



Subject: ENGINE OVERHEATING	Bulletin No.: 01-023/19
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APPLICABLE MODEL(S)/VINS

2018-2019 Mazda6 with SKYACTIV-G 2.5T

DESCRIPTION

Some vehicles may exhibit engine overheating with one or more of the following symptoms:

- "EXCESSIVE ENGINE TEMPERATURE: ENGINE OUTPUT WILL BE LIMITED" displayed in the instrument cluster
- Red overheating indicator illuminated
- Engine temperature gauge reading in the red zone (260°F / 126°C or more)

NOTE: This condition usually happens when the vehicle is in stop and go traffic.

This is caused by the cooling fan not running properly due to improper control software of the Powertrain Control Module (PCM), resulting in high coolant temperature. To correct this issue, the control software of the Powertrain Control Module (PCM) has been modified.

REPAIR PROCEDURE

1. Verify the customer concern.
2. Reprogram the PCM according to the PCM REPROGRAMMING procedure below.
3. Verify repair.

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**

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REPROGRAMMING.

- **POWER SUPPLY MODE** will maintain proper battery voltages during PCM reprogramming.

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- 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:

- IDS shows the calibration part numbers after programming the PCM.
- If any DTCs should remain after performing DTC erase, diagnose the DTC 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.

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CALIBRATION INFORMATION

US spec.

File Name	MY
PYH7-188K2-D	2018
PXH4-188K2-B	2019
PX4C-188K2-A	2020

Mexico spec.

File Name	MY
PYH8-188K2-D	2019
PXH5-188K2-B	2020

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 or CA Emission Warranty (short 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:	XXRBDXFX / 0.3 Hrs

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