

SSPD7 - CX-30 (DM) and Mazda3 (BP) - Body Control Module (BCM) and Vehicle Control Module (VCM) software concern

Vehicle Inspection Procedure and Preparation for Repair

1. Verify that the vehicle is within the following ranges and there is an OPEN SSPD7 campaign in eMDCS:

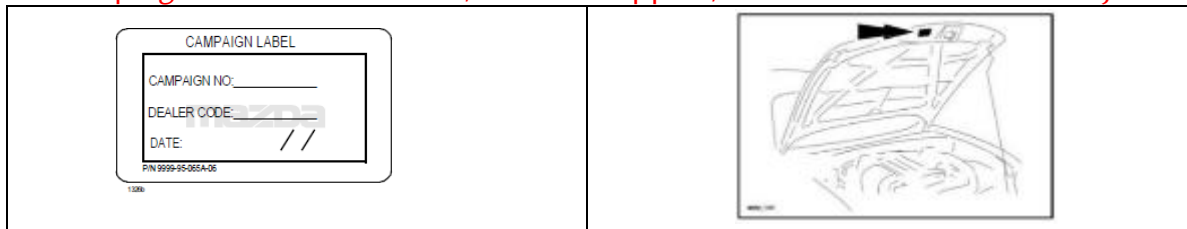
SUBJECT VEHICLES SSPD7

Model	Subject VIN range	Subject production date range
CX-30 (MMVO)	3MVDM**** RM 600011 - 631187	From August 22, 2023 through December 1, 2023
Mazda3 (MMVO)	3MZBP**** RM 400011 - 408755	From September 5, 2023 through November 30, 2023
Mazda3 (MC)	JM1BP**** R1 650003 - 707806	From May 25, 2023 through November 17, 2023

*Only the vehicles in this range and with an "Open" status in eMDCS are affected. If the vehicle is in the range above and SSPD7 is in OPEN status in eMDCS, proceed to Step 2. If the vehicle does not have an OPEN SSPD7 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 **SSPD7** 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 SSPD7 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 SSPD7	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 SSPD7 or any of the SSP campaigns is not displayed	See Action	The vehicle is not affected by the Recall or SSP

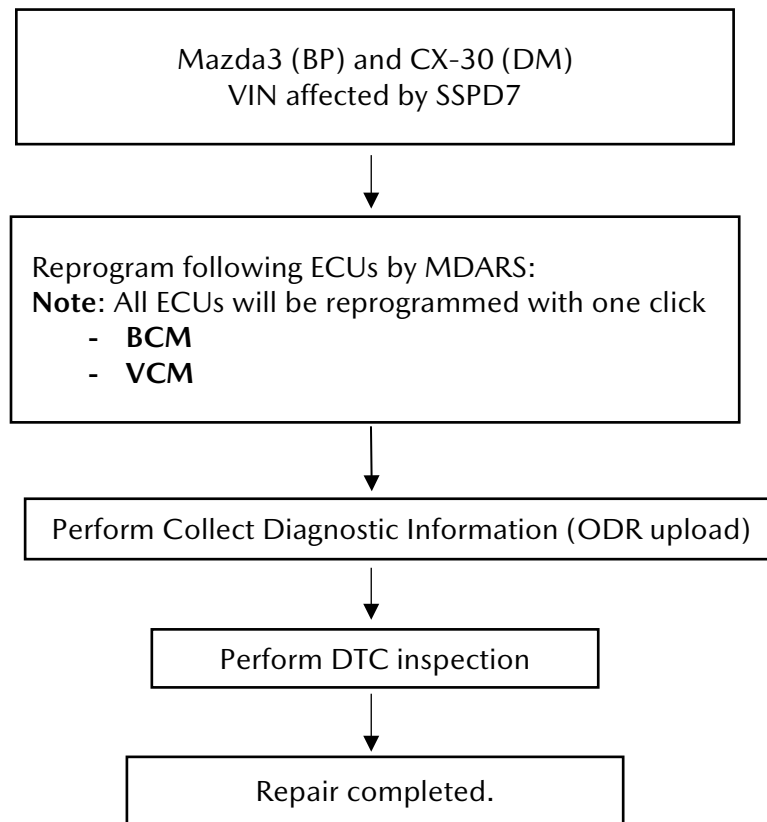
Technician Certification level required: Certified or above.

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 using MDARS,

Section A: Flow Chart



NOTE: You must clear any DTC's (diagnose and repair) before performing any campaign repair. Any campaign repair will NOT fix/clear a DTC issue. Once the DTC issue is repaired, then start the repair process for campaigns.



IMPORTANT NOTE:

- 1) All vehicles are required to "Collect Diagnostic Information (ODR Upload)" after the software update has been completed. If this is not uploaded successfully, or if one or more software updates are missed or done incorrectly, this SSPD7 will remain open and the warranty claim will not be paid. Dealers will then be required to contact the customer to bring the vehicle back to correct the concern.
- 2) Please wait up to 30 minutes after completing the SSPD7 operation before submitting the warranty claim.

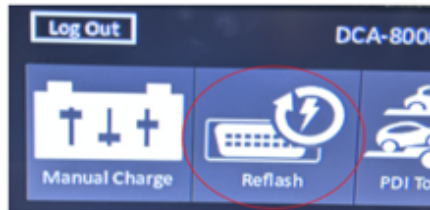
-----END OF SECTION A-----

Section B: Repair Procedure

Reprogram ECUs by MDARS

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 "Refresh" setting in the charger, which will keep the voltage stable. The setting voltage must be between 12 -13V.



- CAUTION: PLEASE READ BEFORE REPAIR

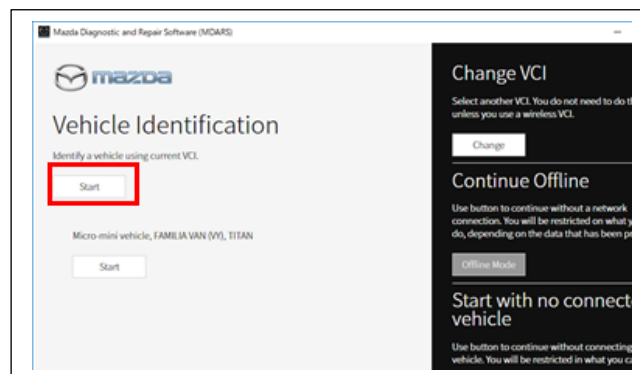
1. Vehicle Identification

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

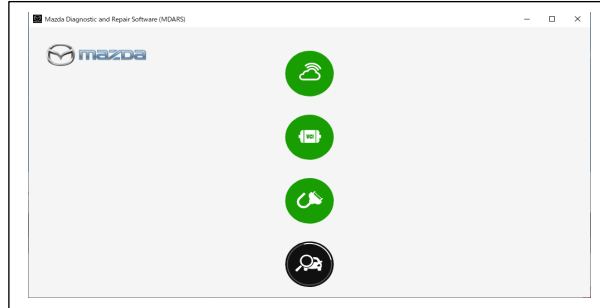
CAUTION:

- 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.

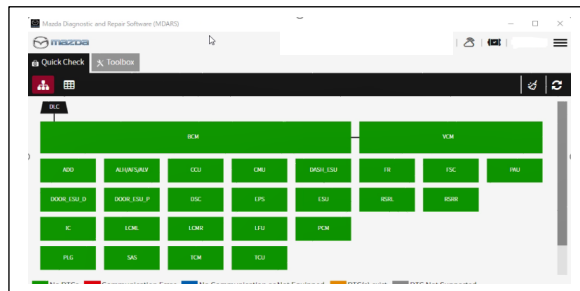
2. Click the "Start" button.



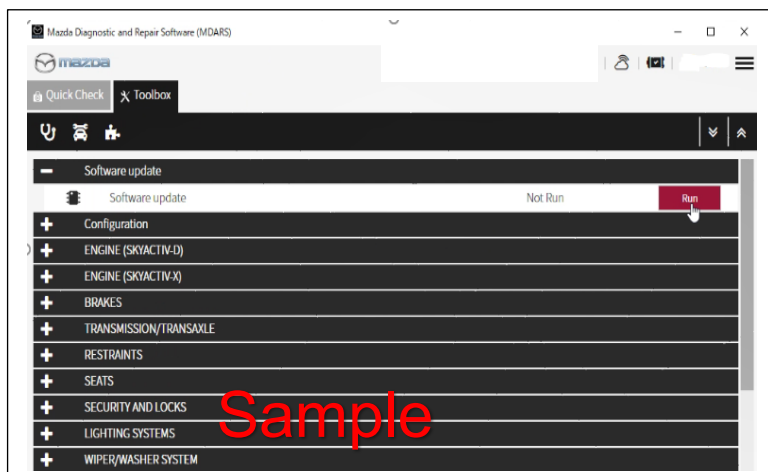
3. The Vehicle Identification process will start and automatically inspect every connection and then collect the vehicle information.



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.



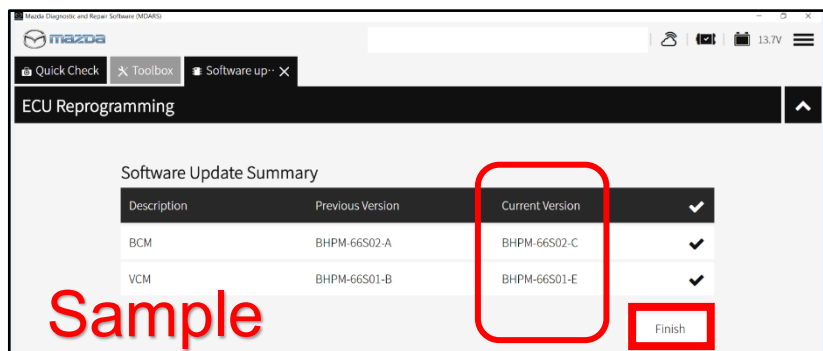
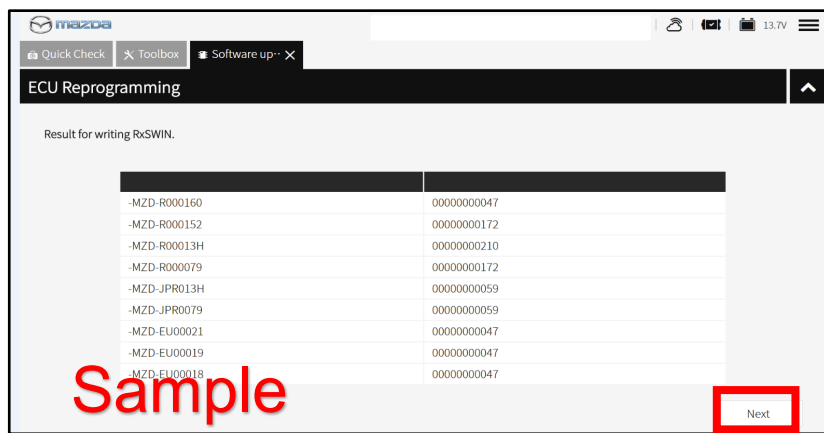
5. Reprogram ECUs as below.
 - At 'Software update' on 'Toolbox' tab, select 'Run'.



6. Select required module on 'ECU Reprogramming' screen. Start Reprogramming.*
 - BCM
 - VCM

IMPORTANT NOTE:

- When either BCM or VCM has been selected, then MDARS will reprogram BCM and VCM together, as one software package. There is no need to perform software reprogramming individually.
 - If current calibration file name in the ECU FILENAME screen is the same as shown in Calibration Files Information or with 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)
7. 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.



Calibration file information

Note: If the software file is up to date – or the calibration file is equal to or higher than the suffix in the table, the unit is already modified. If this is the case proceed with Collect Diagnostic Information (Manual) Update.

BCM

Model	Target ECU (Hardware #)	File Name (New)	Time	Spec.
BP	BJFN-6756X-	BJFN-66S02-C	2 mins	US (Japan Built), 4SD
	BJFS-6756X-	BJFS-66S02-C		US (Japan Built), 5HB
	BKHT-6756X-	BKHT-66S02-C		US (Japan Built), 4SD w/moonroof
	BKJF-6756X-	BKJF-66S02-C		US (Japan Built), 5HB w/moonroof
	BJGT-6756X-	BJGT-66S02-C		US (Mexico Built), 4SD
DM	DNBJ-6756X-	DNBJ-66S02-D		US (Mexico Built)

VCM

Model	Target ECU (Hardware #)	File Name (New)	Time	Spec.
BP	BJFN-6756X-	BJFN-66S01-C	3 mins	US (Japan Built), 4SD
	BJFS-6756X-	BJFS-66S01-C		US (Japan Built), 5HB
	BKHT-6756X-	BKHT-66S01-C		US (Japan Built), 4SD w/moonroof
	BKJF-6756X-	BKJF-66S01-C		US (Japan Built), 5HB w/moonroof
	BJGT-6756X-	BJGT-66S01-C		US (Mexico Built), 4SD
DN	DNBJ-6756X-	DNBJ-66S01-D		US (Mexico Built)

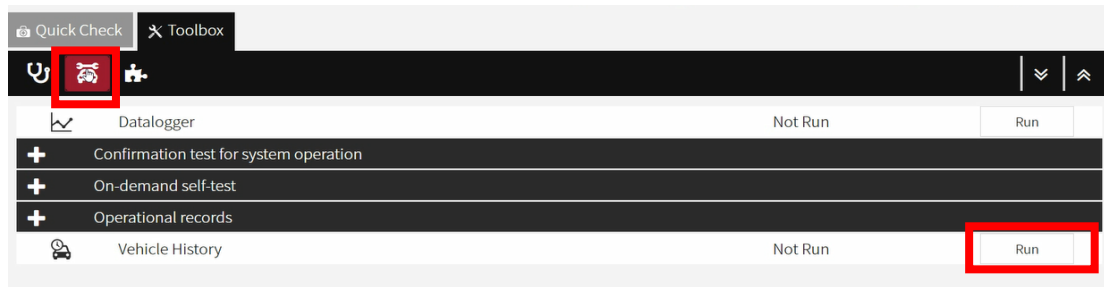
Recovery Mode Procedure – Click here if programming fails. Then return here and move to the next step in the procedure after recovery.

Collect Diagnostic Information (ODR update) – Upload of Data

WARNING! FAILURE TO PERFORM COLLECT DIAGNOSTIC INFORMATION (MANUAL) UPDATE WILL RESULT IN CLAIM DENIAL, CAMPAIGN REMAINING IN OPEN STATUS AND VEHICLE HAVING TO COME BACK TO REDO THE DATA PUSH

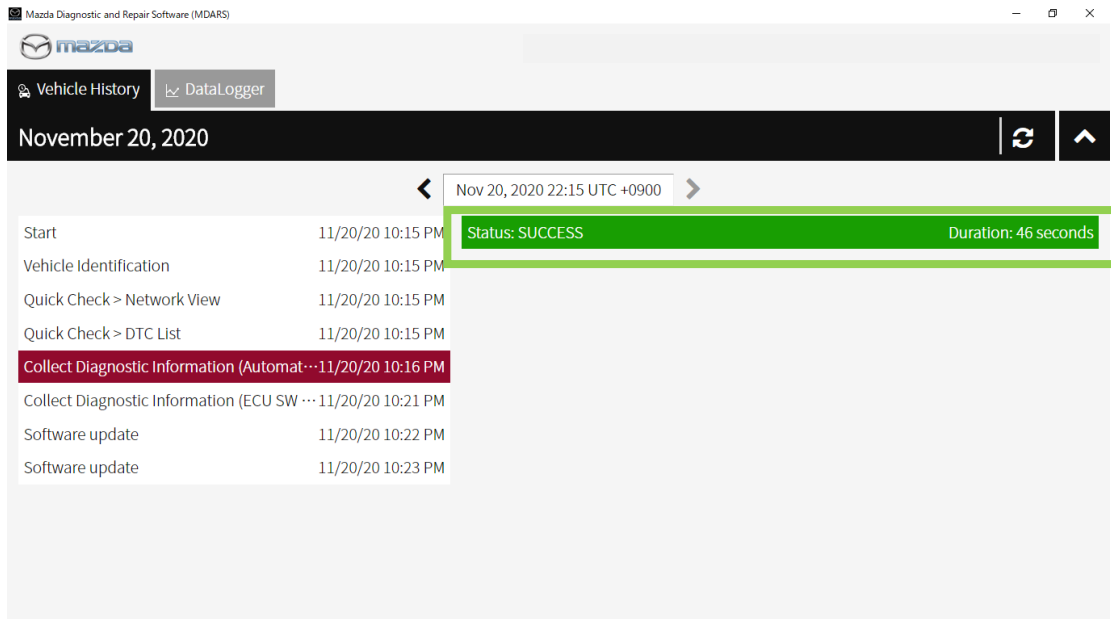
Upload Data - Check for data collection result after reprogramming all required modules. Then proceed to perform Collect Diagnostic Information (Manual)

A. Open the vehicle history on toolbox tab.



- B. Click the 'Collect Diagnostic Information (Automatic)' and make sure the status is 'SUCCESS' In green on the right. If there is more than one repair (such as MSP61), you only need to do one verification for all software updates, it is not necessary to confirm the 'Collect Diagnostic Information' after required module reprogram every time. Move to the next step.

Only the latest "Collect Diagnostic Information" is the considered valid and that needs to show "SUCCESS"

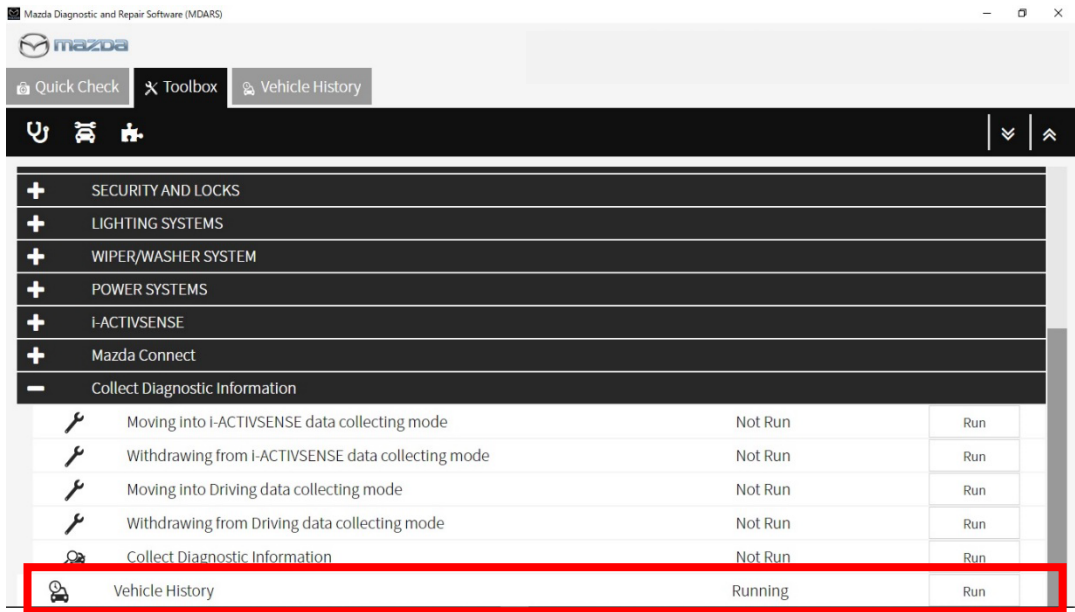


CAUTION: If the status is 'FAILURE', the Collection Diagnostic Information (latest vehicle information) has not been submitted to the server, continue with steps below.

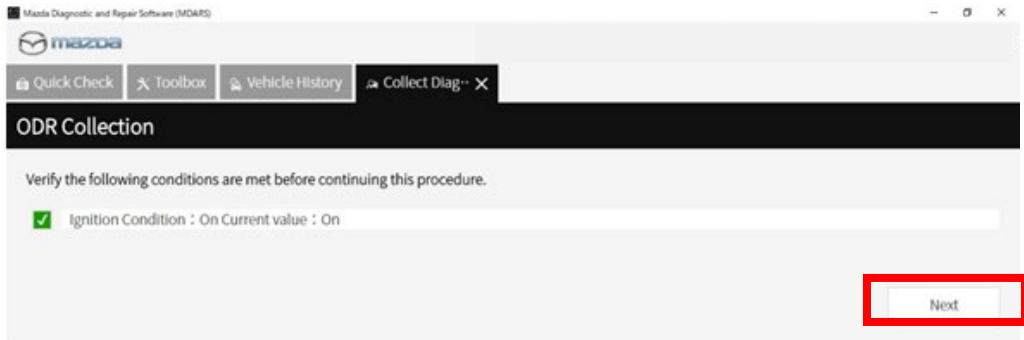
Status: FAILURE

Duration: 1 seconds

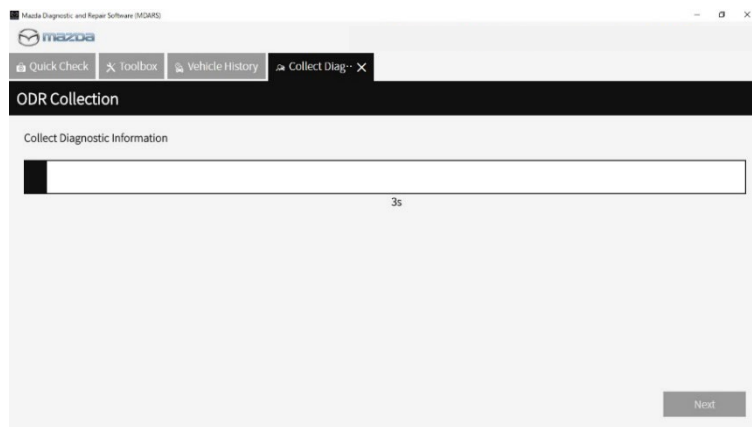
C. 'Collect Diagnostic information' then click 'Run' at the tool box tab.



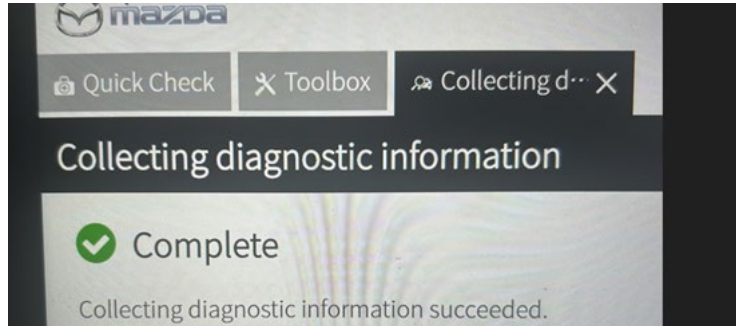
D. Click 'Next'



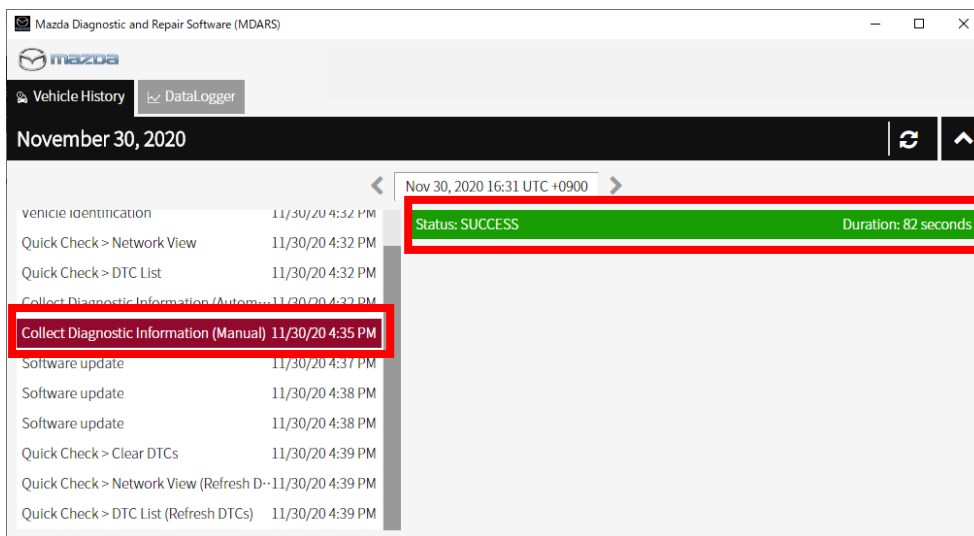
E. This may take around 60 seconds.



F. MDARS has collected data and confirmation has been sent to the server.



G. Check to make sure “Collect Diagnostic Information (Manual) appears and Status shows ‘SUCCESS’ in green. ***If this step is not completed, your warranty claim will not be approved and the customer will need to return for a re-repair.***



8. Disconnect battery charger before going to the next step.

DTC inspection

9. Check and erase DTC by using MDARS.

10. 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.

Note:

- After the reprogram, 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 done.

- Perform the following engine start and stop procedure to clear DTC P2610:00.

- 1) Start the engine (5 seconds).

- 2) Stop the engine and turn ignition ON (Engine OFF)
- 3) Clear the DTC recorded in the memory by MDARS.
- 4) Perform the KOER ON-Demand self-test by MDARS.

11. Disconnect the MDARS from the DLC-2.

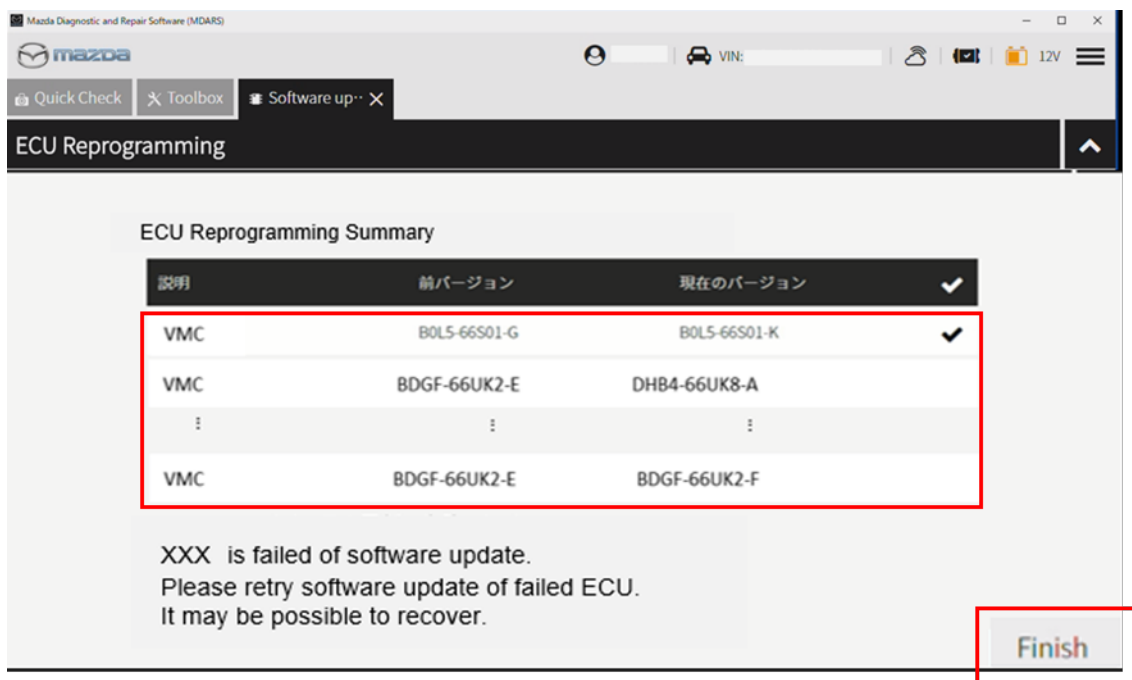
12. Move to **Section C. Campaign Label Installation**

Recovery mode procedure:

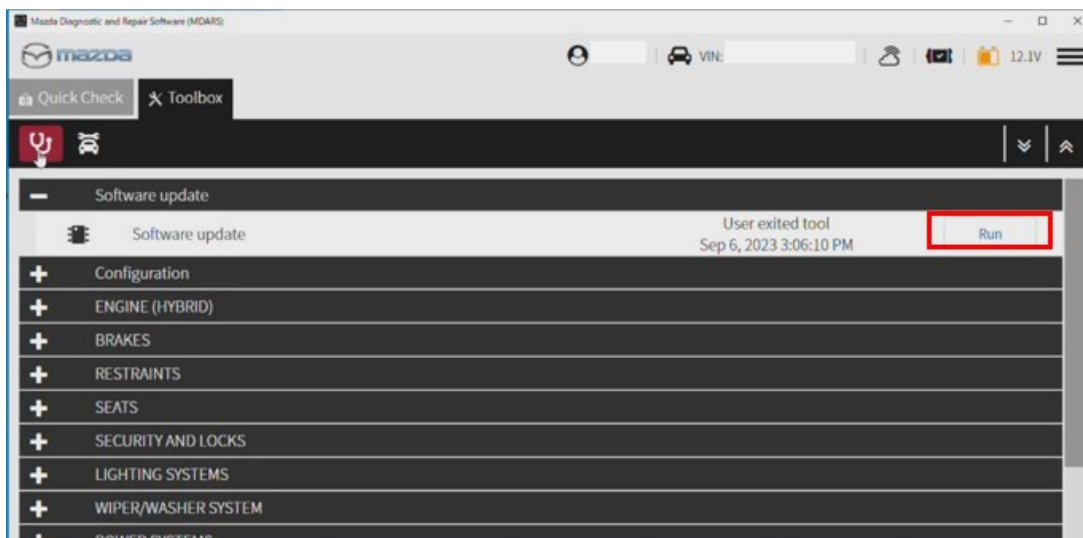
NOTE: If reprogramming fails, reprogramming is performed again using recovery mode (see steps below).

Recovery mode procedure:

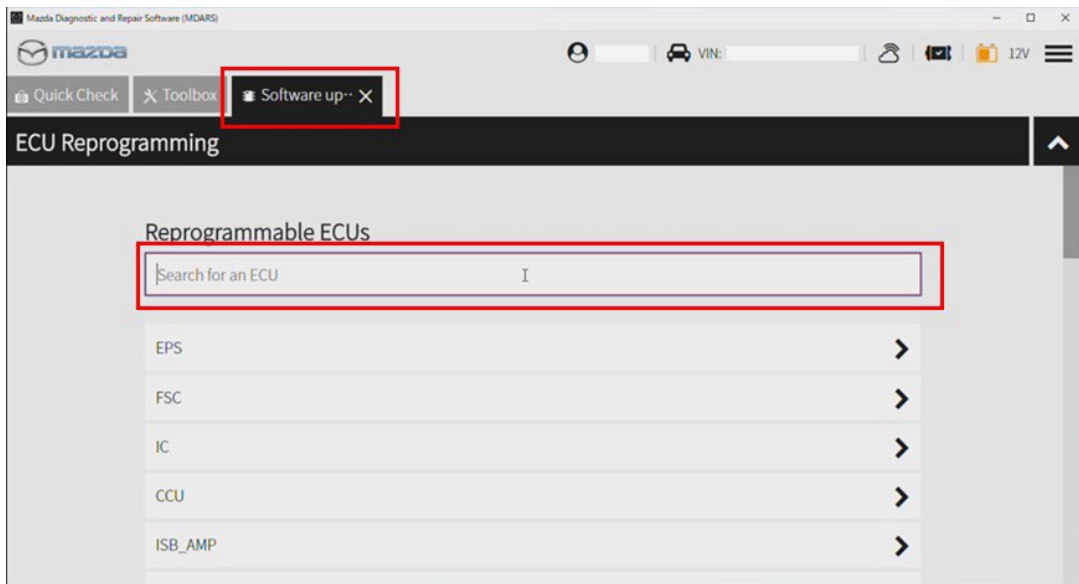
- 1) After a failure of reprogramming, the following screen is displayed. Check the ECU name on the screen and select "Finish" in the lower right corner.



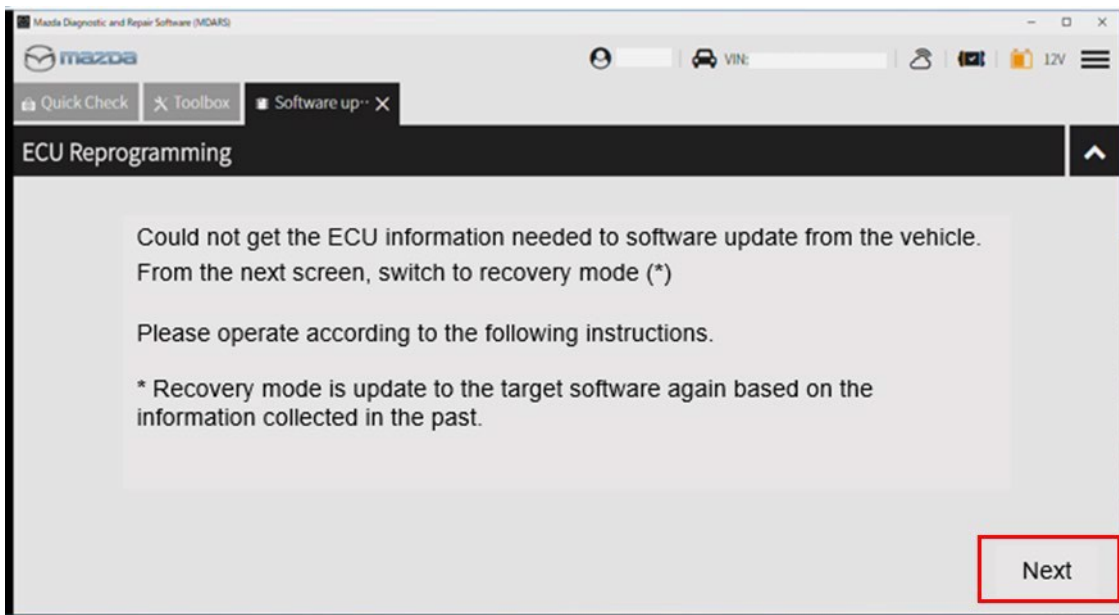
- (2) Select "Run".



(3) Selecting ECUs for Reprogramming.



4. Since the information at the time of reprogramming failure remains, select "Next "to perform reprogramming again, then confirm reprogramming result.



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

C. Campaign Label Installation

1. Fill out a Black "Campaign Label" (9999-95-055A-06) with Campaign #SSPD7", your dealer code, and the repair date. **It is OK to bundle multiple campaigns on one label as long as each campaign is legible.** Use more than one label if necessary.

CAMPAIGN LABEL

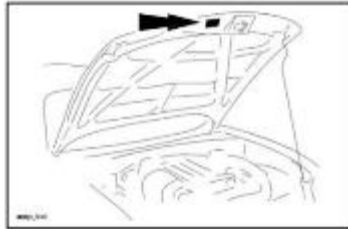
CAMPAIGN NO: _____

DEALER CODE: _____

DATE: //

PIN 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 REPAIR PROCEDURE