

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: SURGING AT LOW SPEEDS AND DURING ACCELERATION	Bulletin No.: 05-004/23
	Last Issued : 08/01/2023

BULLETIN NOTES

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

Previous TSBs:	Date(s) Issued:
05-002/20	12/18/20, 09/24/20 and 06/04/20

APPLICABLE MODEL(S)/VINS

2019-2020 Mazda3 (Japan built A/T only) with VINS lower than JM1BP*****163205 (produced before January 11, 2020)

2019-2020 Mazda3 (Mexico built A/T only) with VINS lower than 3MZBP*****131964 (produced before January 11, 2020)

2018-2020 CX-5 with VINS lower than JM3KF*****856447 (produced before July 20, 2020)

NOTE: This TSB only applies to US spec vehicles with cylinder deactivation. Mexico spec vehicles are not applicable since they do not have cylinder deactivation.

DESCRIPTION

Some customers may complain about a surging at low speeds and during acceleration. This surging is in the longitudinal direction, felt about 2 cycles per second, and occurs in the locked up 1st gear. This may be caused by the torque fluctuation and the torsional resonance in the torque converter. To correct this concern, the PCM software has been modified to reduce the torque fluctuation.

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

REPAIR PROCEDURE

1. Verify customer concern.
2. Reprogram the PCM.

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For Mazda3:

Reprogram the PCM 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 shown in Calibration 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.
- After reprogramming, if DTC U2120:00 and/or U2500:82 are stored and the i-ACTIVSENSE warning light (amber) turns ON, refer to SA-043/20.

For CX-5:

Reprogram the PCM with Mazda Modular Diagnostic System (M-MDS) using IDS 120.03 or later software. Refer to IDS PCM Reprogramming Procedure.

NOTE:

- Verify the current PCM file name in the vehicle by log view screen. If it is the same as that in Calibration Files Information or a later one, there is no need to reprogram it.
- Always update the IDS tool first, then the follow on-screen instructions to download the needed calibration file for PCM reprogramming.
- After reprogramming, verify the file name matches with the Calibration Files Information.

3. 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.

CALIBRATION**Mazda3 Japan built**

Transmission	Drive	File Name	Note
AT	2WD	PX05-188K2-L	Mitsubishi
		PX06-188K2-L	Denso
	4WD	PX07-188K2-N	Mitsubishi
		PX08-188K2-N	Denso

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Mazda3 Mexico built

Transmission	Drive	File Name	Note
AT	2WD	PX13-188K2-F	Mitsubishi
		PX14-188K2-F	Denso
	4WD	PX15-188K2-F	Mitsubishi
		PX16-188K2-F	Denso

CX-5

Model Year	Drive	File Name	Note
2018	2WD	PYFA-188K2-K	Mitsubishi
		PYFB-188K2-K	Denso
	4WD	PYFC-188K2-K	Mitsubishi
		PYFD-188K2-K	Denso
2019	2WD	PX42-188K2-D	Mitsubishi
		PX43-188K2-D	Denso
	4WD	PX44-188K2-E	Mitsubishi
		PX45-188K2-E	Denso
2020	2WD	PX2E-188K2-D	Mitsubishi
		PX2F-188K2-D	Denso
	4WD	PX2G-188K2-D	Mitsubishi
		PX2H-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 **Federal Emission Warranty**.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	08
Damage Code	9W
Part Number Main Cause	Mazda3: 5555-18-881 CX-5: 5555-RP-PCM
Quantity	0
Operation Number / Labor Hours:	XXS39XFX / 0.3 Hrs.

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