

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: CHECK ENGINE LIGHT ON WITH DTC P0504:00	Bulletin No.: 01-001/24
	Last Issued : 01/31/2024

BULLETIN NOTES

This bulletin supersedes the previously issued SA listed below. The changes are noted in Red.

Previous TSB/SA:	Date(s) Issued:
01-001/24	01/02/24
SA-062/23	10/16/23

APPLICABLE MODEL(S)/VINS

2024 CX-90 (H3T MHEV and PHEV) with VINS lower than JM3KK*****148358 (produced before November 3, 2023)

DESCRIPTION

Some vehicles may exhibit check engine light turns on with DTC P0504:00 [PCM] (Brake switch circuit problem) stored in memory. This may be caused by the PCM incorrectly reading the brake switch input. To eliminate this concern, the control software of the PCM has been modified.

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

REPAIR PROCEDURE

1. Verify the customer concern.
2. If not performed yet, perform campaign program 6323J, including reprogram of the PCM, and claim the labor hours to the campaign program.
3. Reprogram the PCM with the Mazda Modular Diagnostic System (M-MDS), using Mazda Diagnostic And Repair Software (MDARS). Refer to MDARS ECU Reprogramming Procedure.

NOTE:

- **Be sure to submit ODR data as it is a required item and will be checked during warranty claim submission. Instructions can be found under M-MDS -> MDARS (Uploading ODR Data).**
- Depending on the current software versions, both the PCM and the ECM may be reprogrammed automatically.
- Reprogramming is not necessary if current calibration file name in the ECU FILENAME screen is the same as shown in Calibration Files Information or with later suffix.
- The parameter "Battery State of Charge (SOC)" is reset during PCM reprogramming procedure.
- Since the SOC value is necessary when performing "Battery condition initialization setting" after PCM reprogramming to decide whether battery charging is necessary or not, measure and record the PID "BATT_SOC" first by using M-MDS Data logger function before reprogramming the PC

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- 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 is done.
4. After reprogramming, conduct the battery condition initial setting (i-stop setting) according to the instructions in MGSS (BATTERY CONDITION INITIALIZATION SETTING (i-stop SETTING)).
 5. Clear the DTC and turn the ignition off and get out of the vehicle.
 6. Close and lock the door then wait ten minutes or more.
 7. Verify the repair by starting the engine and confirming there is no CHECK ENGINE light ON or abnormal warning lights present.

NOTE [Except PHEV]: If any DTCs should remain after deleting DTC, diagnose the DTCs according to the appropriate Troubleshooting section in MGSS.

NOTE [PHEV]:

- DO NOT start the engine with connected 12V battery charger because the power supply from the DCDC converter and the power supply from the 12V battery charger may interfere then warning light comes up and DTCs are stored.
- If any DTCs should remain after deleting DTC, diagnose the DTCs according to the appropriate Troubleshooting section in MGSS.

CALIBRATION

Model	Power-train	ECU	File Name (Old)	File Name (New)	Note
KK	H3T (3.3L)	PCM	H301-188K2-M	H301-188K2-N*	Regular fuel
			H302-188K2-M	H302-188K2-N*	Premium fuel
	PHEV	PCM	MS05-186K2-N	MS05-186K2-S	Without 1500W A C power outlet
			MS06-186K2-N	MS06-186K2-S	With 1500W AC power outlet
		ECM	PXRC-188K2-N	PXRC-188K2-R	

*: MDARS will load the correct PCM software automatically, depending on the engine.

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

Warranty Type	A
Symptom Code	6X
Damage Code	9W
Part Number Main Cause	[PHEV] 5555-18-6B1 [except PHEV] 5555-18-881
Quantity	0
Operation Number / Labor Hours:	XXWK3XFX / 0.3 Hrs.

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