

# Technical Service Bulletin

Mazda North American Operations  
Irvine, CA 92618-2922

**Subject:**

**CHECK ENGINE LIGHT ON WITH DTC P061B:00, U0401:00 (AND U0442:00) WHEN ENGINE CRANKING IS INTERRUPTED**

**Bulletin No.:** 01-015/18

**Last Issued:** 10/23/2018

## BULLETIN NOTES

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

## APPLICABLE MODEL(S)/VINS

2018 Mazda6 vehicles with VINs lower than JM1GL\*\*\*\*\*320486 (produced before June 18, 2018)

2018 CX-5 vehicles with VINs lower than JM3KF\*\*\*\*\*432561 (produced before June 14, 2018)

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

2019 MX-5 vehicles with VINs lower than JM1ND\*\*\*\*\*302419 (produced before September 4, 2018)

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

**NOTE:** Mexico spec. vehicles are not applicable.

## DESCRIPTION

Some vehicles may experience a lack of power and the check engine light on with DTC P061B:00 and U0401:00 stored in the PCM memory when engine cranking is interrupted and on A/T vehicles, DTC U0442:00 is also stored. This concern most likely occurs when the brake pedal is released during engine cranking.

- DTC P061B:00 - [PCM] Internal control module torque calculation performance problem
- DTC U0401:00 - Signal error from PCM
- DTC U0442:00 - [TCM] Invalid data received from PCM

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.

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

## REPAIR PROCEDURE

1. Verify customer concern.
2. Check if any DTC(s) for the MAF sensor or IAT sensor were stored.
  - If Yes: This TSB does not apply. Diagnose according to the instructions on MGSS online.

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- If No: Proceed to the next step.
- 3. Check the FFD for DTC P061B:00 was stored during engine cranking.
  - If Yes: Proceed to the next step.
  - If No: This TSB does not apply. Diagnose according to the instructions on MGSS online.
- 4. If it is determined the vehicle is applicable to this TSB, reprogram the PCM with Mazda Modular Diagnostic System (M-MDS).

**Explain to the customer:**

This is not an actual failure of the engine but a false detection of the failure caused by the brake pedal being released during engine cranking. With the false failure, the engine control computer turned on the Fail Safe mode resulting in reduced engine rpm. To avoid the false detection, the engine control software has been updated.

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**PCM Reprogramming:**

1. Verify the customer concern.
2. Reboot the IDS to clear memory before reprogramming.
3. Using IDS **111.03** or later software, reprogram the PCM to the latest calibration (refer to "Calibration Information" table) by following the "Module Reprogramming" procedure.

**NOTE:**

- Always update the IDS tool first, then follow on-screen instructions to download the needed calibration file for PCM reprogramming.
- 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.
- IDS shows the calibration part numbers after programming the PCM.
- Please 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.
- 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/issue, it will also contain all previously released calibrations.
- Start/Stop button vehicles only: DO NOT press the start/stop button during the reprogramming process.
- When performing this procedure, we recommend using the "Power Supply" mode in the Battery Management System to keep the vehicle battery up to capacity. If a different charger is used, make sure it does not exceed 20 AMPS. If it exceeds 20 AMPS, it could damage the VCM.

4. After performing the PCM reprogramming procedure, clear DTCs.
5. After clearing DTCs, start the engine and confirm that no warning lights stay on.
6. Record customer presets in the infotainment system.
7. Disconnect the negative battery cable and wait for 30 seconds or more to reset the fuel control learning data.
8. Re-connect the negative battery cable.
9. Re-enter customer presets in infotainment system.

**NOTE:**

If any DTCs should remain after performing DTC erase, diagnose the DTCs using MGSS online instructions and submit a warranty claim according to the normal warranty procedure.

**CALIBRATION INFORMATION****Mazda6**

| Engine                         | Transmission | File Name    | Note |
|--------------------------------|--------------|--------------|------|
| 2.5L w/o Cylinder Deactivation | M/T          | PYH1-188K2-D | ---  |
|                                | A/T          | PYH2-188K2-D | ---  |

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|                                 |     |              |     |
|---------------------------------|-----|--------------|-----|
| 2.5L with Cylinder Deactivation | A/T | PYH3-188K2-E | --- |
|---------------------------------|-----|--------------|-----|

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

### CX-5

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

### CX-3

| Emission | Transmission | Drive | File Name    | Note |
|----------|--------------|-------|--------------|------|
| 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

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| Body                 | Transmission | File Name    | Note |
|----------------------|--------------|--------------|------|
| 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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