Technical Service Bulletin

Mazda North American Operations Irvine, CA 92618-2922



Subject:

DISCHARGED BATTERY AFTER VEHICLE IS PARKED FOR MORE THAN 8 HOURS

Bulletin No.: 01-010/20

Last Issued: 12/17/2020

BULLETIN NOTES

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

Previously issued TSBs:	Date issued:
01-010/20	08/11/20

APPLICABLE MODEL(S)/VINS

2019-2021 Mazda3 (Japan built) with VINS lower than JM1BP*****300106 (produced before July 2, 2020) 2019-2021 Mazda3 (Mexico built) with VINS lower than 3MZBP*****200049 (produced before July 2, 2020) 2020 CX-30 with VINS lower than 3MVDM******200264 (produced before July 2, 2020)

DESCRIPTION

Some customers may experience a no start because the battery is discharged after the vehicle is parked for more than 8 hours. This may be caused by one or more of the following, resulting in excessive parasitic draw (dark current) on the battery.

- 1. The vehicle control system may not have gone to sleep because a key fob was left in the vehicle after the ignition switch was turned off and the doors were closed. This is caused by improper BCM control logic which allows a higher parasitic draw (approx. 6A) to continue for approximately 6 minutes until the vehicle control system goes into sleep mode. If the doors are operated frequently for car washing or luggage loading/unloading etc., it prevents the vehicle control system from sleeping during that time.
- 2. The parking lights may have been left on because the warning sound for lights on is a short ding, and it may not be noticed.
- [With Full-Auto A/C] The heater control unit may not have gone to sleep because the hazard warning switch was pressed after the ignition was turned off. This is caused by improper control logic of the heater control unit.

Page **1** of **4**

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Bulletin No.: 01-010/20	Last Issued: 12/17/2020

To correct these concerns:

- The control software of the body control module (BCM) has been modified to shorten the time until
 going into the sleep mode to approximately 2 minutes.
- The control software of the body control module (BCM) has been modified to change the lights on warning sound to a continuous one.
- The control software of the heater control unit has been modified.

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

REPAIR PROCEDURE

1. Verify customer concern.

NOTE:

- If the concerned vehicle is equipped with electric/electronic accessories (especially aftermarket
 ones), the vehicle may not go to sleep mode after the ignition is turned off (depending on the wiring
 method to the power source). On such a vehicle, remove these accessories and then diagnose if
 they are the cause of the concern.
- If the concerned vehicle is equipped with a dash cam that is set to keep running even when the ignition is off (so-called parking mode), the power consumption may result in a drained battery when the vehicle that is not frequently driven.
- 2. [For 2019 Mazda3 5HB with advanced keyless entry] Check if MSP56 has been completed. Has MSP56 been completed?
 - YES: Go to step 3.
 - NO: Perform MSP56, then go to step 5.
- 3. Reprogram the BCM with the Mazda Modular Diagnostic System (M-MDS), using the Mazda Diagnostic And Repair Software (MDARS). Refer to MDARS ECU Reprogramming Procedure.

NOTE: 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.

- 4. [For 2019 Mazda3 5HB with advanced keyless entry] If the BCM needs to be reprogrammed and the current LFU file name is NOT the same as shown in Calibration Files Information or with later suffix, reprogram the LFU. Refer to MDARS ECU Reprogramming Procedure.
- 5. Reprogram the IP-ESU (**CCU** on MDARS) 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 the reprogramming, pending DTC P2610:00 [PCM] may be stored without the CHECK ENGINE light ON. Since this DTC may turn to a current DTC depending on operations after the reprogramming, clear DTC after all repair work done.

Page **2** of **4**

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Bulletin No.: 01-010/20	Last Issued: 12/17/2020

- If DTC U2120:00 or/and U2500:82 are stored and i-ACTIVSENSE warning light (amber) turns on after the reprogramming, refer to SA-043/20.
- If the Welcome Lamp function is accidently activated while using MDARS, it may also cause this concern. Check and correct as necessary. Refer to the SA-054/20 for details.
- 6. Clear the DTC, turn the ignition off, and get out of the vehicle.
- 7. Close and lock the door.
- 8. Wait for at least ten minutes.
- 9. Verify the repair by starting the engine and making sure the Check Engine light is OFF and no abnormal warning lights are ON.

NOTE: If any DTC should remain after performing a DTC erase, diagnose the DTC according to the instructions on MGSS.

CALIBRATION INFORMATION

Spec Mo	Model	Pody	File Name	
	iviouei	ьоцу	BCM_MAIN	BCM_SUB (*)
Japan Built	Mazda3	5HB	BEMD-66S02-S	BCKP-66S03-
		4SD	BCKA-66S02-V	BCKP-66S03-
Mexico Built	Mazda3	4SD	BDTS-66S02-S	BCKP-66S03-
	CX-30	5HB	DGH9-66S02-H	BCKP-66S03-

NOTE(*): For further updated BCM_MAIN file name, BCM_SUB file name may vary.

Cooo	Madal	D = 4	File Name
Spec Model I	воау	LF control unit (LFU)	
All	Mazda3	5HB	BCWK-66S06-E

Snoc	Spec Model	File Name
Spec		Heater control unit (CCU)
All	Mazda3, CX-30	BDGG-66S12-F

Page 3 of 4

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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 Mazda's New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

With BCM Reprogramming:

Warranty Type	А
Symptom Code	64
Damage Code	9W
Part Number Main Cause	5555-67-560
Quantity	0
Operation Number / Labor Hours:	Reprogramming BCM only: XXS4MAFX / 0.3 Hrs. Reprogramming both units: XXS4MBFX / 0.3 Hrs.

Without BCM Reprogramming:

Warranty Type	Α
Symptom Code	64
Damage Code	9W
Part Number Main Cause	5555-61-190
Quantity	0
Operation Number / Labor Hours:	XXS2MXFX / 0.3 Hrs.

Page 4 of 4

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