| Subject： | Bulletin No：01－010／13 |
| :--- | :--- |
| MAZDA SERVICE PROGRAM（MSP39）－MIL ILLUMINATION WITH DTC P0126：00 |  |

## BULLETIN NOTE

－This bulletin supersedes the previous bulletin 01－010／13，issued on 03／01／13．The APPLICABLE MODEL（S）／ VINS and VEHICLE INSPECTION PROCEDURE has been revised．
－Changes are noted below in Red beside the change bar．

## APPLICABLE MODEL（S）／VINS

2013－2014 CX－5 vehicles equipped with an automatic transmission and produced from September 7， 2012

## I through February 28， 2013

－VIN Range（2013MY）：JM3KE＊＊＊＊D0 148076－169134
－VIN Range（2014MY）：JM3KE＊＊＊＊E0 300040－327150
2014 Mazda6 vehicles produced from October 25， 2012 through February 22， 2013
－VIN Range：JM1GJ1＊5＊E1 100027－112472

## DESCRIPTION

On certain subject vehicles，the malfunction indicator light（MIL）may illuminate with DTC P0126：00（thermostat stuck open）stored in the powertrain control module（PCM）memory．The thermostat functions normally，but the ＂thermostat stuck open＂condition is mistakenly detected due to inappropriate PCM software．
This concern will occur under the following conditions：
－When driving on highways／freeways immediately after a cold start
－When the ambient temperature is 14 to 32 degrees $F$（ -10 to 0 degrees $C$ ）
－When operating the HVAC system in the maximum airflow mode

## NOTE：

－UNDER THE MAZDA SERVICE PROGRAM（MSP39），ALL CURRENT DEALER INVENTORY AND RETAILED VEHICLES FOUND TO BE WITHIN THE ABOVE VIN RANGES AND PRODUC－ TION DATE RANGES MUST BE REPAIRED ACCORDING TO THE INSTRUCTIONS CONTAINED IN THIS SERVICE BULLETIN．
－BEFORE PERFORMING ANY REPAIR，VALIDATE THAT THE VEHICLE IS APPLICABLE TO THIS PROGRAM BY PERFORMING AN＂eMDCS WARRANTY VEHICLE INQUIRY＂AND VERIFY－ ING THE VEHICLE DISPLAYS CAMPAIGN＂MSP39＂AND ITS CAMPAIGN STATUS DISPLAYS ＂OPEN＂．SEE＂VEHICLE INSPECTION PROCEDURE＂BELOW．

## DEALER INVENTORY：

Repair all applicable vehicles currently in dealer inventory according to the procedures contained in this service bulletin．

## RETAIL VEHICLES：

When an applicable retail vehicle is brought into the dealer for any type of repair or scheduled maintenance， perform an eMDCS Warranty Vehicle Inspection and check the status of MSP39．If status of MSP39 is＂OPEN＂ repair the vehicle according to the procedures contained in this service bulletin．

## VEHICLE INSPECTION PROCEDURE

1. Verify the vehicle is within the following VIN and production date ranges:

2013-2014 CX-5 vehicles equipped with an automatic transmission and produced from September 7, 2012 through February 28, 2013

- VIN Range (2013MY): JM3KE****D0 148076-169134
- VIN Range (2014MY): JM3KE****E0 300040-327150

2014 Mazda6 vehicles produced from October 25, 2012 through February 22, 2013

- VIN Range: JM1GJ1*5*E1 100027-112472
- If the vehicle is within the above VIN and production date ranges, proceed to Step 2.
- If the vehicle is not within the above VIN and production date ranges, return the vehicle to the customer or inventory.

2. Perform a Warranty Vehicle Inquiry using your eMDCS System. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.
eMDCS System - Warranty Vehicle Inquiry Results

| If eMDCS displays: | Action Required: |
| :---: | :---: |
| "Campaign: MSP39 Open" | Proceed to "REPAIR PROCEDURE". |
| "Campaign: MSP39 Closed" | Return vehicle to inventory or customer. |
| "Campaign: MSP39 Open" or "Closed" is not |  |
| displayed | Campaign does not apply to this vehicle. Return the <br> vehicle to inventory or customer. |

## REPAIR PROCEDURE

1. Reboot the IDS to clear memory before reprogramming.
2. Using IDS 83.04 for IDS version 83 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.
- On some models, the meter illumination goes out during PCM reprogramming. This is a normal condition.
- 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.

3. After performing the PCM reprogramming procedure, verify the repair by starting the engine and making sure there are no MIL illumination or abnormal warning lights present.

NOTE:

- If any DTCs should remain after performing DTC erase, diagnose the DTCs using MS3 online instructions or Workshop Manual.
- After PCM reprogramming, it is no longer necessary to road test the vehicle to "relearn" KAM (Keep Alive Memory).
- After performing MSP39, 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 driver side of the engine compartment.


## CALIBRATION INFORMATION

IMPORTANT: Use IDS 83.04 for IDS version 83 or later software.
2014 Mazda6 With 2.5L Engine:

| Spec. | Trans. | Emission <br> Type | PCM <br> Supplier | New PCM Calibration Part <br> Number | File Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Calif. | MT | PZEV | MELCO | PY1D 18881C | PY1D 188K2C |
| Calif. | MT | PZEV | DENSO | PY1P 18881C | PY1P 188K2C |
| Calif. | AT | PZEV | MELCO | PY1E 18881C | PY1E 188K2C |
| Calif. | AT | PZEV | DENSO | PY1R 18881C | PY1R 188K2C |
| Calif. | MT | ULEV | MELCO | PY8A 18881A | PY8A 188K2A |
| Calif. | MT | ULEV | DENSO | PY8C 18881A | PY8C 188K2A |
| Calif. | AT | ULEV | MELCO | PY8B 18881A | PY8B 188K2A |
| Calif. | AT | ULEV | DENSO | PY8D 18881A | PY8D 188K2A |
| Fed./ <br> Canada | MT | T2B5 | MELCO | PY1H 18881C | PY1H 188K2C |
| Fed./ <br> Canada | MT | T2B5 | DENSO | PY1V 18881C | PY1V 188K2C |
| Fed./ <br> Canada | AT | T2B5 | MELCO | PY1J 18881C | PY1J 188K2C |
| Fed./ <br> Canada | AT | T2B5 | DENSO | PY1W 18881C | PY1W 188K2C |

## 2013-2014 CX-5 With Automatic Transmission:

| Spec. | Engine | Drive | PCM Supplier | New PCM Calibration Part Number | File Name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Calif. | 2.0 L | 2WD | MELCO | PEAS 18881B | PEAS 188K2B |
| Calif. | 2.0 L | 2WD | DENSO | PEBV 18881B | PEBV 188K2B |
| Calif. | 2.0 L | 4WD | MELCO | PEAT 18881B | PEAT 188K2B |
| Calif. | 2.0L | 4WD | DENSO | PEBW 18881B | PEBW 188K2B |
| Fed./ Canada | 2.0 L | 2WD | MELCO | PEAV 18881B | PEAV 188K2B |
| Fed./ Canada | 2.0 L | 2WD | DENSO | PEBX 18881B | PEBX 188K2B |
| Fed./ Canada | 2.0 L | 4WD | MELCO | PEAW 18881B | PEAW 188K2B |
| Fed./ Canada | 2.0 L | 4WD | DENSO | PECA 18881B | PECA 188K2B |
| Calif. | 2.5 L | 2WD | MELCO | PY09 18881D | PY09 188K2D |
| Calif. | 2.5L | 2WD | DENSO | PY3R 18881D | PY3R 188K2D |
| Calif. | 2.5L | 4WD | MELCO | PY2W 18881D | PY2W 188K2D |
| Calif. | 2.5L | 4WD | DENSO | PY3S 18881D | PY3S 188K2D |
| Fed./ Canada | 2.5L | 2WD | MELCO | PY2V 18881D | PY2V 188K2D |
| Fed./ Canada | 2.5L | 2WD | DENSO | PY3W 18881D | PY3W 188K2D |
| Fed./ Canada | 2.5L | 4WD | MELCO | PY2X 18881D | PY2X 188K2D |
| Fed./ Canada | 2.5L | 4WD | DENSO | PY3X 18881D | PY3X 188K2D |

NOTE: The PCM Calibration Part Numbers listed above are provided for PCM reprogramming purposes only. These are not necessarily the same Mazda part numbers used to order an actual PCM through the Mazda Parts System. It is not necessary to order a PCM as part of this repair procedure.

## WARRANTY INFORMATION

## NOTE:

- This repair will be covered under Mazda's Emission Warranty term.
- Repairs performed outside the Emission Warranty term of 96 months/80,000 miles will require DCSM authorization.
- Additional diagnostic time cannot be claimed for this repair.

|  | PCM Reprogramming |
| :--- | :---: |
| Warranty Type | A |
| Symptom Code | 99 |
| Damage Code | 99 |
| Process Number | AD009B |
| Part Number Main Cause | $7777-$ SP-J03 |
| Quantity | 0 |
| Operation Number / Labor Hours | XXJ4DXFX / 0.3 Hrs. |

