

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922

**Subject:**

CHECK ENGINE LIGHT ON WITH DTC P061B:00

Bulletin No.: 01-015/19

Last Issued: 08/12/2019

BULLETIN NOTES

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

Previous TSBs:	Date(s) Issued:
01-015/18	08/22/2018 and 10/23/2018

APPLICABLE MODEL(S)/VINS

US Spec.:

2018-2019 Mazda6 vehicles (with coolant control valve) with VINs lower than JM1GL*****505645 (produced before April 22, 2019)

NOTE: Mazda6 vehicles with SKYACTIV-G 2.5T are not applicable to this bulletin.

2018-2019 CX-5 vehicles (with coolant control valve) with VINs lower than JM3KF*****623863 (produced before April 22, 2019)

2019 CX-3 vehicles (with coolant control valve) with VINs lower than JM1DK*****421607 (produced before September 4, 2018)

2019 MX-5 vehicles (without coolant control valve) with VINs lower than JM1ND*****302419 (produced before September 4, 2018)

Mexico Spec.:

2019-2020 Mazda6 vehicles (with coolant control valve) with VINs lower than JM1GL*****508645 (produced before June 27, 2019)

NOTE: Mazda6 vehicles with SKYACTIV-G 2.5T are not applicable to this bulletin.

DESCRIPTION

Some vehicles may experience a lack of power and the check engine light on with DTC P061B:00 stored in PCM memory under one of the following conditions (A or B).

- DTC P061B:00 - [PCM] Internal control module torque calculation performance problem.

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Condition	Condition Description
A	When cranking is interrupted (likely occurs when the brake pedal is released during cranking)
B	When accelerating from 1300-1600 rpm with wide open throttle

Due to an improper control logic of the PCM, the engine torque calculation error detection is too sensitive. To eliminate this concern, the PCM software has been modified.

Explain to the customer:

This is not an actual failure of the engine, but a false detection of the failure caused by **the improper engine control software**. With the false failure, the engine control computer turned on the Fail Safe mode, resulting in reduced engine rpm. To avoid the false detection **in the future**, the engine control software has been updated.

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

REPAIR PROCEDURE

1. Verify the customer concern.

2. **Were any MAF sensor and/or IAT sensor DTC(s) were stored?**

- **Yes:** This TSB does not apply. Diagnose DTC(s) according to the instructions on MGSS online.

- **No:** Proceed to Step 3.

3. **Check the FFD. Was DTC P061B:00 stored during engine cranking or when accelerating from 1300-1600 rpm with wide open throttle?**

- **Yes:** Proceed to Step 4.

- **No:** This TSB does not apply. Diagnose **DTC** according to the instructions on MGSS online.

4. **Refer to the table below and determine if PCM reprogramming is applicable to the subject vehicle.**

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Condition	Condition Description	Model	Reprogram PCM
A	When cranking is interrupted (likely occurs when the brake pedal is released during cranking)	CX-3, MX-5, CX-5, Mazda6	Yes
B	When accelerating from 1300-1600 rpm with wide open throttle	CX-5, Mazda6	Yes
		CX-3, MX-5	No

NOTE: Under Condition B, do not reprogram the PCM on CX-3 or MX-5 models at this time. This bulletin does not apply. Diagnose the vehicle according to the instructions on MGSS online.

5. If the subject vehicle is applicable to this bulletin, reprogram the PCM according to the PCM REPROGRAMMING procedure below.

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PCM REPROGRAMMING:**ATTENTION: READ ALL CAUTIONS AND NOTES BEFORE AND AFTER REPROGRAMMING PCM!****CAUTION:**

- IF IDS DOES NOT HAVE SUFFICIENT BATTERY POWER, THE REPROGRAMMING WILL FAIL.
- PCM DAMAGE MAY OCCUR IF THE CORRECT BATTERY CHARGER SETTING IS NOT USED.
- SET THE BATTERY MANAGEMENT SYSTEM TO "POWER SUPPLY MODE" DURING PCM REPROGRAMMING.
- POWER SUPPLY MODE will maintain proper battery voltages during PCM reprogramming.
- If a different charger is used, MAKE SURE IT DOES NOT EXCEED 20 AMPS. IF IT EXCEEDS 20 AMPS, IT COULD DAMAGE THE PCM.
- The charger **MUST** be connected directly to the vehicle battery.
- It is **NOT** necessary to remove any fuses or relays during PCM reprogramming when the IDS screen prompts you to do so. You may accidentally stop power to one of the PCM terminals and **CAUSE THE PCM TO BE BLANKED**, or you may receive error messages during the IDS reprogramming procedure.
- Start/Stop button vehicles: **DO NOT** press the start/stop button during the reprogramming process.

BEFORE REPROGRAMMING PCM:**NOTE:**

- Verify the current PCM file name in the vehicle by log view screen. If it's the same as shown in the chart(s) below (or a later one), you do not need to reprogram the PCM.
- Always update the IDS tool first, then follow on-screen instructions to download the needed calibration file for PCM reprogramming.
- If the vehicle exhibits any trouble codes or driveability symptoms, diagnose and repair using **MGSS** **BEFORE** attempting to reprogram the PCM.
- When reprogramming a PCM, IDS will always display the "latest" calibration P/N available for that vehicle. If any calibration has been revised/updated to contain new information for a new service concern, it will also contain all previously released calibrations.
- Confirm the DLC cable is in good condition before attempting to reprogram the PCM.

PCM REPROGRAMMING:

1. Reboot the IDS to clear memory before reprogramming.
2. Using the latest IDS Software available, reprogram the PCM to the latest calibration (refer to "Calibration Information" table) by following the "Module Reprogramming" procedure.
3. Verify the file name matches with the Calibration chart(s) below.
4. Clear all DTCs.
5. Start the engine and confirm that no warning lights stay on.
6. Record the customers radio presets from the infotainment system.
7. Disconnect the negative battery cable and wait at least 30 seconds to reset the fuel control learning data.
8. Re-connect the negative battery cable.
9. Re-enter the customers presets into the infotainment system.

AFTER REPROGRAMMING PCM:**NOTE:**

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- IDS shows the calibration part numbers after programming the PCM.
- If any DTCs should remain after performing DTC erase, diagnose the DTC0 using MGSS online instructions and submit a warranty claim according to the normal warranty procedure.
- Be aware that PCM calibration part numbers and file names listed in any Service Bulletin may change due to future releases of IDS software, and additional revisions made to those calibrations for service related concerns.

CALIBRATION INFORMATION

Mazda6 (US and Mexico Spec.):

MY	Engine	Transmission	File Name	Note
US 2018	2.5L	M/T	PYH1-188K2-J	---
		A/T	PYH2-188K2-J	w/o Cylinder Deactivation
			PYH3-188K2-L	with Cylinder Deactivation
US 2019	2.5L	M/T	PXD6-188K2-C	---
		A/T	PXD7-188K2-C	w/o Cylinder Deactivation
			PXD8-188K2-C	with Cylinder Deactivation
Mexico 2019	2.5L	A/T	PYH5-188K2-G	---
Mexico 2020			PXD9-188K2-B	---

NOTE: Mazda6 vehicles with SKYACTIV-G 2.5T are not applicable.

2018 CX-5 (US Spec. Only):

Engine	Transmission	Drive	File Name	Note
2.0L	M/T	2WD	PEL1-188K2-E	Mitsubishi
			PEL2-188K2-D	Denso
2.5L (w/o Cylinder Deactivation)	A/T	2WD	PYH9-188K2-F	Mitsubishi
			PYJ1-188K2-E	Denso
		4WD	PYJ2-188K2-F	Mitsubishi
			PYJ3-188K2-E	Denso
2.5L (with Cylinder Deactivation)	A/T	2WD	PYFA-188K2-J	Mitsubishi
			PYFB-188K2-J	Denso
		4WD	PYFC-188K2-J	Mitsubishi

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			PYFD-188K2-J	Denso
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2019 CX-5 (US Spec. Only):

Engine	Transmission	Drive	File Name	Note
2.0L	M/T	2WD	PAL9-188K2-C	Mitsubishi
			PAM1-188K2-B	Denso
2.5L (w/o Cylinder Deactivation)	A/T	2WD	PX46-188K2-C	Mitsubishi
			PX47-188K2-B	Denso
		4WD	PX48-188K2-C	Mitsubishi
			PX49-188K2-B	Denso
2.5L (with Cylinder Deactivation)	A/T	2WD	PX42-188K2-C	Mitsubishi
			PX43-188K2-C	Denso
		4WD	PX44-188K2-D	Mitsubishi
			PX45-188K2-D	Denso

CX-3 (US Spec. Only):

Emission	Transmission	Drive	File Name
Cal	M/T	2WD	PA01-188K2-E
	A/T	2WD	PA02-188K2-E
		4WD	PA03-188K2-E
Fed	M/T	2WD	PAD7-188K2-E
	A/T	2WD	PAD8-188K2-E
		4WD	PAD9-188K2-E

MX-5 (US Spec. Only):

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Body	Transmission	File Name
Convertible Top	M/T	PAD2-188K2-C
	A/T	PAC6-188K2-C
Retractable Fastback	M/T	PAD4-188K2-B
	A/T	PAD5-188K2-C

NOTE: It is not necessary to order a PCM part for this repair procedure.

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 (long term).
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9W
Part Number Main Cause	5555-RP-PCM
Quantity	0
Operation Number / Labor Hours:	XXP7YXFX / 0.3 Hrs.

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