Technical Service Bulletin

Mazda North American Operations Irvine, CA 92618-2922



Subject:

REPEATED CLICK SOUND FROM HVAC SYSTEM - (AUTO A/C ONLY)

Bulletin No.: 07-003/20

Last Issued: 07/16/2020

APPLICABLE MODEL

2020 CX-30 vehicles equipped with Auto A/C 2019-2020 Mazda3 vehicles equipped with Auto A/C

DESCRIPTION

Some customers may hear a repeating click sound when using the HVAC system. The click sound may be caused by the air mix doors moving back and forth. This concern has been eliminated by a dash-electrical supply unit control software modification.

REPAIR PROCEDURE

1. Verify customer concern.

NOTE: If any air conditioning system related DTCs are stored, this Service Information is not applicable. Diagnose DTCs according to MGSS online.

2. Reprogram the DASH-ESU using the Mazda Diagnostic And Repair Software (MDARS). Refer to "MDARS - ECU Reprogramming Procedure".

NOTE: If the current calibration file name in the ECU FILENAME screen is the same as shown in the Calibration Files Information or with a later suffix, reprogramming is not necessary.

3. Verify repair.

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 images below mention a certain control unit such as "PCM" or "BCM" as an example.

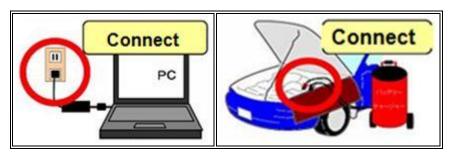
ATTENTION: READ ALL CAUTIONS AND NOTES BEFORE AND AFTER REPROGRAMMING!

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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
- Connect an AC adaptor to the PC in order to minimize any voltage fluctuation during reprogramming. DO NOT use the vehicle battery as a power source for the PC.
- When reprogramming with MDARS, power consumption and voltage fluctuation are greater than with IDS. Connect the GR8 battery charger and use Manual Mode set to 14.5 volts and continuous charging to the vehicle to minimize any voltage fluctuation. DO NOT use any other charger.



BEFORE REPROGRAMMING NOTE:

- Turn off all electrical loads, especially the 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

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



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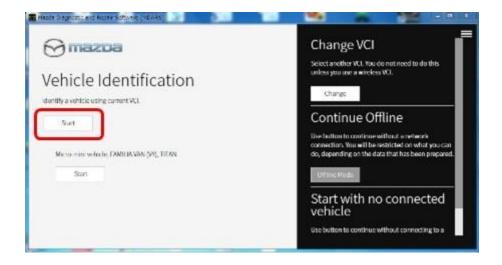
b. Enter the software number adding "-" instead of a space. **Example:** If "PX06 18 8K2H" is printed, enter "PX06-18-8K2H".

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CAUTION: Entering the wrong Software Number leads to incorrect software downloading and may result in abnormal vehicle operation.

- 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".



4. Select the "toolbox" tab.

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5. Select Work Support group.

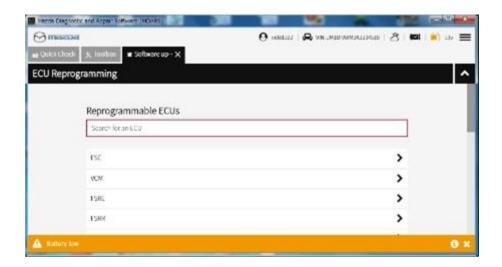


6. Select "Software update", then click "Run".

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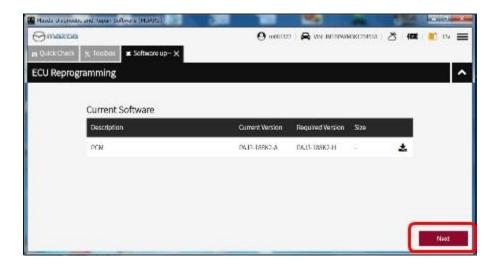
7. Select the ECU to be reprogrammed.



8. Confirm the current and new software versions, then click "Next".

NOTE: When reprogramming the BCM, two (2) softwares will be shown.

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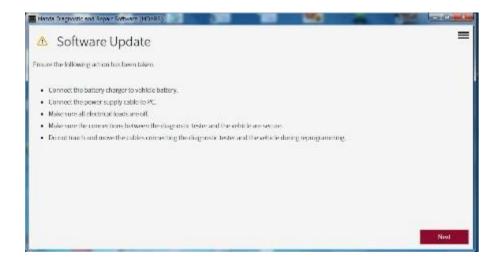
9. Wait for the download, then click "Next".

NOTE: When reprogramming the BCM, downloading will occur twice.

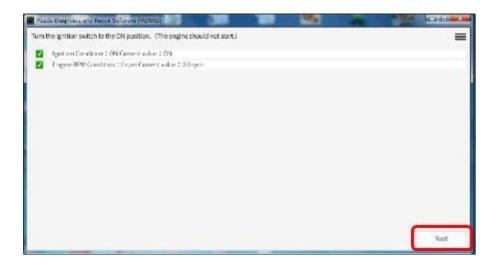


10. Read the screen instructions, then click "Next".

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

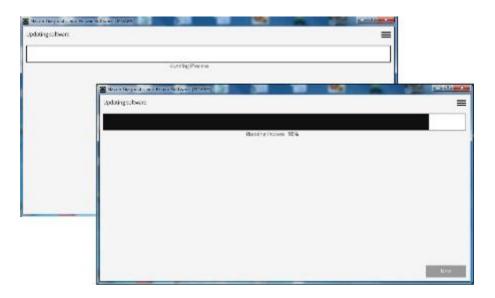


12. Wait for the reprogramming to complete.

NOTE:

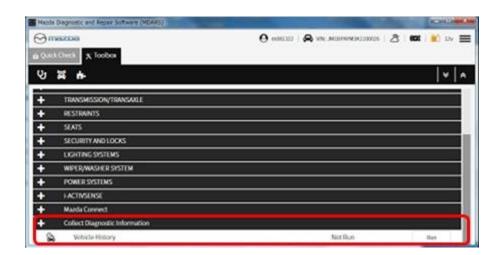
- The progress bar will stay at 90% for 30 seconds. This is not a failure.
- When reprogramming the BCM, this process will occur twice.

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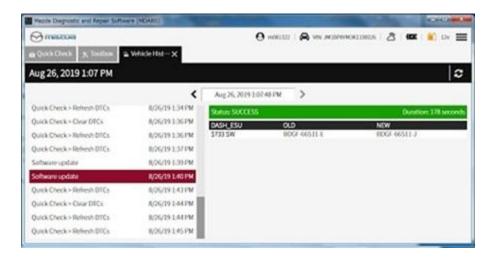
AFTER REPROGRAMMING

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



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

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CALIBRATION INFORMATION

File Name BDGF-66S11-L

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	А
Symptom Code	82
Damage Code	9W
Part Number Main Cause	5555-61-590
Quantity	0

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NOTE:

- After reprogramming, keep a copy of the ECU FILENAME on M-MDS screen along with the repair order and warranty application sheet.
- This bulletin does not apply to vehicles equipped with a manual A/C system.

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