

<b>Subject:</b> MAZDA SERVICE PROGRAM (MSP39) - MIL ILLUMINATION WITH DTC P0126:00	<b>Bulletin No:</b> 01-010/13
	<b>Last Issued:</b> 04/17/2013

## BULLETIN NOTE

- This bulletin supersedes the previous bulletin 01-010/13, issued on 03/01/13 and 04/02/13. 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 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 PRODUCTION 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 VERIFYING 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.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical--including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

## 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 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.
- **Start/Stop button vehicles only: DO NOT press the start/stop button during the reprogramming process.**

- 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, clear DTCs.**
  4. **After clearing DTCs, start the engine and confirm that no warning lights stay on.**

**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 Type	PCM Supplier	New PCM Calibration Part 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./ Canada	MT	T2B5	MELCO	PY1H 18881C	PY1H 188K2C
Fed./ Canada	MT	T2B5	DENSO	PY1V 18881C	PY1V 188K2C
Fed./ Canada	AT	T2B5	MELCO	PY1J 18881C	PY1J 188K2C
Fed./ 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.	2.0L	2WD	MELCO	PEAS 18881B	PEAS 188K2B
Calif.	2.0L	2WD	DENSO	PEBV 18881B	PEBV 188K2B
Calif.	2.0L	4WD	MELCO	PEAT 18881B	PEAT 188K2B
Calif.	2.0L	4WD	DENSO	PEBW 18881B	PEBW 188K2B
Fed./ Canada	2.0L	2WD	MELCO	PEAV 18881B	PEAV 188K2B
Fed./ Canada	2.0L	2WD	DENSO	PEBX 18881B	PEBX 188K2B
Fed./ Canada	2.0L	4WD	MELCO	PEAW 18881B	PEAW 188K2B
Fed./ Canada	2.0L	4WD	DENSO	PECA 18881B	PECA 188K2B
Calif.	2.5L	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.