Technical Service Bulletin

Mazda North American Operations Irvine, CA 92618-2922



Subject:

TEMPERATURE SETTING MAY NOT CHANGE WHEN OPERATED VERY SLOWLY

Bulletin No.: 07-002/20

Last Issued: 04/15/2020

APPLICABLE MODEL(S)/VINS

2019-2020 Mazda3 with automatic climate control 2020 CX-30 with automatic climate control

DESCRIPTION

Some customers may notice that the temperature setting of the automatic climate control may not change when the temperature dial is operated very slowly. Due to improper control logic of the automatic climate control unit (IP-ESU), turning operation may not be detected when the dial is operated very slowly. To eliminate this concern, the IP-ESU software has been modified.

REPAIR PROCEDURE

- 1. Verify customer concern.
- 2. Reprogram the IP-ESU using the Mazda Diagnostic And Repair Software (MDARS). Refer to "MDARS ECU Reprogramming Procedure".

NOTE:

- If the current calibration file name on the ECU FILENAME screen is the same as BDGG-66S12-F or with a later suffix, reprogramming is not necessary.
- After reprogramming, pending DTC P2610:00 [PCM] will be stored without the Check Engine Light ON. Start the engine and clear the DTC.
- After reprogramming, if DTC U2120:00 and/or U2500:82 are stored and the i-ACTIVSENSE warning light (amber) turns ON, refer to SA-036/19.
- 3. Verify the repair.

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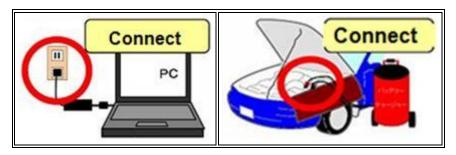
MDARS ECU Reprogramming Procedure

NOTE: This procedure explains a generic reprogramming for all Electrical Control Units (ECU) such as PCM, BCM, ESU, etc. Be aware that some sentences and screen shots below mention a certain control unit such as "PCM" or "BCM" as an example.

ATTENTION: READ ALL CAUTIONS AND NOTES BEFORE AND AFTER REPROGRAMMING!

CAUTION:

- A poor connection between the vehicle and M-MDS and/or low voltage may result in abnormal termination and/or data corruption. A low battery voltage may cause a reprogramming failure resulting in unexpected ECU replacement.
- Make sure that the following connections are firmly connected, then DO NOT touch the VCM and DLC cable to prevent noise and a poor connection.
 - . Between the vehicle-side connector and the DLC cable
 - Between the PC-side connector and the USB port of the PC
- When reprogramming with MDARS, power consumption and voltage fluctuation are greater than with IDS. Use the Power Supply mode in the Battery Management System (GR8) and connect an AC adapter to the PC to stabilize voltage fluctuation.



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BEFORE REPROGRAMMING NOTE:

- Turn off all electrical loads (i.e. A/C blower, audio system, rear defogger and headlights).
- Perform a self-test and verify no DTCs are stored. If any DTCs are stored, repair the concern and delete the DTCs.
- Disconnect any aftermarket accessories (non-genuine Mazda accessories).
- Terminate all programs other than MDARS on the PC. Running other programs may interfere with the MDARS performance, resulting in the PC freezing or other problems.
- Perform reprogramming with a proper internet connection. When using a wireless network, make sure the connection is strong.
- Make sure to keep enough free space on the PC's hard disc. Insufficient free space (less than 1 GB) may result in the PC freezing during reprogramming.
- If MDARS requires Manual PCM Software Number Entry, follow these steps.



a. Look for the small sticker on the PCM that has the software number "**** 18 8K2*" printed on it.





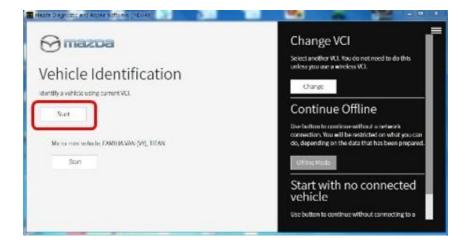
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b. Enter the software number adding "-" instead of a space. **Example:** If "PX06 18 8K2H" is printed, enter "PX06-18-8K2H".

CAUTION:Entering wrong Software Number can lead to inappropriate software downloading and may result in abnormal operation of the vehicle.

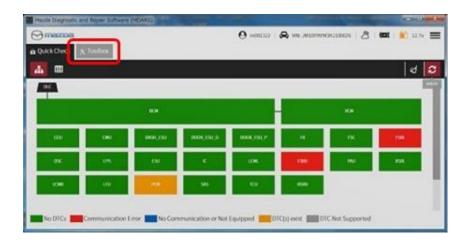


- 1. Connect the M-MDS to the vehicle.
- 2. Launch the Mazda Diagnostic And Repair Software (MDARS).
- 3. Turn the ignition on, then click "Start".



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4. Select the "toolbox" tab.



5. Select Work Support group.

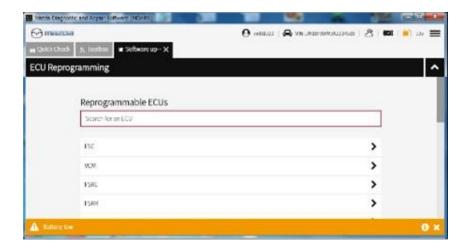


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6. Select "Software update", then click "Run".

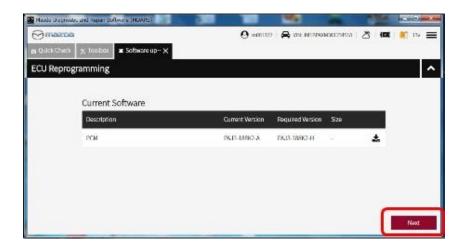


7. Select the ECU to be reprogrammed.

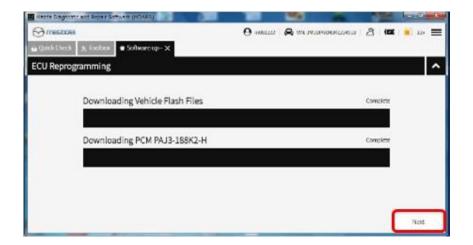


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8. Confirm the current and new software versions, then click "Next". **NOTE:** When reprogramming the BCM, two softwares will be shown.



9. Wait for the download, then click "Next". **NOTE:** When reprogramming the BCM, downloading will occur twice.

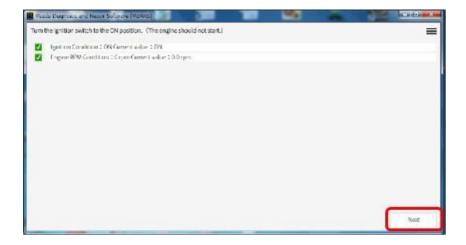


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10. Read the screen instructions, then click "Next".



11. Follow the instructions on the screen, then click "Next".

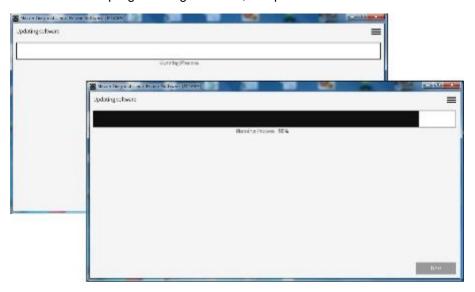


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12. Wait for the reprogramming to complete.

NOTE:

- The progress bar will stay at 90% for 30 seconds. This is not a failure.
- When reprogramming the BCM, this process will occur twice.



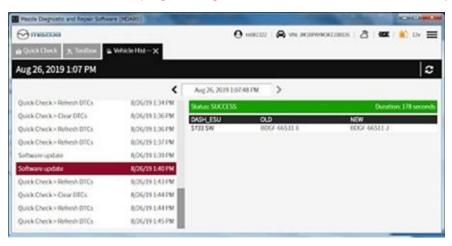
AFTER REPROGRAMMING NOTE:

• Select "Vehicle History" under "Collect Diagnostic Information", then click "Run".



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Confirm the reprogramming on the screen and save the screen copy as a record.



WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	Α
Symptom Code	64
Damage Code	9W
Part Number Main Cause	5555-61-190
Quantity	0
Operation Number / Labor Hours:	XXS29XFX / 0.3 Hrs.

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