

Service Information

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Category F	Repair Guidance	Ref. No. R018/14	Page 1 of 3
Coverage <input type="checkbox"/> Distributor only <input checked="" type="checkbox"/> Please inform your dealers		Date Issued February 11, 2014	
Please convey this information to your <input type="checkbox"/> Director <input checked="" type="checkbox"/> General Manager <input checked="" type="checkbox"/> Warranty Dept. <input checked="" type="checkbox"/> Parts Dept. <input checked="" type="checkbox"/> Training Dept. <input checked="" type="checkbox"/> Field Rep.		Date Revised	
Applicable Model CX-5 (KE)		Applicable Countries or Specifications Europe	

Subject: i-stop warning light (Amber color) flashing with a message “Battery Management System Inspection Required” and DTC P0A8D:00 stored in memory

DESCRIPTION

When an engine is re-started after i-stop condition, some vehicles may experience that i-stop warning light (Amber color) flashes and the message “Battery Management System Inspection Required” is displayed in the instrument cluster. DTC P0A8D:00 is stored in memory.

P0A8D:00 Power supply system circuit low input

CAUSE

Improper control logic of the PCM.

MASS PRODUCTION CHANGE

The control logic of the PCM has been changed.

SUBJECT VIN & PRODUCTION DATE RANGE

EU Spec.

JMZKE**1* ** 224065	May 27, 2013 (SH)
JMZKE**2* ** 224065	May 27, 2013 (SH)
JMZKE**3* ** 212112	April 2, 2013 (PY)
JMZKE**7* ** 212112	April 2, 2013 (PE)

REPAIR PROCEDURE

Note: 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 PCM.

1. Perform troubleshooting for the DTC P0A8D:00 following the workshop manual
2. If there is no abnormality found by the step 1, reprogram the PCM with Mazda Modular Diagnostic System (M-MDS) using IDS 88.03 or later software.

Note:

- Verify the current PCM file name in the vehicle by log view screen. If it is the same as that in the below chart or later one, you do not need to reprogram it.
Note: See the note if available in the table for the file name suffix that the improvement is effective from.
- Always update the IDS tool first, then follow on-screen instructions to download the needed calibration file for PCM reprogramming.
- Follow the attached “Service Caution for reprogramming”.
- After the reprogramming, verify the file name if it matches with in the below chart.

Calibration Files Information

Spec	EGN	TM	Drive	File Name	Kickdown switch	Note	
Europe	PE	MT	2WD	PE1T-188K2-J	-	Denso Improvement effective from the suffix "H".	
				PE03-188K2-K		Mitsubishi Improvement effective from the suffix "J".	
			PE1W-188K2-J	Denso Improvement effective from the suffix "H".			
			PE1R-188K2-K	Mitsubishi Improvement effective from the suffix "J".			
		AT	4WD	PE1X-188K2-H	Without	Denso Improvement effective from the suffix "G".	
				PE1S-188K2-J		Mitsubishi Improvement effective from the suffix "H".	
			4WD	PECB-188K2-C	With	Denso Improvement effective from the suffix "B".	
				PEAX-188K2-C		Mitsubishi Improvement effective from the suffix "B".	
	SH (Low)	MT	2WD	-	SH01-188K2-T	-	Improvement effective from the suffix "S".
			4WD		SH1A-188K2-T		
		AT	2WD	SH02-188K2-S	Without	Improvement effective from the suffix "R".	
				SH3E-188K2-F	With	Improvement effective from the suffix "E".	
			4WD	SH1B-188K2-S	Without	Improvement effective from the suffix "R".	
				SH3F-188K2-F	With	Improvement effective from the suffix "E".	
	SH (High)	MT	4WD	-	SH1J-188K2-T	-	Improvement effective from the suffix "S".
		AT	4WD	Without	SH1K-188K2-S	Without	Improvement effective from the suffix "R".
				With	SH3G-188K2-F	With	Improvement effective from the suffix "E".
	Russia	PE	MT	2WD	PE2X-188K2-J	-	Denso Improvement effective from the suffix "H".
PE2W-188K2-K					Mitsubishi Improvement effective from the suffix "J".		
2WD				PE3D-188K2-H	Without		Denso Improvement effective from the suffix "G".
				PE3C-188K2-J			Mitsubishi Improvement effective from the suffix "H".
4WD			PE3B-188K2-H	Denso Improvement effective from the suffix "G".			
			PE2J-188K2-J	Mitsubishi Improvement effective from the suffix "H".			
AT			2WD	PECC-188K2-C	With	Denso Improvement effective from the suffix "B".	
				PEBA-188K2-C		Mitsubishi Improvement effective from the suffix "B".	
			4WD	PECD-188K2-C		Denso Improvement effective from the suffix "B".	
				PEBB-188K2-C		Mitsubishi Improvement effective from the suffix "B".	
PY		4WD	PY5F-188K2-D	Denso Improvement effective from the suffix "C".			
			PY11-188K2-D	Mitsubishi Improvement effective from the suffix "C".			
		SH (High)	AT	4WD	With	SH3N-188K2-E	With

3. After PCM reprogramming, conduct the battery condition initial setting (i-stop setting) following the workshop manual "BATTERY CONDITION INITIALIZATION SETTING (i-stop SETTING)".

WARRANTY INFORMATION

This warranty information applies only to verified customer complaint ON VEHICLE eligible for warranty repair.

Assembly group		F – Fuel and Emission Control
Subassembly group		08 – EMISSION CONTROL
Symptom Code		6X
Damage Code		9W
DTC Code		P0A8D
Causal Part No.		5555 RP PCM
Q'ty		0
Operation No. & Labor Hours	PCM, Reprogramming	XXK51AFX 0.3 Hrs.
	* Reprogramming * Battery Electrolyte Gravity Inspection (once).	XXK51BFX 0.4 Hrs.
Period Covered		Normal warranty period

After the reprogramming, be sure to keep the copy of "Log Viewer" screen on M-MDS along with the repair order and warranty application sheet, until the vehicle's warranty period expires. Please refer to S/I E005/10.

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Technical Service Dept.
Mazda Motor Corporation
1D91232435 (MC Internal Use)

-Attachment- Service Caution for Reprogramming

CAUTION

- **Perform reprogramming only when the concern matches to the condition described on Service Information. Unnecessary reprogramming may change drive feeling and result in customer complaint.**
- **Do NOT perform reprogramming with modules which are taken from other vehicles and installed on the repaired vehicle. There is a possibility that the engine will not start.**

1. Regular maintenance requirements for PC.

- Verify that the latest M-MDS software is installed on the PC.
- Make sure to keep proper free space on the PC's hard disc. Insufficient free space (less than 1 GB) may result in PC freeze during reprogramming.

2. Attentions for PC operation.

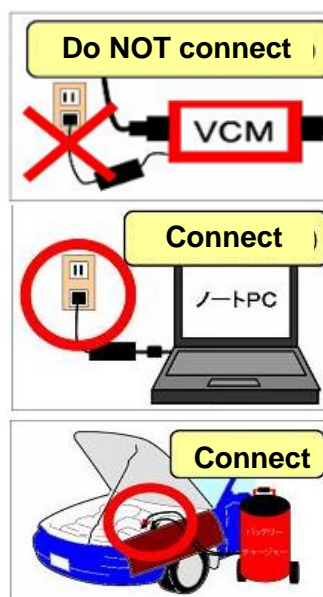
- When following M-MDS instructions such as "Select YES/NO", "Turn IG on" etc., carefully read the instructions first then acts the next operation correctly. Too quick action will cause incorrect selection/ key touching and the following PC freeze. Wait for a few seconds and then select and press correct button.
- Terminate all programs other than IDS on the PC. Or, it will take longer time for reprogramming, PC may freeze or it will cause any other problem.
- Perform reprogramming under proper Internet environment. Especially when using wireless network, make sure to have good connection.
- Set the power management of the PC to 'Always ON'.

3. Before reprogramming

- For vehicles equipped with i-stop, the parameter "Battery State of Charge" is reset during the PCM reprogramming procedure, but it is needed for "Battery condition initialization setting (i-stop setting)" to decide whether battery charging is necessary or not. Therefore check and record the PID BATT_SOC inside the PCM first by using M-MDS Data logger function before reprogramming the PCM.

- Low voltage may result in abnormal termination and/or PCM (TCM) data corruption. Please check following items.

- Do NOT connect AC adapter to VCM when M-MDS is communicating with a vehicle.
- Connect AC adapter to the PC in order to stabilize voltage fluctuation during reprogramming (Do NOT use vehicle battery outlet as power source for the PC).
- Connect battery charger (charge current maintained within 10 to 15A) to the vehicle to stabilize voltage fluctuation.
- Make sure to turn off all the electrical loads. (Especially A/C (blower), audio, rear defogger and headlights).
- Disconnect all non-genuine aftermarket electrical parts and modifications.



4. During reprogramming

- On some models, the meter illumination turns off during reprogramming. This is normal operation.
- Do not touch the VCM and DLC cable to prevent noise occurrence and bad connection.

5. After reprogramming

- After reprogramming, delete all DTCs, then perform self-test and verify no DTC is stored.
 - Note:** After reprogramming, communication error related DTCs may be stored. This is normal operation and you can delete these DTCs.
 - Note:** In some cases the vehicle may set U-codes that will not clear and the engine will not shut off. To correct this concern, disconnect the F-45 (30 amp ABS fuse) for 10 seconds, then recheck. The F-45 fuse is located in the F-01 fuse block on the left side of the engine compartment.
- Please close the session once even when you continue the reprogramming on another same model.
 - Note:** Even with the same model, the applicable reprogramming file may be different depending on the equipment type/level of transmission, immobilizer, etc.
- Please confirm the file name on the "Log Viewer" screen after reprogramming.

NOTE:
After reprogramming, once close the session. Then, open a new session again and go to the "Log Viewer" screen on which the programmed file name is displayed as shown in figure. Take the screen copy and keep it with the reprogramming date written on it.

Filename (PCM):
SW-**LFCAEA000**

LFCA : Base No.
A : Suffix

Please verify the suffix is same or later than the Service Information.

Filename (PCM):
PE7B-188K2-D

PE7B-188K2 : Base No.
D : Suffix

Please verify the suffix is same or later than the Service Information.

Filename (TCM):
PE25-21PS1-A

PE25-21PS1 : Base No.
A : Suffix

(TCM) FILENAME = PE25-21PS1-A
(TCM) HARDWARE_NUM = FZ21-18ZB7-
Standard Equipment Modules - Pass - (TCM)

<Caution for vehicle with i-stop>

- For vehicles equipped with i-stop, perform "battery condition initial learning" after reprogramming, or i-stop does not function.