Technical
Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922

MAZDA

Subject:	Bulletin No.: 01-004/20
MASTER WARNING LIGHT ON AND LACK OF POWER WITH DTC P2BF6:00	**Last Issued:** 07/16/2020

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted in Red.

Previously issued TSBs:	Date issued:
01-004/20	06/22/20 and 02/25/20

APPLICABLE MODEL(S)/VINS

2019-2020 Mazda3 vehicles (Japan built) with VINS starting with JM1
2019-2020 Mazda3 vehicles (Mexico built) with VINS lower than 3MZBP******140268 (produced before March 26, 2020)
2020 CX-30 vehicles with VINS lower than 3MVDM******137195 (produced before May 26, 2020)

NOTE: Mexico spec. vehicles are not applicable as they are not equipped with Cylinder Deactivation.

DESCRIPTION

Some customers may experience the master warning light turning on and a lack of power with DTC P2BF6:00 (Exhaust shutter valve position sensor circuit low input (1DC)) stored in memory. This is caused by improper logic written in the PCM for the exhaust shutter valve position sensor.

Customers having this concern should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

1. Verify customer concern.
2. Reprogram the PCM 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.
- After reprogramming, pending DTC P2610:00 [PCM] will be stored without the Check Engine Light ON. Start the engine and clear the DTC.
- If DTC U2120:00 or/and U2500:82 are stored and i-ACTIVSENSE warning light (amber) turns on after the reprogramming, refer to SA-036/19.

3. Clear the DTC, turn the ignition off, and get out of the vehicle.

4. Close and lock the door.

5. Wait for at least ten minutes.

6. Verify the repair by starting the engine and making sure that all warning lights are off.
NOTE: If any DTC should remain after performing a DTC erase, diagnose the DTC according to the instructions on MGSS.

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!

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.**

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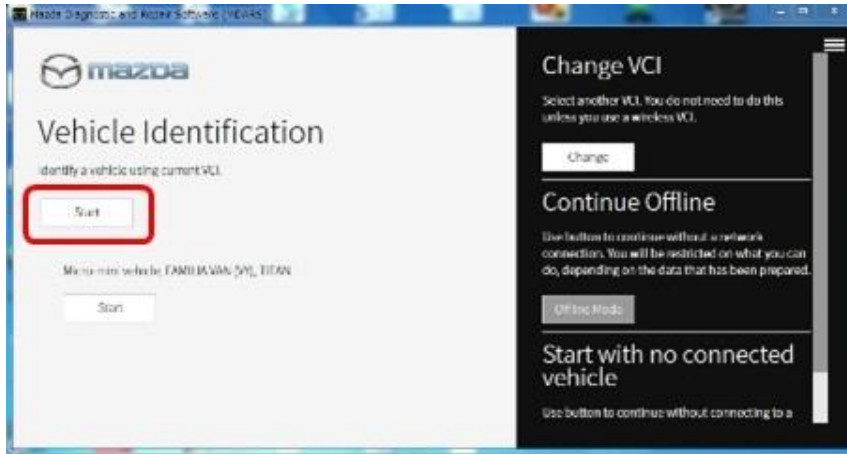
BEFORE REPROGRAMMING
NOTE:

- 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.

1. Connect the M-MDS to the vehicle.

2. Launch the Mazda Diagnostic And Repair Software (MDARS).

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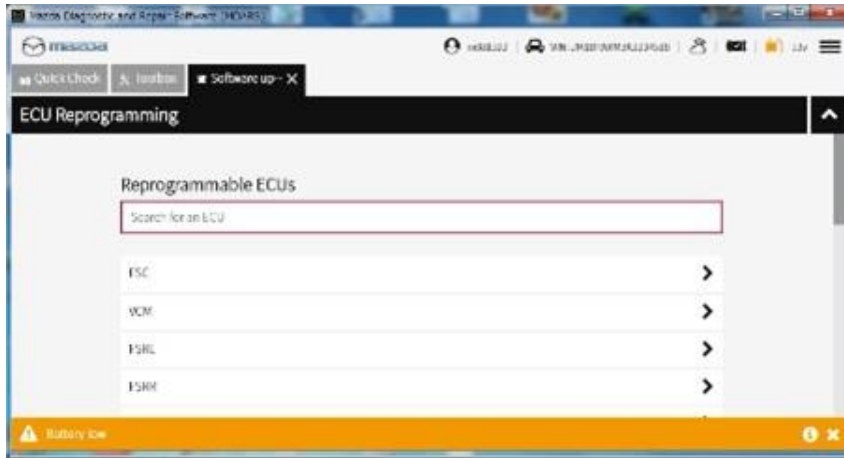
8. Confirm the current and new software versions, then click "Next".
NOTE: When reprogramming the BCM, two softwares will be shown.

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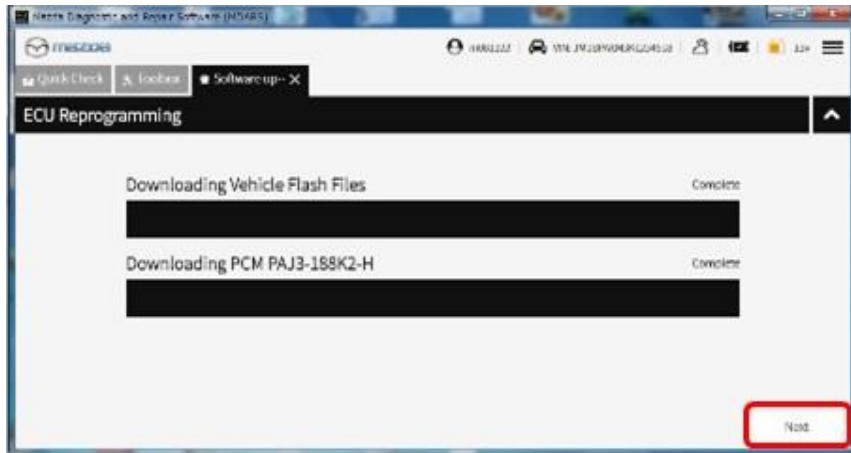
10. Read the screen instructions, then click "Next".

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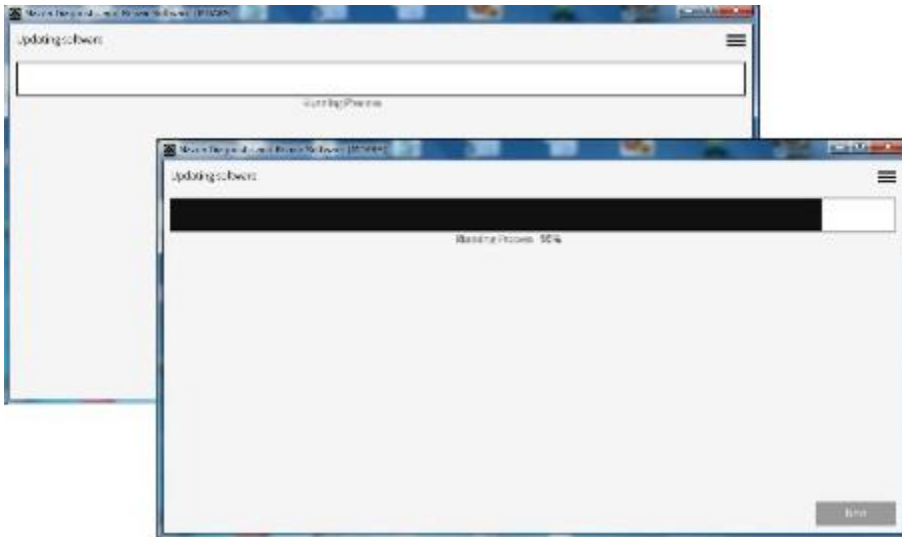
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11. Follow the instructions on the screen, then click "Next".
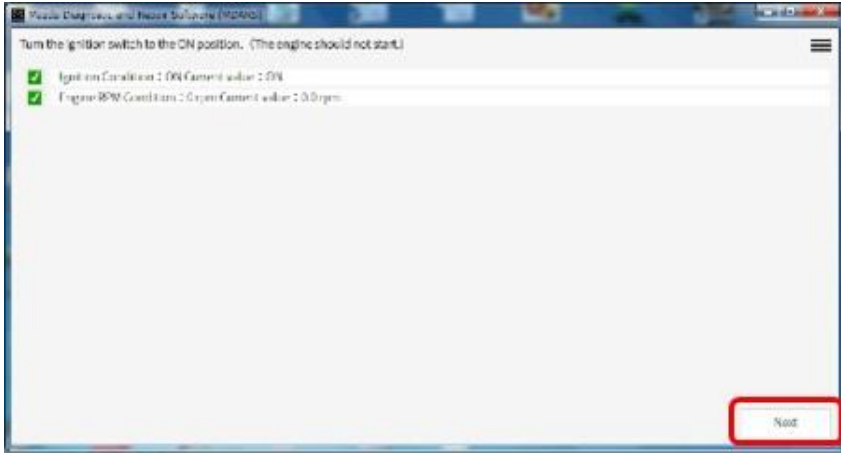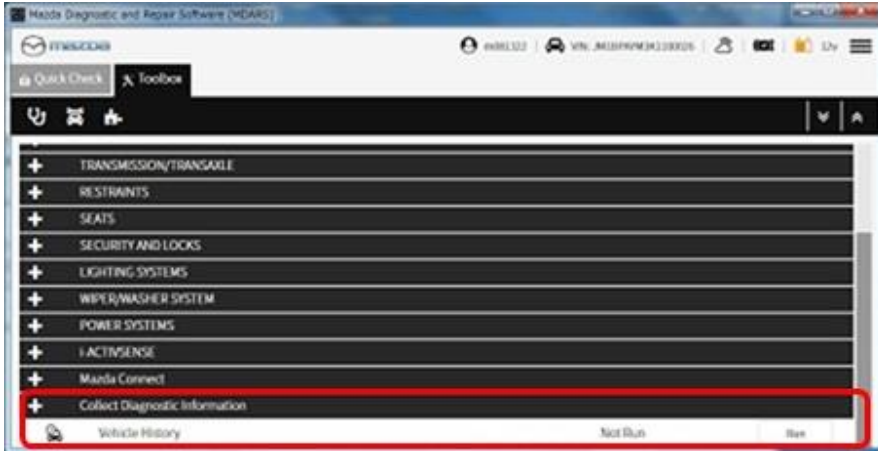

12. Wait for the reprogramming to complete.
NOTE:

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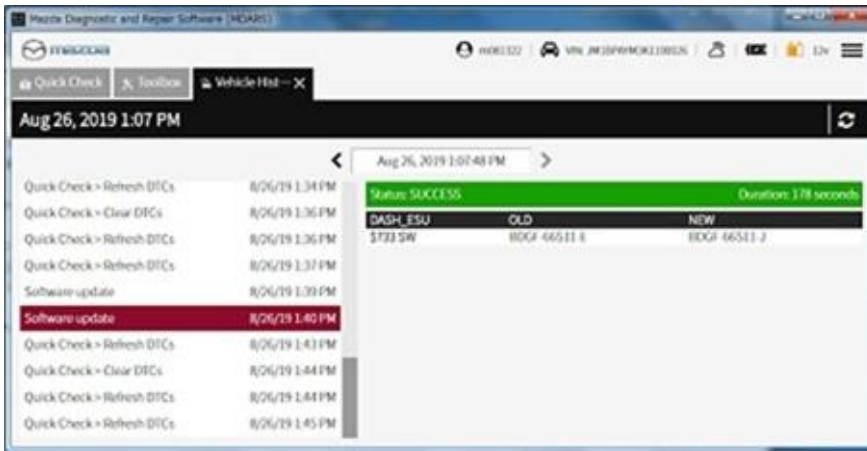- When reprogramming the BCM, this process will occur twice.

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AFTER REPROGRAMMING
NOTE:

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

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

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CALIBRATION INFORMATION

Mazda3
Japan built

Trans-mission	Drive	File Name	PCM
M/T	2WD	PX58-188K2-K	Mitsubishi
		PX59-188K2-K	Denso
A/T	2WD	PX05-188K2-L	Mitsubishi
		PX06-188K2-L	Denso
	4WD	PX07-188K2-N	Mitsubishi
		PX08-188K2-N	Denso

Mexico built

A/T	2WD	PX13-188K2-F	Mitsubishi
		PX14-188K2-F	Denso
	4WD	PX15-188K2-F	Mitsubishi
		PX16-188K2-F	Denso

CX-30

A/T	2WD	PXH7-188K2-D	Mitsubishi
		PXH8-188K2-D	Denso
	4WD	PXJ9-188K2-D	Mitsubishi
		PXK1-188K2-D	Denso

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WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Fed. Emission Warranty.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9W
Part Number Main Cause	5555-18-881
Quantity	0
Operation Number / Labor Hours:	XXS1JXFX / 0.2 Hrs.

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