

MDARS PCM reprogramming procedure

REPAIR PROCEDURE: PCM REPROGRAMMING by MMDS (MDARS) - 2019 Mazda3

NOTE:

- **Follow the below "Service Caution for reprogramming".**

1. Reprogram the PCM using MDARS.
2. After the reprogramming, verify the calibration file name with the chart below at screen of the (PCM) FILENAME.
3. Clear the DTC and turn the ignition off and get out of the car.
4. Close and lock the door.
5. Wait for ten minutes or more. **IF YOU DON'T WAIT AT LEAST 10 MINUTES YOU WILL HAVE A COMMUNICATION ERROR WITH THE FORWARD SENSING CAMERA. DTC U2120:00 is stored and i-ACTIVSENSE AMBER warning light is illuminated. In addition U2500:82 could also be illuminated if the vehicle did not sit with the doors closed and locked for at least 10 minutes. If this occurs, either disconnect the negative ground cable for at least 1 minute or close and lock the doors for at least 10 additional minutes.**
6. Verify the repair by starting the engine and making sure there is no MIL illumination or abnormal warning lights present.

NOTE:

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

Calibration files information

NOTE:

- If the calibration file is with the suffix in the table or later, the PCM already has the modified calibration.

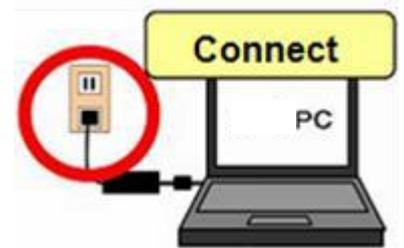
| PCM File Name | Note |
|---------------|----------------------|
| PX05-188K2-J | AT, 2WD, PYUD, Melco |
| PX07-188K2-L | AT, 4WD, PYUD, Melco |
| PX58-188K2-H | MT, 2WD, PYUD, Melco |
| PX13-188K2-D | AT, 2WD, PYUD, Melco |
| PX06-188K2-J | AT, 2WD, PYUD, Denso |
| PX08-188K2-L | AT, 4WD, PYUD, Denso |
| PX59-188K2-H | MT, 2WD, PYUD, Denso |
| PX14-188K2-D | AT, 2WD, PYUD, Denso |

Service Caution for Reprogramming

NOTE: Poor connection between the vehicle and MDARS and/or low voltage may result in abnormal termination and/or data corruption.

- a.** Make sure that the following connections are firmly connected, and then do NOT touch the VCM and DLC cable to prevent from causing noise and poor connection.

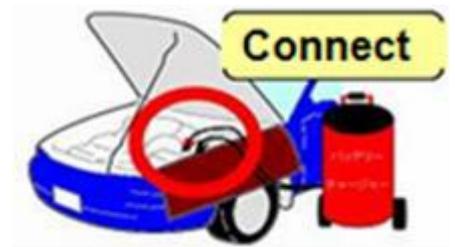
- Between the vehicle-side connector and the DLC cable
- Between the PC-side connector and USB port of PC



- b.** Connect AC adapter to the PC in order to stabilize voltage fluctuation during reprogramming

Do NOT use vehicle battery outlet as power source for the PC.

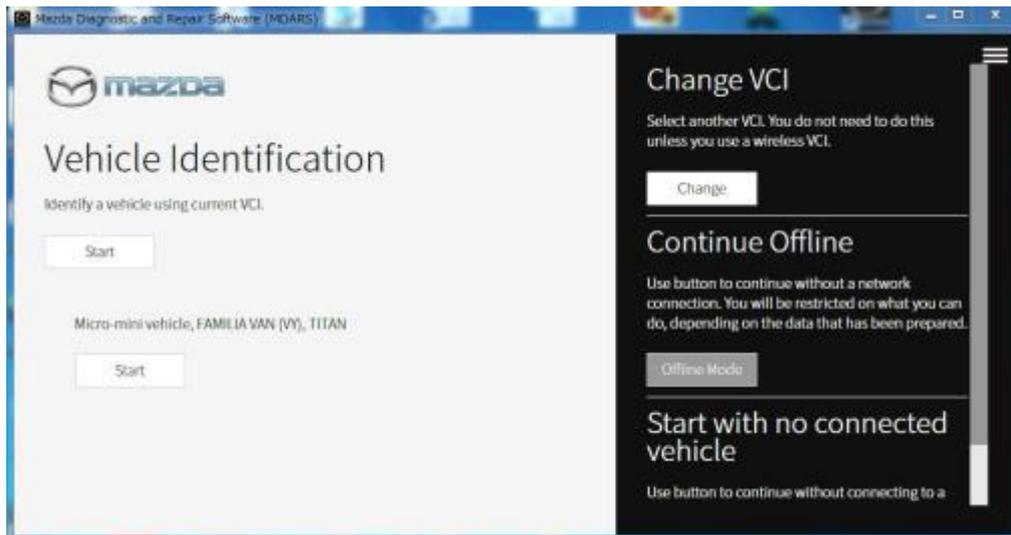
- c.** During reprogramming, connect battery charger (charge current maintained within 10 to 15A) to the vehicle to stabilize voltage fluctuation.



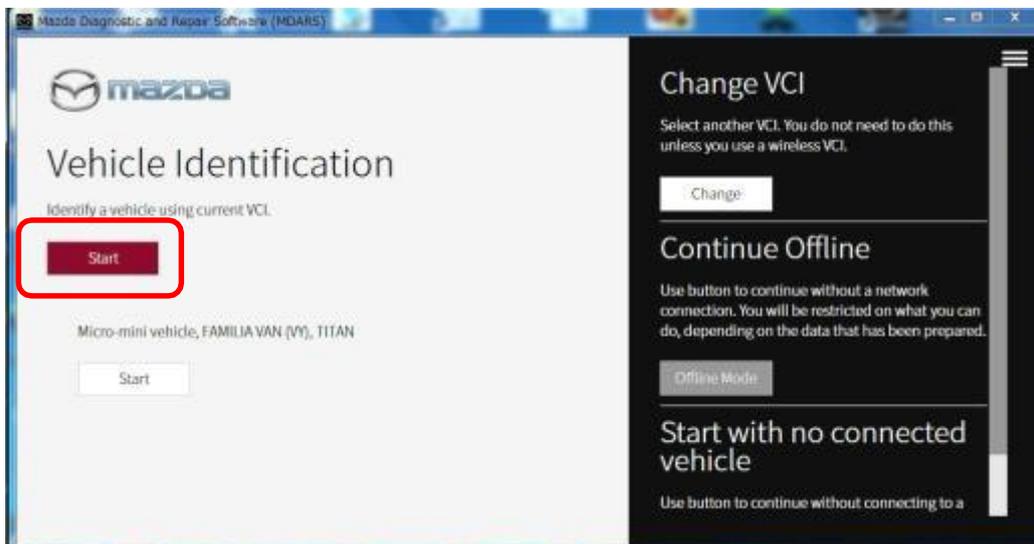
Before reprogramming, pay attention to the vehicle condition and PC environment.

- a.** Turn off all the electrical loads, especially pay attention to A/C (blower), audio, rear defogger and headlights.
- b.** Perform self-test and verify no DTC is stored. If any DTC is stored, fix the concern and delete the DTC.
- c.** Disconnect all non-genuine aftermarket accessories.
- d.** Terminate all programs other than MDARS on the PC. This may extend reprogramming, PC may freeze or it may cause other problems.
- e.** Perform reprogramming under proper Internet environment. Especially when using wireless network, make sure the connection is strong.
- f.** Make sure to keep proper free space on the PC's hard disc. Insufficient free space (less than 1 GB) may result in PC freeze during reprogramming.

1. Log in to the MGSS and select “Launch M-MDS” button.



2. Ignition on the vehicle and select “Start”.



3. Wait



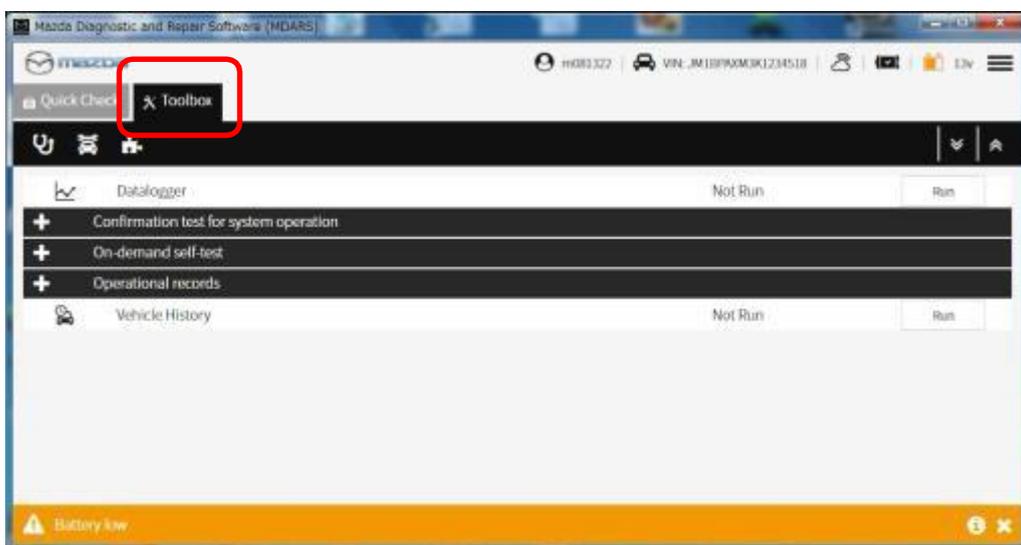
4. The deployment modules are displayed after the vehicle identification was completed.



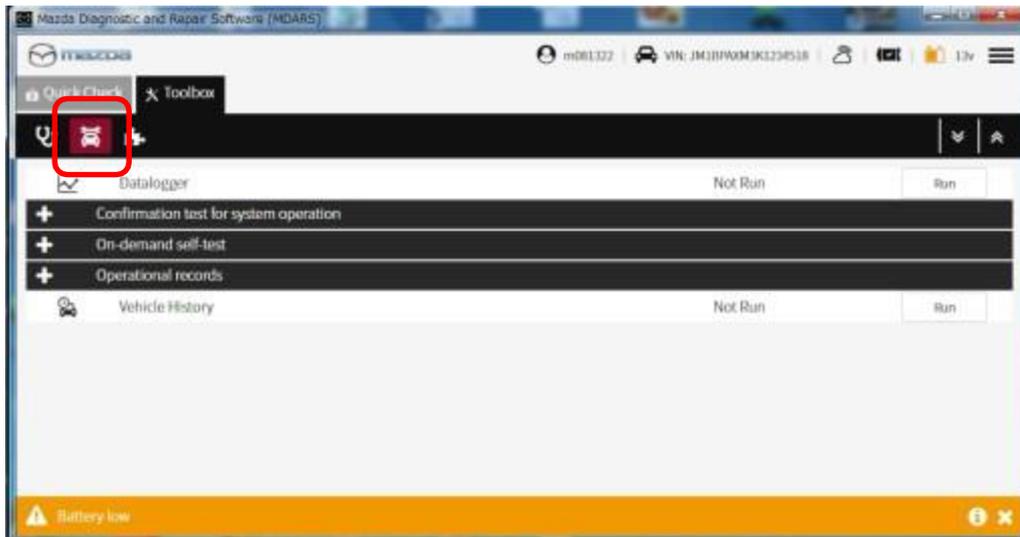
Note: "Vehicle Disconnected" is displayed at the time of communication error.



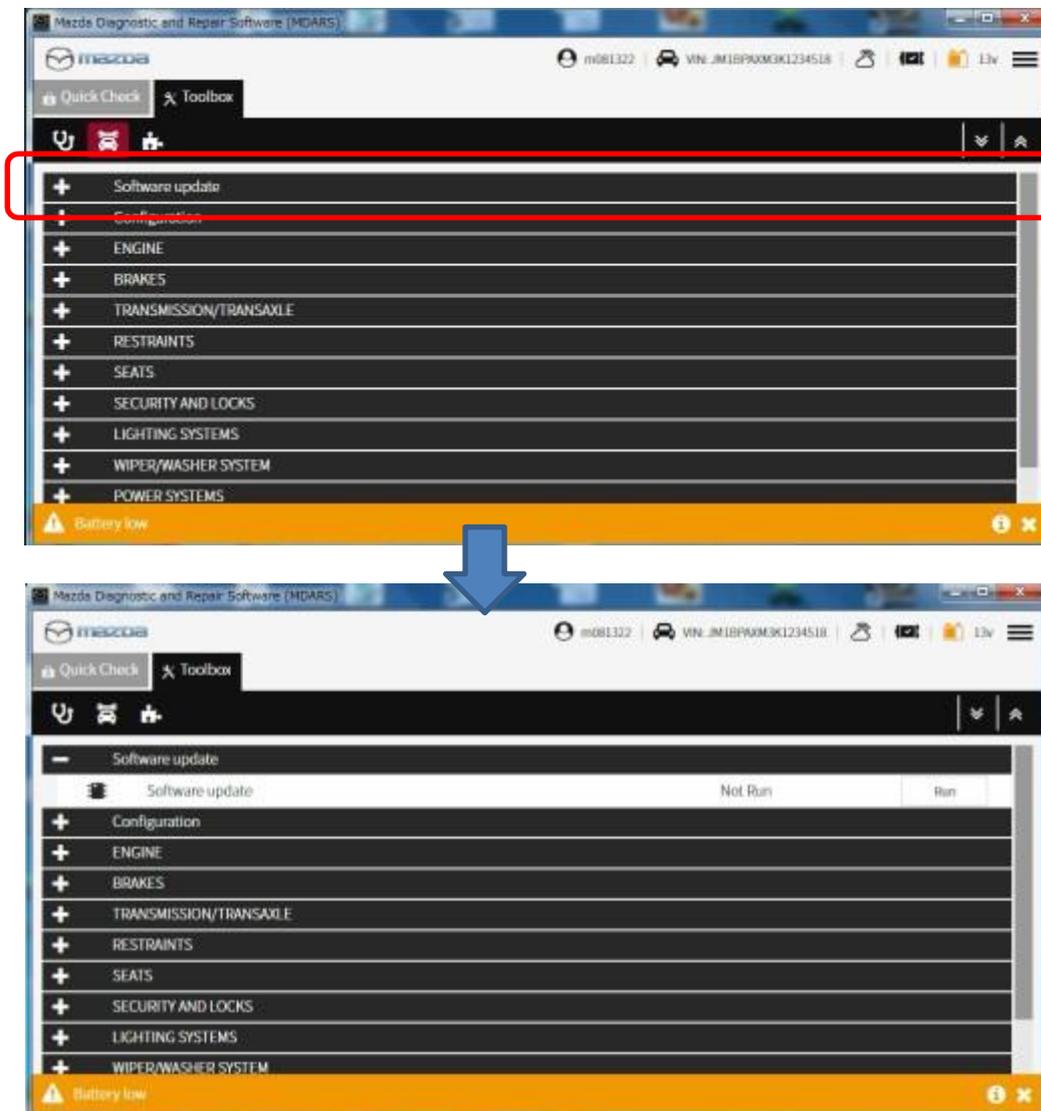
6. Select "toolbox".



7. Select the following icon.



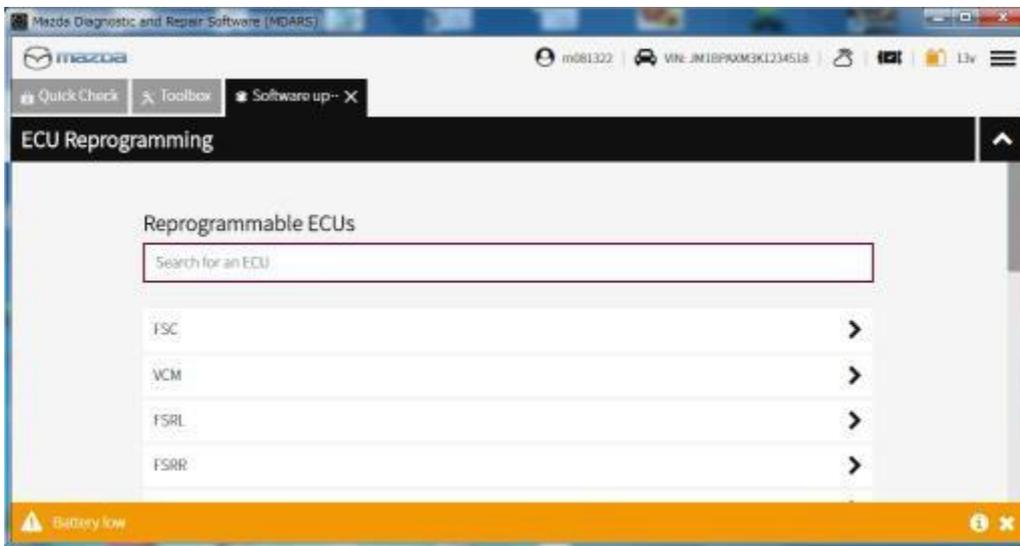
8. Select "Software update".



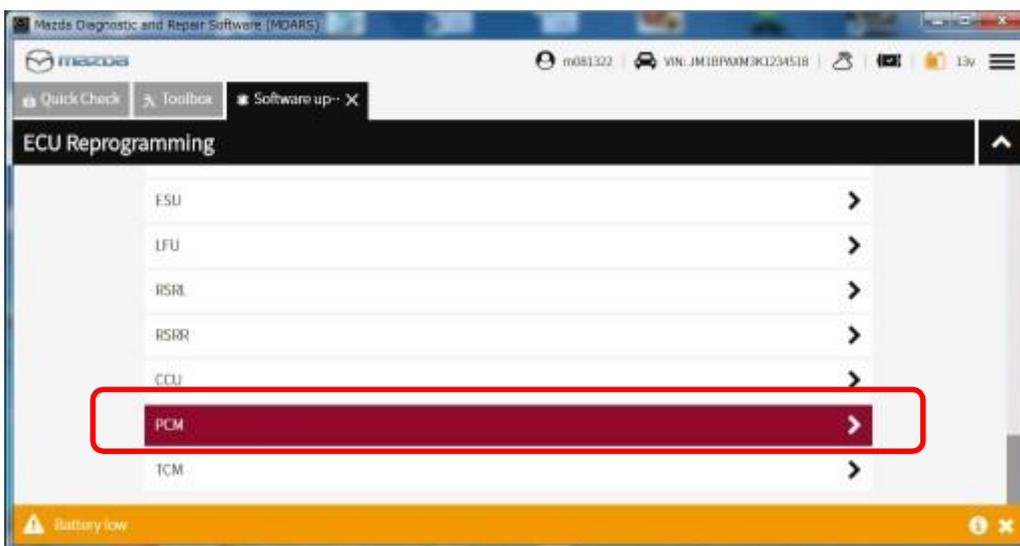
9. Select "Run".



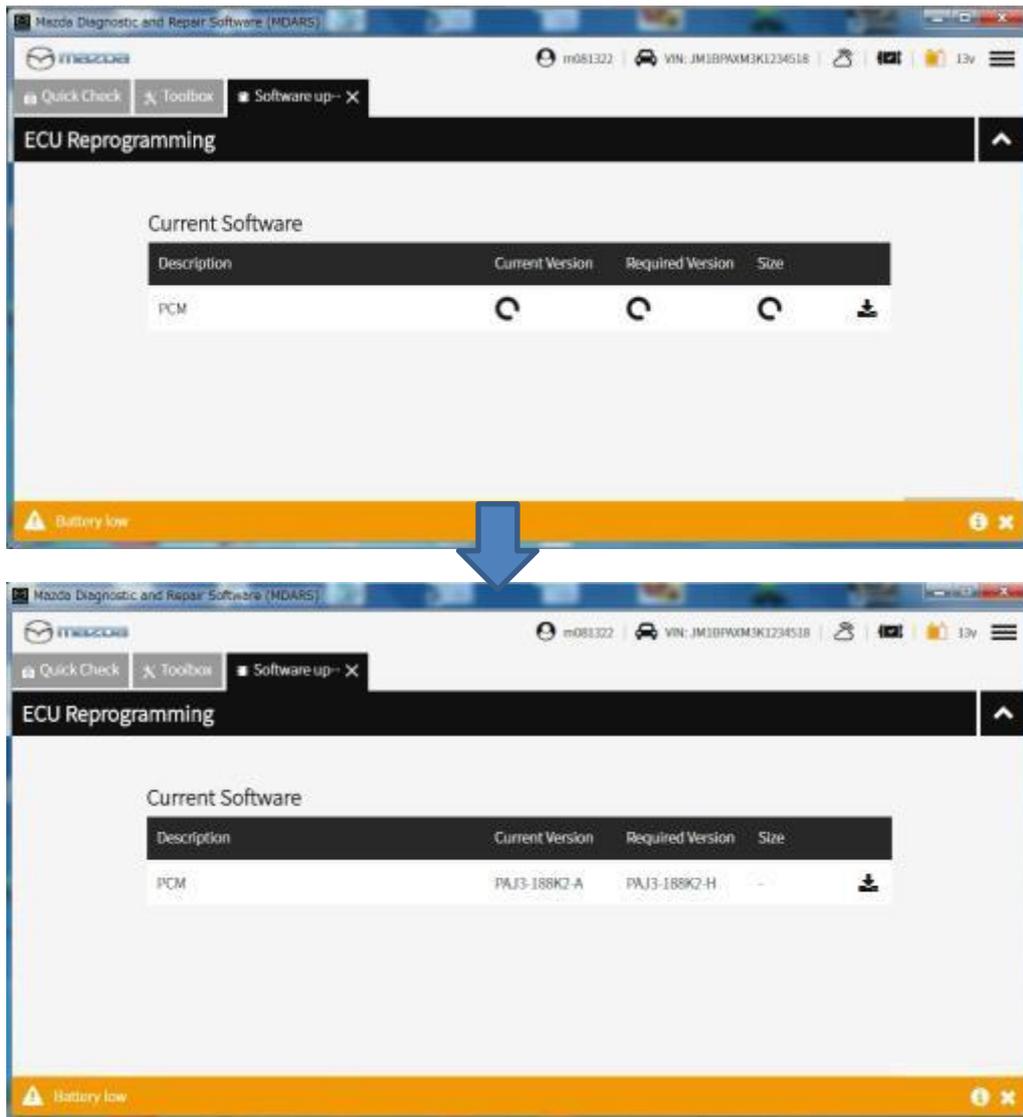
10. Scroll the screen.



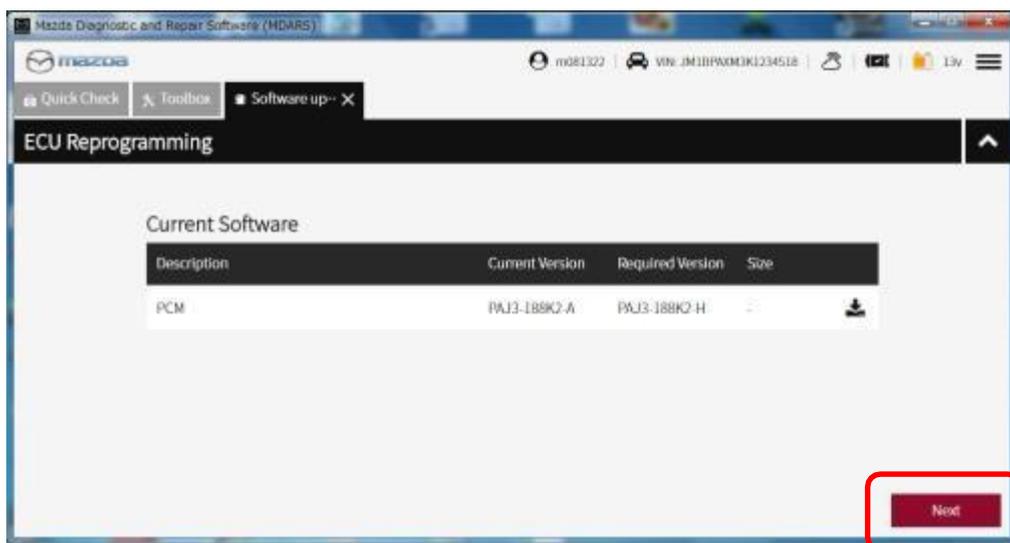
11. Select "PCM".



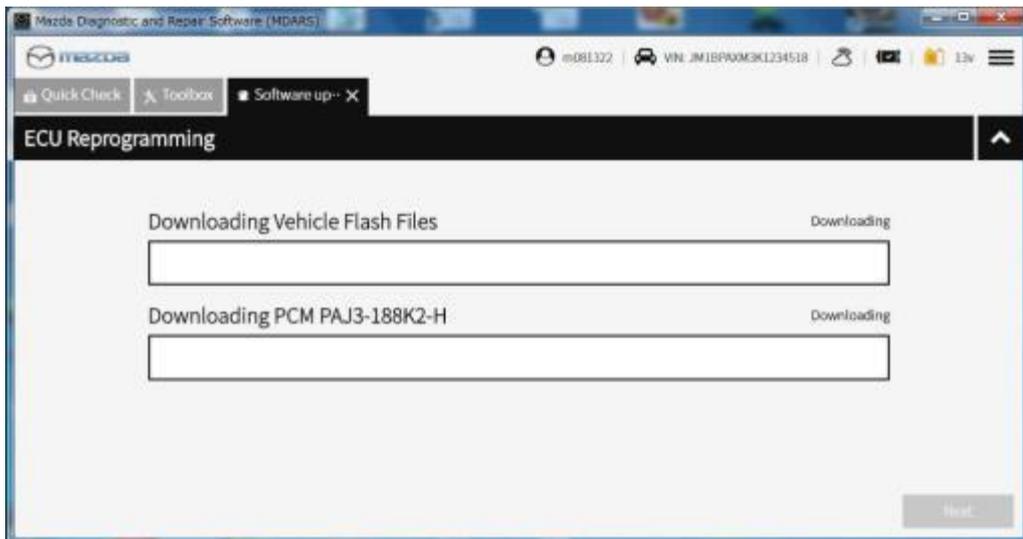
12. Wait



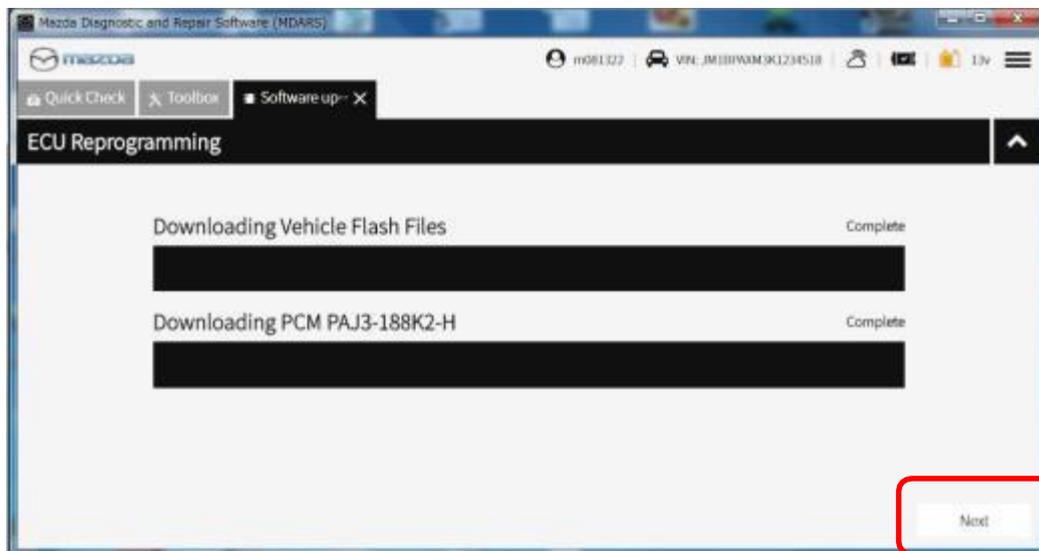
13. Select "Next".



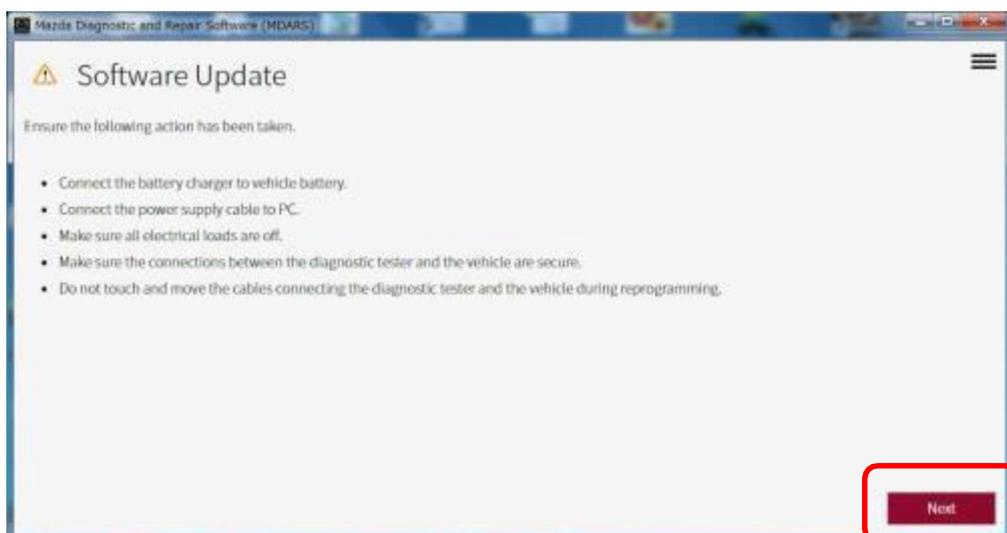
14. Wait



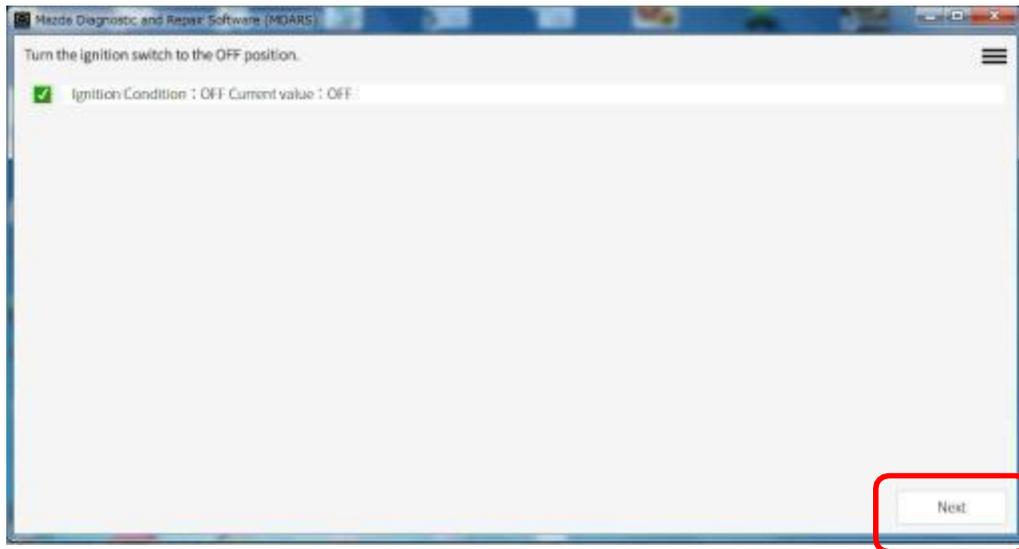
15. Select "Next".



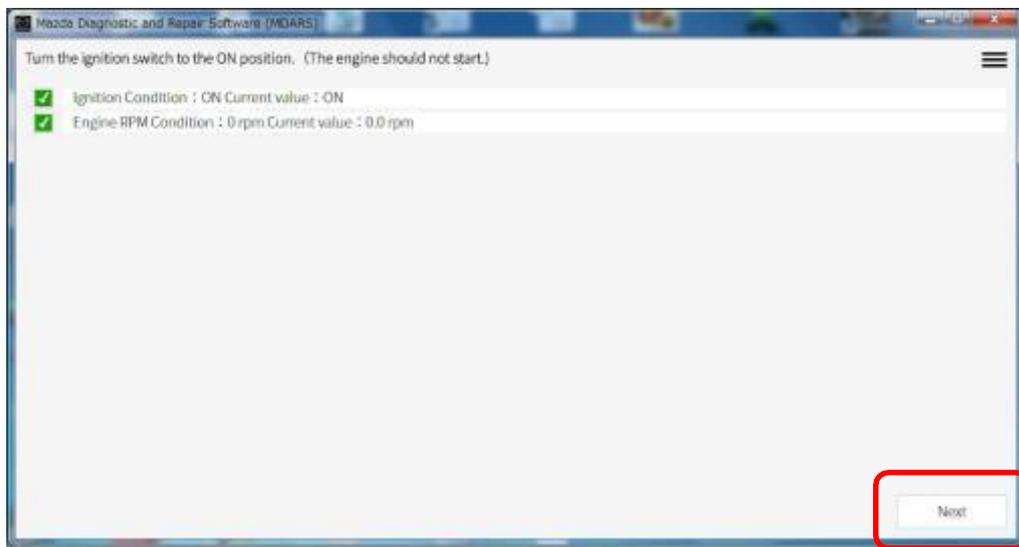
16. Read the screen instructions and select "Next".



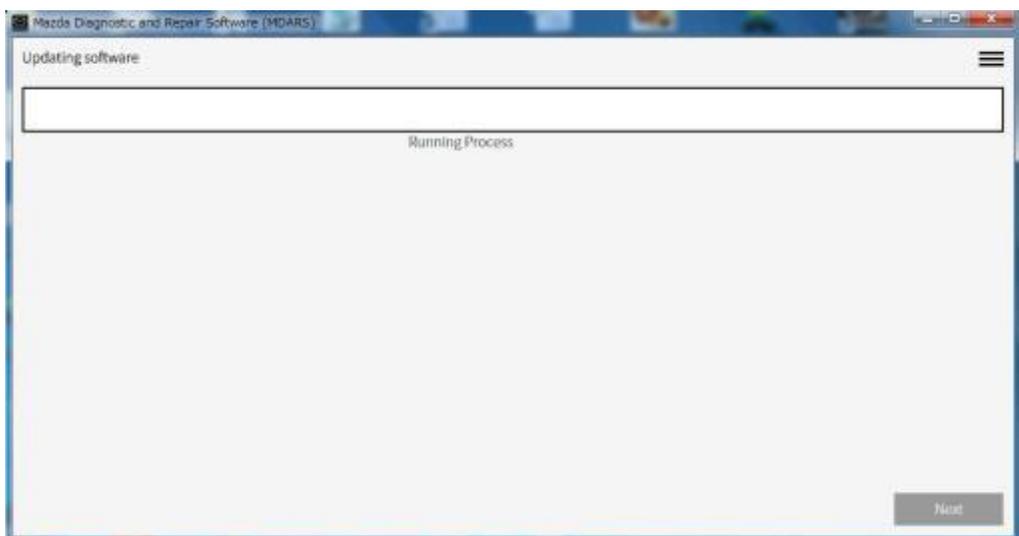
17. Select “Next”.



18. Select “Next”.



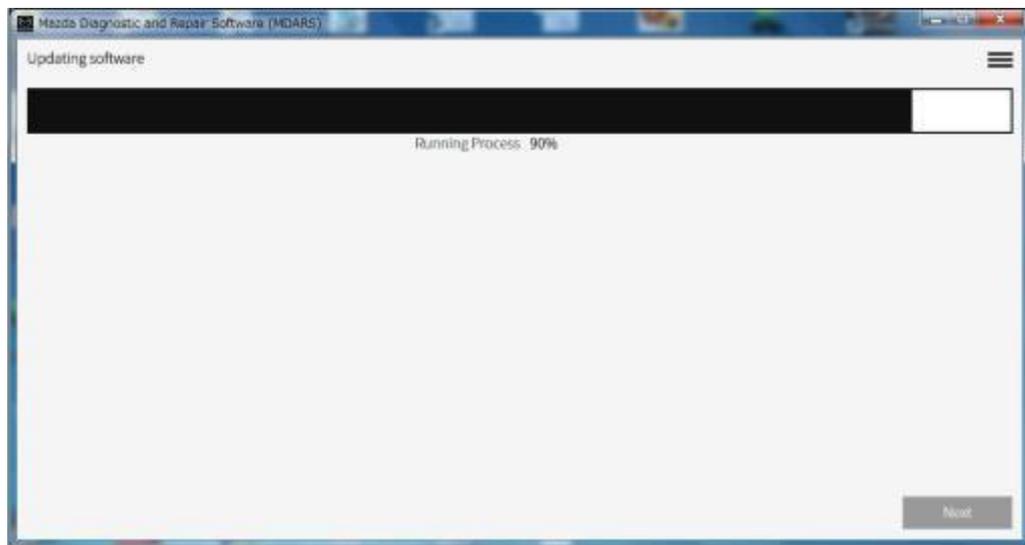
19. Wait



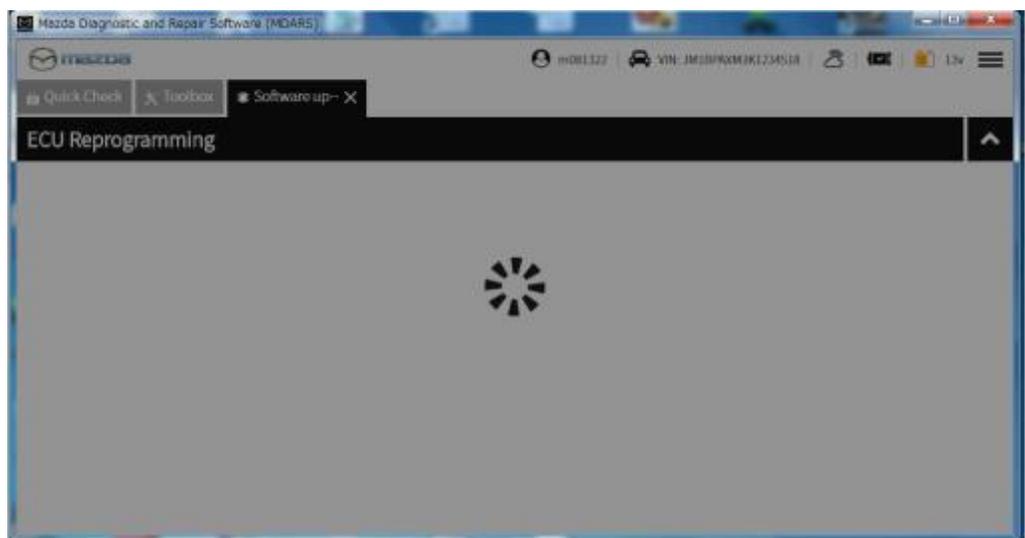
20. Wait



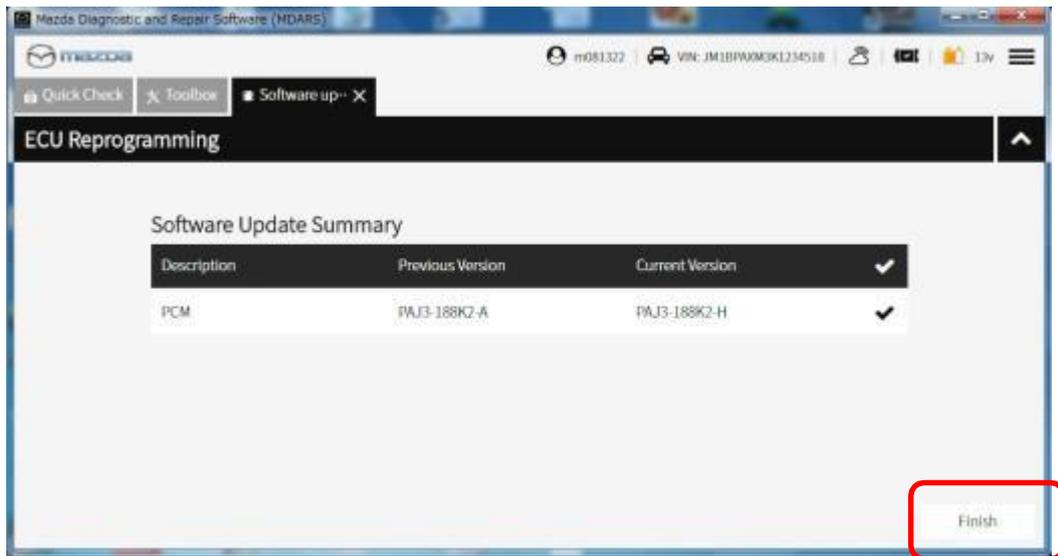
21. Wait



22. Wait



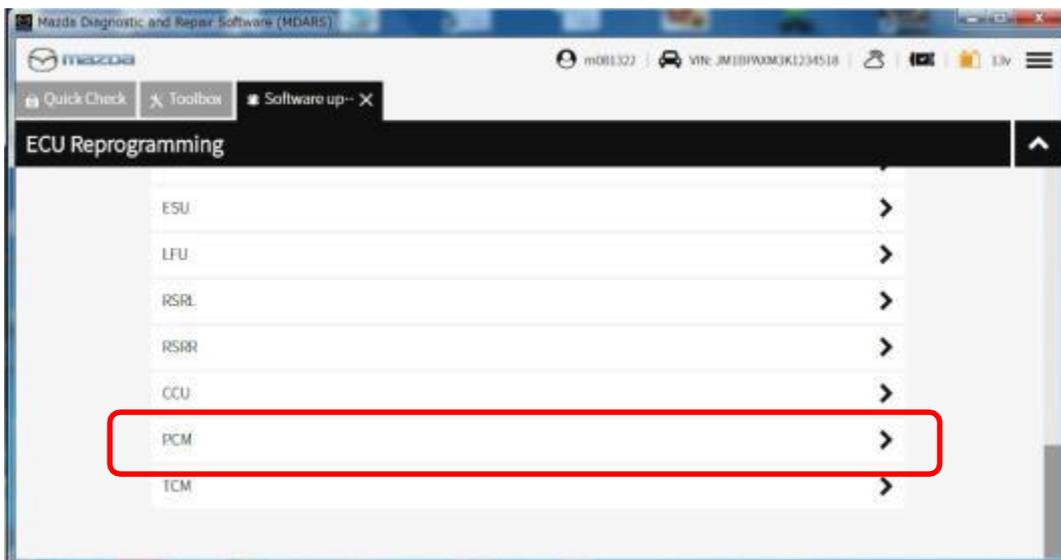
23. Capture the screen of filename and select “Finish”.



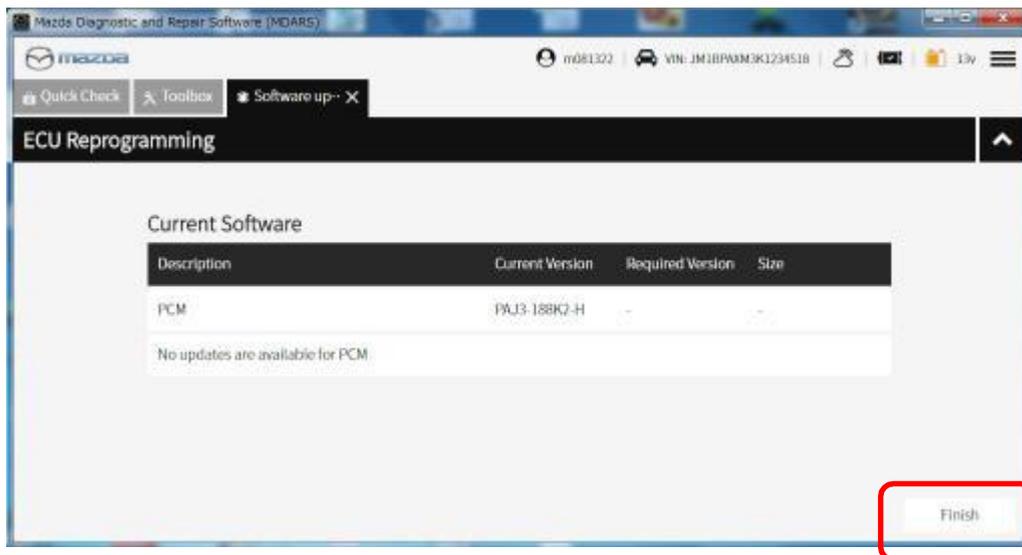
24. Select “Run”.



25. Select “PCM”.



26. Confirm the filename after reprogramming and select "Finish".



27. Finish



A. CAMPAIGN LABEL INSTALLATION

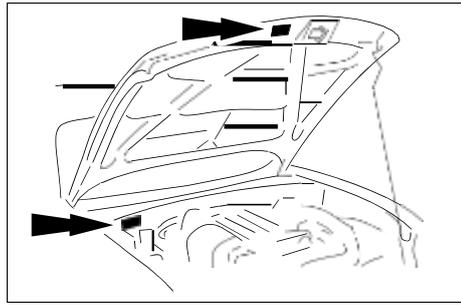
1. Fill out a blue "Campaign Label" (9999-95-065A-06) with Campaign No: "3719F", your dealer code, today's date.

CAMPAIGN

| |
|--------------------|
| CAMPAIGN NO: _____ |
| DEALER CODE: _____ |

PN 9999-95-065A

2. Affix it to the hood or bulkhead as shown:



3. Return the vehicle to customer.