

# Service Bulletin

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| <b>Subject:</b><br><b>MAZDA SERVICE PROGRAM (MSP38) - ROUGH IDLE AND ENGINE STALL DURING LONG IDLING</b> | <b>Bulletin No:</b> 01-024/12  |
|  | <b>Last Issued:</b> 11/09/2012 |

## BULLETIN NOTE

- This bulletin supersedes the previous bulletin 01-024/12 issued on 11/01/12 and 11/07/12. The VEHICLE INSPECTION PROCEDURE has been revised.

## APPLICABLE MODEL(S)/VINS

- 2012 Mazda3 (with SKYACTIV 2.0L) produced from September 25, 2011 through March 27, 2012
- VIN Range: JM1BL1\*\*\*C1 538770 - 636669

## DESCRIPTION

On certain 2012 Mazda3 vehicles, when using high evaporative winter fuel, if the vehicle is stopped and idling for longer than 20 minutes, there is a possibility that the fuel inside the high-pressure fuel pump may be raised to a higher temperature than usual. If the fuel temperature is higher than the fuel vapor temperature, the fuel supply to the injector may be insufficient and potentially cause one of the following conditions:

- The vehicle may experience rough idle and/or the malfunction indicator light (MIL) may illuminate with DTC P0191:00 (fuel pressure sensor circuit range/performance problem) stored in the PCM memory.
- The engine may stall during stop after idling for a long time, and may not restart for a certain period of time.

## NOTE:

- UNDER THE MAZDA SERVICE PROGRAM (MSP38), 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 "MSP38" 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 MSP38. If status of MSP38 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:
  - 2012 Mazda3 (with SKY ACTIV 2.0L) and produced from September 25, 2011 through March 27, 2012  
VIN Range: JM1BL1\*\*\*C1 538770 - 636669
    - 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: MSP38 Open"                              | Proceed to "REPAIR PROCEDURE".  |
| "Campaign: MSP38 Closed"                            | Return vehicle to inventory or customer.  |
| "Campaign: MSP38 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 81.03 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.
- **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 section 01-02.
- After PCM reprogramming, it is no longer necessary to road test the vehicle to "relearn" KAM (Keep Alive Memory).

**CALIBRATION INFORMATION**

| Specification | Transmission | New PCM Calibration Part Number | File Name             |
|---------------|--------------|---------------------------------|-----------------------|
| CAL           | MT           | PE07 18 881 N or later          | PE07-188K2-N or later |
|               | AT           | PE08 18 881 M or later          | PE08-188K2-M or later |
| FED           | MT           | PE2G 18 881 M or later          | PE2G-188K2-M or later |
|               | AT           | PE2K 18 881 L or later          | PE2K-188K2-L or later |

**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 warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- Warranty claims for MSP38 will be accepted (one time only per vehicle) for unlimited time and mileage.
- Additional diagnostic time cannot be claimed for this repair.

|                                |                     |
|--------------------------------|---------------------|
| Warranty Type                  | A                   |
| Symptom Code                   | 99                  |
| Damage Code                    | 99                  |
| Process Number                 | AC050A              |
| Part Number Main Cause         | 7777-SP-H07         |
| Quantity                       | 0                   |
| Operation Number / Labor Hours | XXH8JXFX / 0.3 Hrs. |