Subject: MAZDA SPECIAL PROGRAM (MSP05) - O2 SENSOR DTC ERROR, P2195 / P2196

Bulletin No: 01-xxx/04
Last Issued: 7/30/2004

APPLICABLE MODEL(S)/VINS

2004 MAZDA3, 2.0L Engine PZEV (Partial Zero Emission Vehicle), built from September 29, 2003 through July 2, 2004 (California Emission Regulation Applicable Model only)
• VIN Range: JM1 BK**F* 41 100220 - JM1 BK**F* 41 206392

DESCRIPTION

It is possible that the DTC for O2 sensor failure may not be displayed appropriately. The DTC P2195 (Front HO2S Signal Stuck Lean) and DTC P2196 (Front HO2S Signal Stuck Rich) may be displayed in reverse. The DTC P2195 may be displayed in case of “stuck rich” and the DTC P2196 may be displayed in case of “stuck lean”.

NOTE:
• UNDER THE MAZDA SPECIAL PROGRAM (MSP05), ALL CURRENT DEALER INVENTORY AND RETAILED VEHICLES FOUND TO BE WITHIN THE ABOVE VIN RANGES, AND PRODUCED FROM SEPTEMBER 29, 2003 THROUGH JULY 2, 2004, MUST BE INSPECTED AND REPAIRED ACCORDING TO THE INSTRUCTIONS CONTAINED IN THIS SERVICE BULLETIN. THIS INCLUDES CUSTOMERS WHO HAVE BROUGHT THEIR VEHICLE IN FOR NORMAL SCHEDULED MAINTENANCE AND/OR RECALL REPAIRS THAT MAY NOT BE RELATED TO THE CONCERNS OUTLINED IN THIS 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 "MSP05". SEE "VEHICLE INSPECTION PROCEDURE" BELOW.

DEALER INVENTORY:

Inspect and repair all current dealer inventory according to the procedures contained in this service bulletin.

RETAIL VEHICLES:

When a retail vehicle is brought into the dealer for any type of repair or scheduled maintenance, inspect and repair the vehicle according to the procedures contained in this service bulletin.
VEHICLE INSPECTION PROCEDURE

1. Verify the vehicle is within the following VIN range, AND built from September 29, 2003 through July 2, 2004:
   • VIN Range: JM1 BK**F* 41 100220 - JM1 BK**F* 41 206392
     - If the vehicle is within the above VIN range, AND built from September 29, 2003 through July 2, 2004, proceed to Step 1.
     - If the vehicle is not within the above VIN range, return the vehicle to the customer or inventory.

2. Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect the vehicle for an Authorized Modification Label MSP05 attached to the vehicle’s hood.
   
   NOTE: Verify the campaign number as the vehicle may have multiple labels.

   eMDCS System - Warranty Vehicle Inquiry Results

<table>
<thead>
<tr>
<th>If eMDCS displays:</th>
<th>Campaign Label is:</th>
<th>Action Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Campaign: MSP05 Open”</td>
<td>Present</td>
<td>Contact the Mazda Corporate Dealer Assistance Group at (877) 727-6626 to update vehicle history</td>
</tr>
<tr>
<td></td>
<td>Not present</td>
<td>Proceed to “REPAIR PROCEDURE”</td>
</tr>
<tr>
<td>“Campaign: MSP05 Closed ”</td>
<td>Present</td>
<td>Return vehicle to inventory or customer</td>
</tr>
<tr>
<td></td>
<td>Not present</td>
<td>Complete a label and apply it to vehicle’s hood</td>
</tr>
<tr>
<td>“Campaign: MSP05 Open” or “Closed” is not displayed</td>
<td>Does not apply</td>
<td>Campaign does not apply to this vehicle. Return the vehicle to inventory or customer</td>
</tr>
</tbody>
</table>
REPAIR PROCEDURE

1. When a subject vehicle within VIN range is brought in to the dealer for MIL illumination with DTC P2195 or P2196 stored in memory, carry out the following operations.
   - If the DTC P2195 is stored in memory, perform the necessary diagnosis or repair according to the “On-Board Diagnostic” of Workshop Manual for DTC P2196 instead of P2195. Proceed to Step 2.
   - If the DTC P2196 is stored in memory, perform the necessary diagnosis or repair according to the “On-Board Diagnostic” of Workshop Manual for DTC P2195 instead of P2196. Proceed to Step 2.

   **NOTE:** Be sure to reprogram the PCM after performing the diagnostic/repair for the DTC P2195/P2196, so as to identify the actual malfunction condition from the data stored.

2. Verify vehicle is within VIN range and has not been previously reprogrammed to the “E” calibration level.

   **NOTE:** Current calibration level can be checked using WDS. After identifying vehicle, select “Log Viewer” icon (center icon) at the lower left section of the screen. Scroll down on WDS screen and locate “Filename:”. The last digit of the “Filename” is the current calibration identifier. For example: SW-LF67E6. Vehicles that are not at the “E” calibration or later need to be programmed using this repair procedure.

3. Using WDS B32.2 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 WDS PTU first, then install the needed calibration file that WDS shows during PCM reprogramming. Go to “WDS Calibration” on ESI and download the “update” file. If the PTU is not updated to the latest WDS calibration level, the calibration file will not install into the PTU.
   - It is not necessary to remove any fuses or relays during PCM reprogramming when the WDS 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 WDS reprogramming procedure.
   - WDS 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 WDS software, and additional revisions made to those calibrations for service related concerns.
   - When reprogramming a PCM, WDS 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, if the WDS PTU is not docked and connected to 115V-120V, we recommend that a battery charger be installed on the vehicle battery and turned ON to a maximum charge of no more than 20 AMPS to keep the vehicle battery up to capacity. If you exceed 20 AMPS, it will damage the WDS PTU.
4. 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:** After PCM reprogramming, it is no longer necessary to road test the vehicle to “relearn” KAM (Keep Alive Memory).

5. Place an “Authorized Modification” label (P/N 9999-95-AMDC-97) with the new calibration information on the drivers side “A” pillar, near the door hinges.


7. Complete the blue “Authorized Modification” label (9999-95-065A-00) with the Campaign number “MSP05” written on the sticker and affix it to the vehicle’s hood. Refer to the illustration under “VEHICLE INSPECTION PROCEDURE”.

8. Return the vehicle to the customer.
CALIBRATION INFORMATION

<table>
<thead>
<tr>
<th>Transmission</th>
<th>New PCM Calibration Part Number</th>
<th>File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>M/T</td>
<td>LF67-18-881E</td>
<td>SW-LF67EE000</td>
</tr>
<tr>
<td>A/T</td>
<td>LF69-18-881E</td>
<td>SW-LF69EE000</td>
</tr>
</tbody>
</table>

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. Refer to the SRT microfiche for warranty term information.
- Additional diagnostic time cannot be claimed for this repair.

<table>
<thead>
<tr>
<th>Warranty Type</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptom Code</td>
<td>99</td>
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<tr>
<td>Damage Code</td>
<td>99</td>
</tr>
<tr>
<td>Process Number</td>
<td>A4450H</td>
</tr>
<tr>
<td>Part Number Main Cause</td>
<td>LFYM-18-881 - M/T</td>
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<tr>
<td></td>
<td>LFYN-18-881 - A/T</td>
</tr>
<tr>
<td>Quantity</td>
<td>0</td>
</tr>
<tr>
<td>Operation Number / Labor Hours</td>
<td>XX723XRX / 0.4 Hr.</td>
</tr>
</tbody>
</table>