

# Technical Service Bulletin

Mazda North American Operations  
Irvine, CA 92618-2922



<b>Subject:</b>  BATTERY AND ENGINE WARNING WITH DTC P0A7A:00(ISG), P1BC5:00(ISG)	<b>Bulletin No.:</b> 01-004/25
	<b>Last Issued :</b> 05/21/2025

## BULLETIN NOTES

### APPLICABLE MODEL(S)/VINS

2022-2023 CX-30 (Mexico built) vehicles with VINs lower than 3MV DM\*\*\*\* \*\* 589402 (Produced before Sept. 1, 2023)  
2022-2023 Mazda3 (Mexico built) vehicles with VINs lower than 3MZ BP\*\*\*\* \*\* 385892 (Produced before Sept. 11, 2023)

## DESCRIPTION

Some customers may experience the battery and engine warning lights illuminating with following DTC being stored.

P0A7A:00 (ISG)	Integrated starter generator (ISG) (internal stator coil driver circuit) U-phase, V-phase, W-phase: Malfunction detected
P1BC5:00 (ISG)	Integrated starter generator (ISG) (internal stator coil driver circuit) X-phase, Y-phase, Z-phase: Malfunction detected

This concern is caused by improper overcurrent detection logic of the DTC. To eliminate this concern, the Integrated Starter Generator (ISG) control software has been modified to optimize the threshold for DTC detection.

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

## REPAIR PROCEDURE

1. Verify the customer concern.
2. Reprogram the Integrated Starter Generator (ISG) 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 Diagnostic Information (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 Diagnostic Information (ODR) Data).**

3. Clear any other DTCs.
4. Verify the repair by starting the engine (READY ON) and confirming there is no CHECK ENGINE light ON or abnormal

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warning lights present.

**Explanation to Customer Regarding Avg. Fuel Economy:**

Any ECU reprogramming resets the BCM's average fuel economy (remaining mileage). Therefore, the remaining mileage may change when the customer drives the vehicle after reprogramming. After learning the customer's average fuel consumption (calculated over several drives), the remaining mileage will be correctly displayed.

**CALIBRATION**

ECU	File Name (Old)	File Name (New)	Actual time to reprogram
ISG	PAK9-18WF2-G or before	PAK9-18WF2-H or later	4 min
	PGJD-18WF2-	PGJD-18WF2-A or later	
	PW1J-18WF2	PW1J-18WF2-A or later	
	PY29-18WF2	PY29-18WF2-A or later	
	HF5W-18WF2	HF5W-18WF2-A or later	

**NOTE:** This Service Information is only applicable for vehicles using the calibration files listed in the table above.

**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 Basic Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9W
Causal Part No.	5555-18-F00
Quantity	0
Operation No. and Labor Hours	XXX27XFX / 0.3 Hrs.

**NOTE:** After reprogramming, be sure to keep a copy of the ECU FILENAME screen on M-MDS, along with the repair order and warranty application sheet.

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