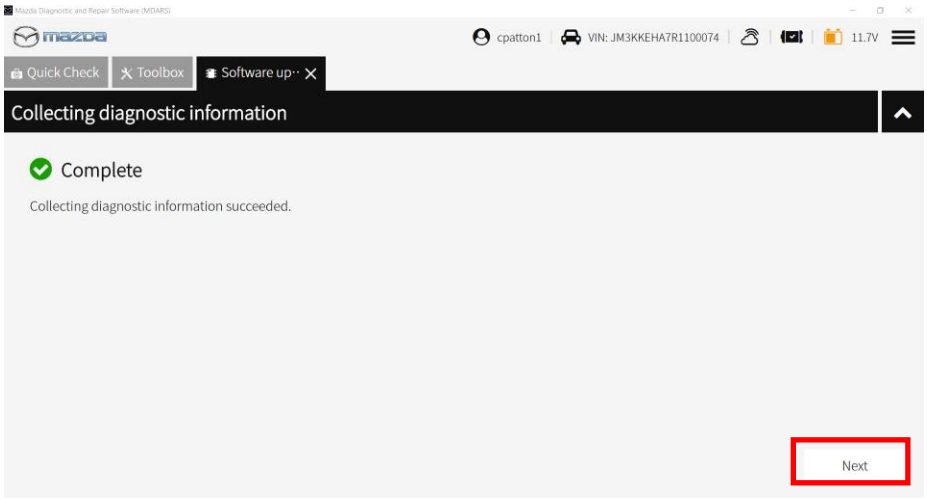


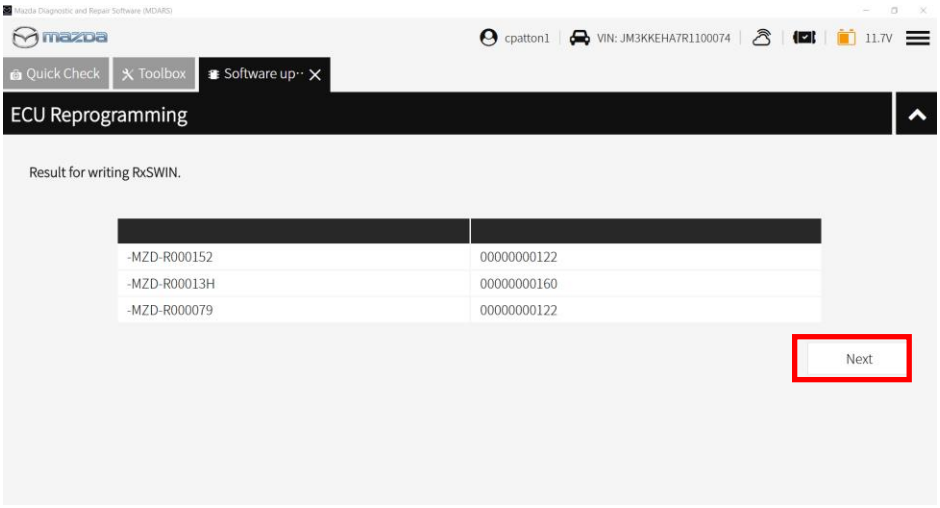


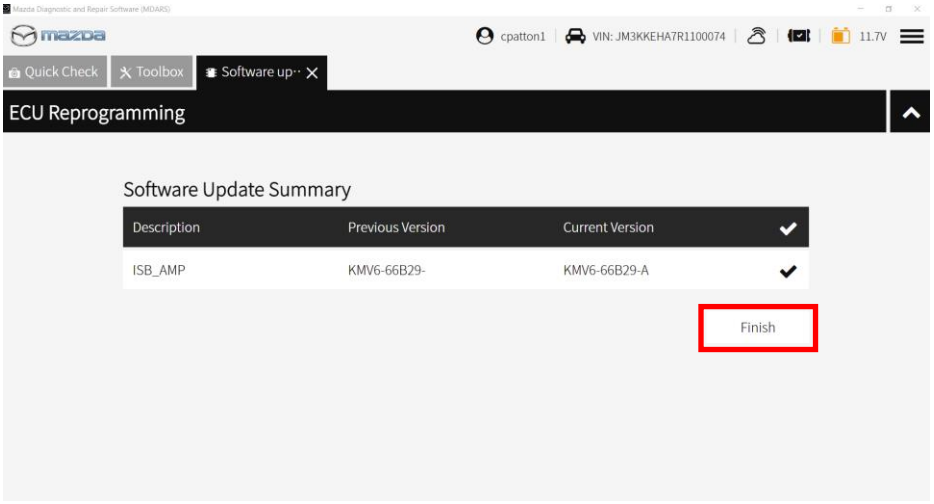

Mazda Diagnostic and Repair Software (MDARS)
Software Update
Ensure the following action has been taken.
Item
Condition
Current value
Ignition
Turn the ignition switch to the ON position. (READY off.)
ON
Engine
Engine off or READY OFF
Battery Voltage
Over 11.6V
11.66 V
Battery Voltage
Disconnects charging connector and wait 10 sec.
Battery Voltage
Connect the battery charger to 12V battery.
PC power supply
Connect the power supply cable to PC.
Next

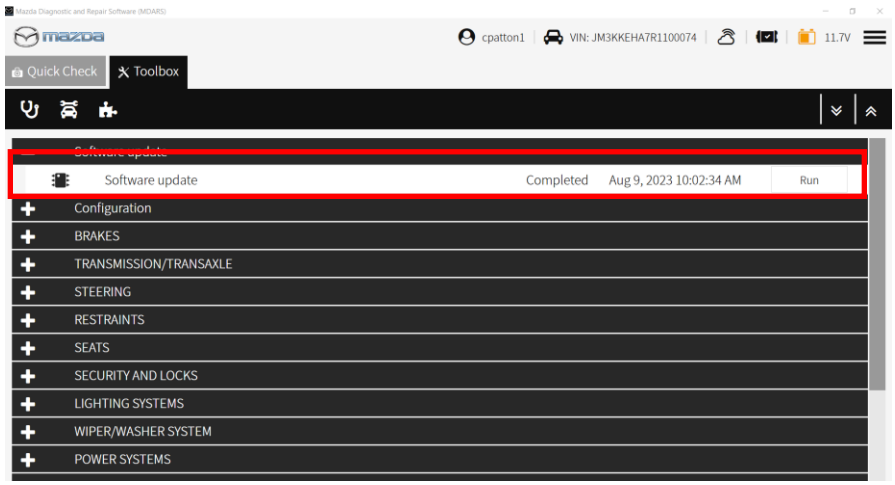

Mazda Diagnostic and Repair Software (MDARS)
Updating software
Running Process 79%
Next


Mazda Diagnostic and Repair Software (MDARS)
Collecting diagnostic information
7s
Next


cpatton1
VIN: JM3KKEHA7R1100074
11.7V
Quick Check
Toolbox
Software up··
Collecting diagnostic information
Complete
Collecting diagnostic information succeeded.
Next


cpatton1
VIN: JM3KKEHA7R1100074
11.7V
Quick Check
Toolbox
Software up··
ECU Reprogramming
Result for writing RxSWIN.
-MZD-R000152
00000000122
-MZD-R00013H
00000000160
-MZD-R000079
00000000122
Next


cpatton1
VIN: JM3KKEHA7R1100074
11.7V
Quick Check
Toolbox
Software up··
ECU Reprogramming
Software Update Summary
Description
Previous Version
Current Version
ISB_AMP
KMV6-66B29-
KMV6-66B29-A
Finish



Calibration file information

NOTE: If the calibration file has a suffix that is equal to or later, the vehicle has the updated software. Record the current "Target Software File #" on the RO and move to the next step "Check and Upload ODR Data"

Model	Module	Target ECU (Hardware #)	Target Software file #	Reprogramming Time (min.)
CX-90 (KK)	ISB_AMP	KMV6-66B20-	KMV6-66B29-A	3

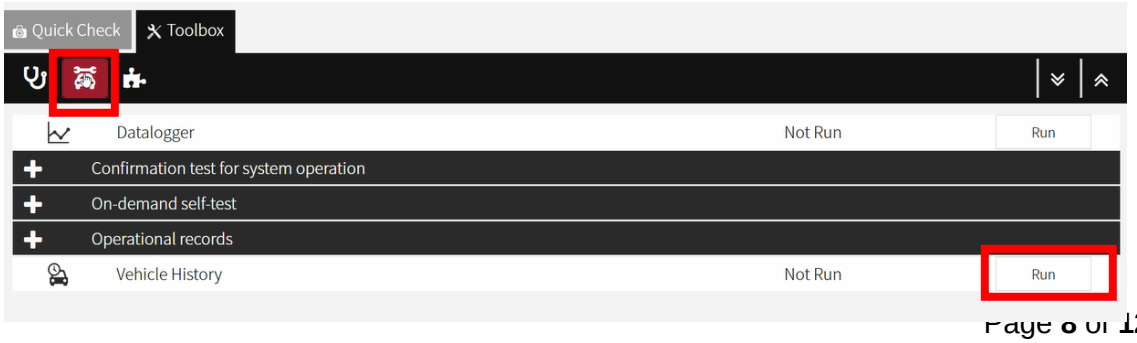
NOTE: You must use the correct software above or the customer will need to return for an unnecessary re-repair, and your dealer will absorb the cost. This also could put the customer at a safety risk and place liability on the dealer and Mazda unnecessarily.

Check ODR Data transmission was sucessful

You must perform the ODR Data Transmission correctly and check if successful. **If not performed correctly the customer will need to return for an unnecessary repair. The ODR data collection is required to be transmitted to Mazda in order to confirm the vehicle has been properly repaired.**

The following steps are a check of ODR data transmission as a result after reprogramming all required modules with vehicle verification.

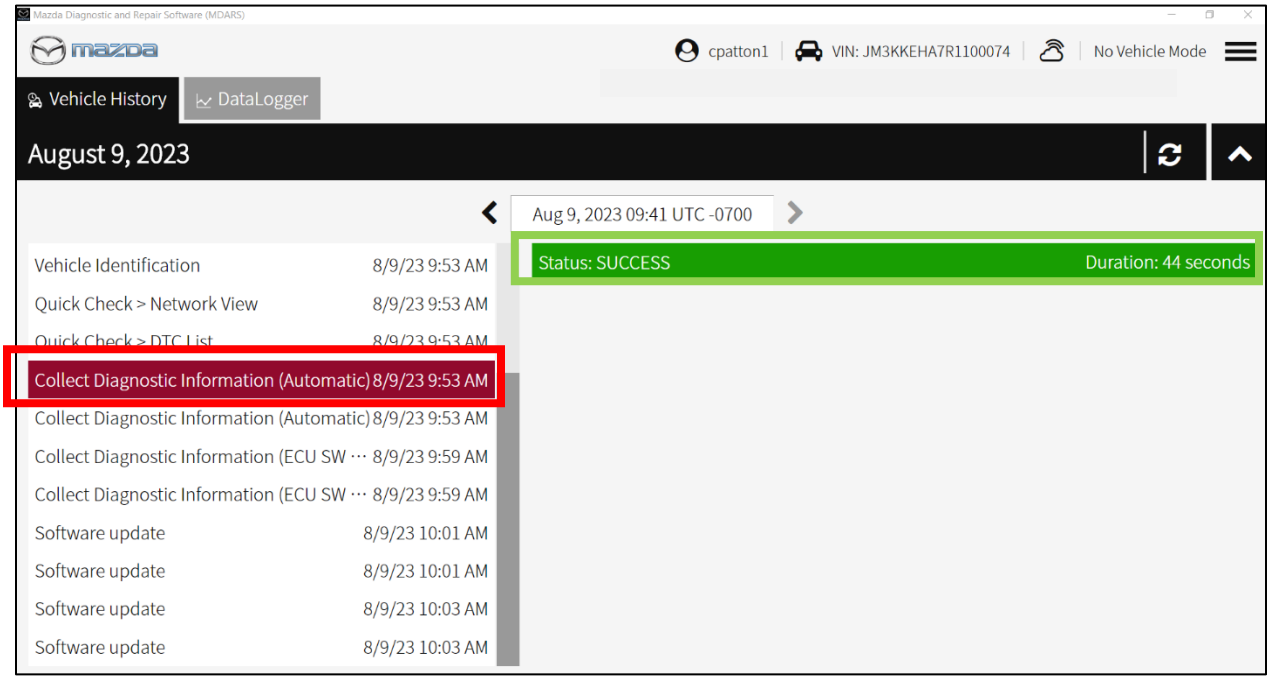
8. Open the vehicle history on toolbox tab.



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

   a. **Verify the "Collect Diagnostic Information" after required module is updated.**

   b. **<u>Only the latest "Collect Diagnostic Information" is valid one and the particular one that must show "SUCCESS"</u>**

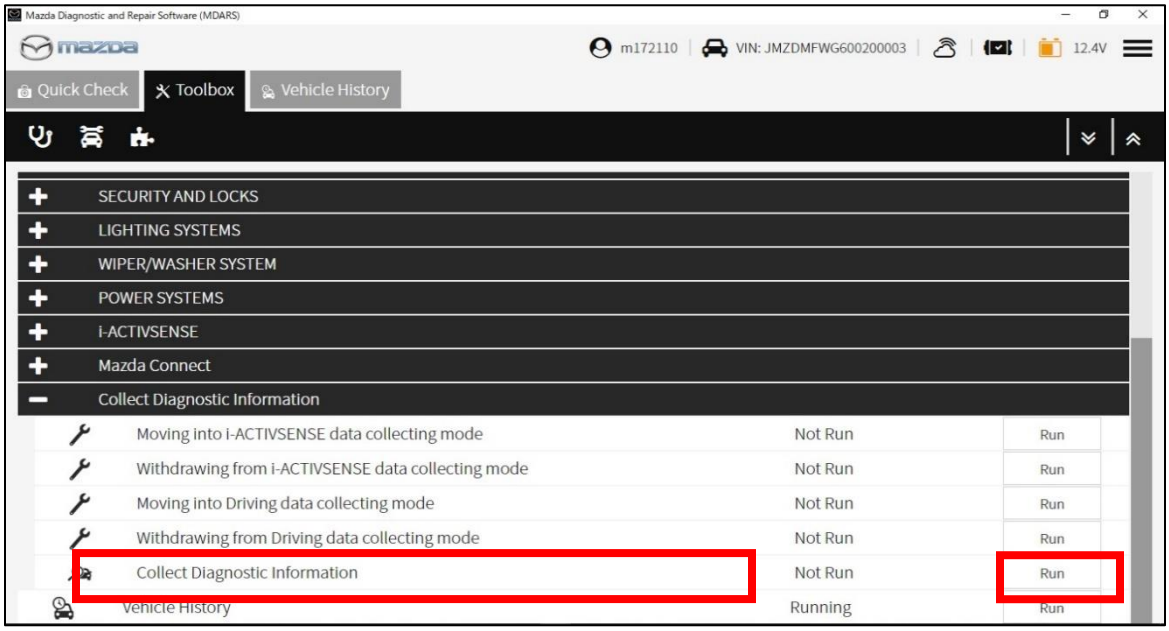


10. When you can confirm status as shown above, Confirmation of Diagnostic Information and "SUCCESS" in Green the ODR data has been transmitted successfully and the repair is complete. **NOTE: If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate troubleshooting section of the Workshop Manual. Then, proceed to Step 15.**

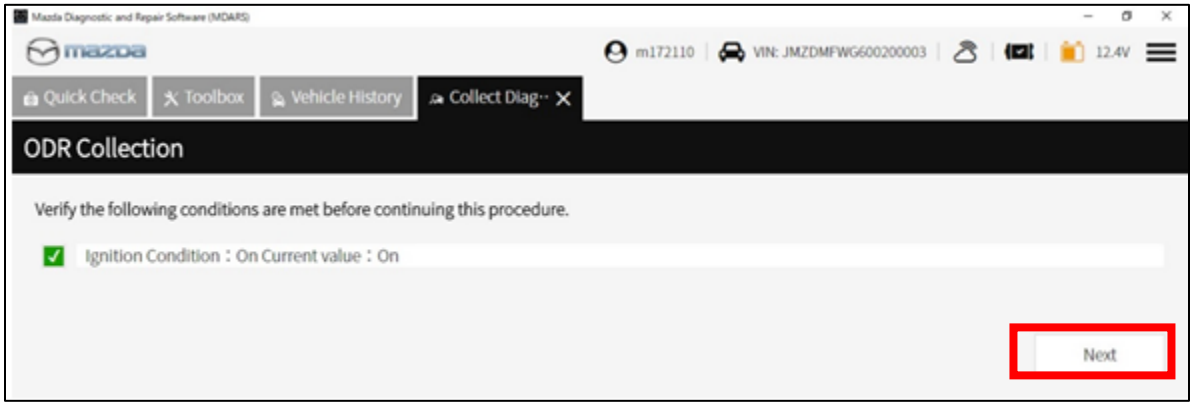
IMPORTANT: The ODR Data should transmit automatically after the Software Update. If ODR Transmission/Update is not successful, you must go to step 11 and follow the steps below to manually update ODR until a sucessful ODR data transmission occurs as in Step 9 and 10.

If the status is "FAILURE", the ODR (latest vehicle information) has not been submitted to the server. Do not disconnect the VCM and troubleshoot why the ODR data did not transmit, then try to transmit again. Step 11 has instructions when FAILURE is shown.

11. **Manual Update of ODR Data** – The following steps are required when status, as shown above: "FAILURE". On the tool box tab go down to, "Collect Diagnostic information" then click "Run". If successful, move to step 12.

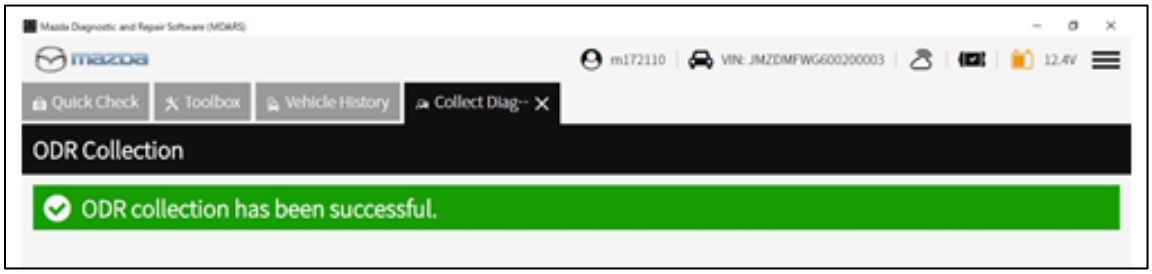


12. Click "Next"

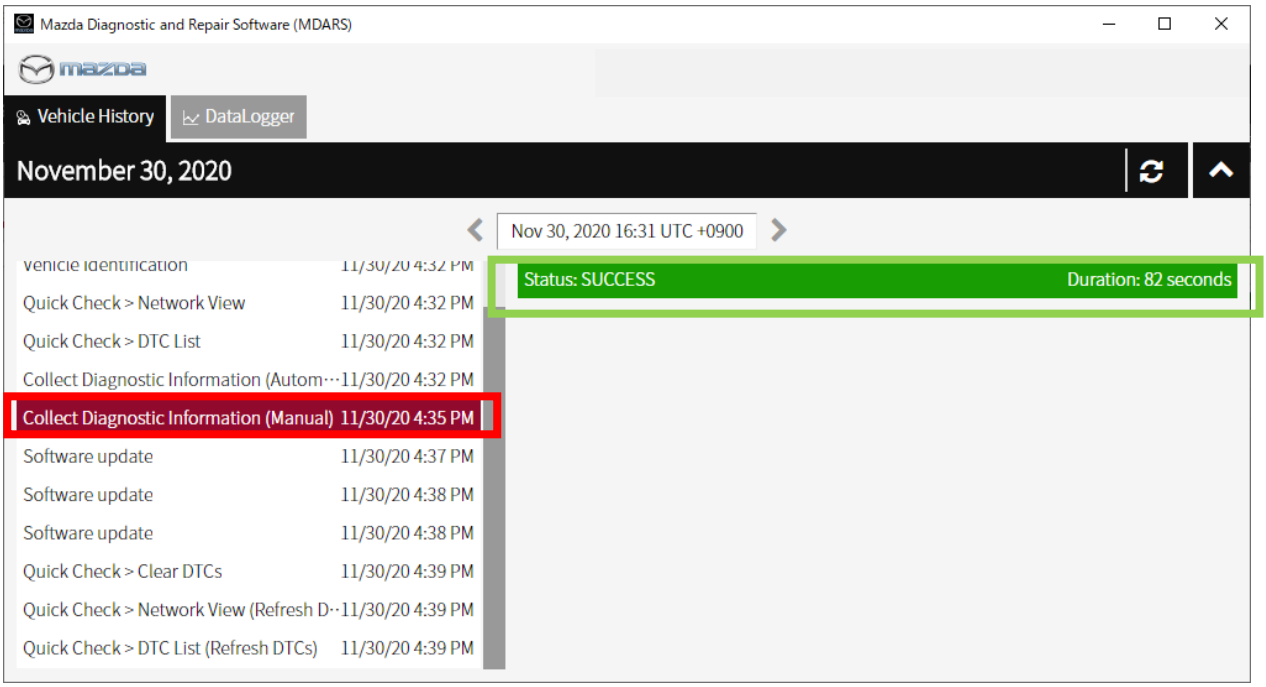


You will see this screen below for approximately 60 seconds.

13. MDARS will collect ODR and send to the Mazda server.



14. Perform a manual check to ensure the ODR Data transmission was successful, similar to step 9. "Collect Diagnostic Information (Manual)" status shows should show "SUCCESS" in Green color.

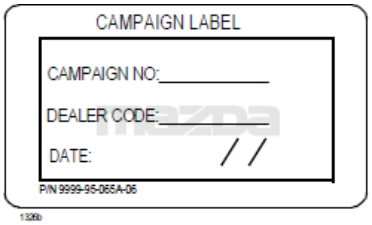


NOTE: If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate troubleshooting section of the Workshop Manual.

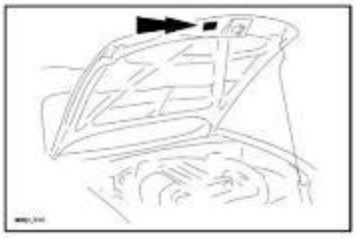
15. Disconnect the MDARS from the DLC-2. Move to step C. CAMPAIGN LABEL INSTALLATION

C. CAMPAIGN LABEL INSTALLATION

a. Fill out a Black "Campaign Label" (9999-95-055A-06) with Campaign #: "6123H", your dealer code, and the repair date.



b. 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