

Subject: MAZDA SPECIAL PROGRAM (MSP04) - ENGINE NO START, LACK OF POWER, DTCS P2107, P2108, P2402 OR P0420 - POWERTRAIN CONTROL MODULE (PCM) REFLASH	Bulletin No: 01-008/05
	Last Issued: 2/7/2005

BULLETIN NOTE

This bulletin supersedes the previous bulletin 01-022/04, issued on 11/01/2004. The REPAIR PROCEDURE and CALIBRATION INFORMATION has been revised.

APPLICABLE MODEL(S)/VINS

2004 RX-8 vehicles built prior to March 12, 2004

- VIN Range: JM1FE17**40100001 - 40135536

DESCRIPTION

Some vehicles may experience the following concerns:

- Engine fails to start (cranks but no start) at cold engine temperature. This is caused by flooded spark plugs due to slightly rich air/fuel ratio for cold starting.
- Engine is hard to start after short distance drive without engine reaching normal operating temperature at cold ambient temperature. This is caused by lower engine compression due to seals icing by moisture inside engine.
- Engine has lack of acceleration power and / or knocking when driving at more than approx. 6000 RPM or at high altitudes. This is caused by poor combustion gas sealing due to the lack of amount of oil supplied from the metering oil pump.
- MIL illuminates with DTC P2107/2108 stored in memory. This is caused by sub CPU – main CPU communication error after jump-starting the engine due to dead battery.
- MIL illuminates with DTC P2402 stored in memory. This is caused by improper threshold setting for DMTL motor electric current tolerance.
- MIL illuminates with DTC P0420 stored in memory. This is caused by improper threshold setting for rear O2 sensor output tolerance.

NOTE: UNDER THE MAZDA SPECIAL PROGRAM (MSP04), ALL CURRENT DEALER INVENTORY AND RETAILED VEHICLES FOUND TO BE WITHIN THE ABOVE VIN RANGES, AND PRODUCED PRIOR TO MARCH 12, 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 “MSP04”. SEE “VEHICLE INSPECTION PROCEDURE” BELOW.

DEALER INVENTORY:

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

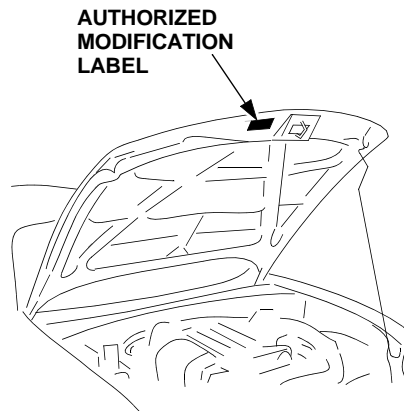
RETAIL VEHICLES:

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 prior to March 12, 2004:
 - VIN Range: JM1FE17**40100001 - 40135536
 - If the vehicle is within the above VIN range, AND built prior to March 12, 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 Vehicle Status Inquiry using your eMDCS System and inspect the vehicle for an Authorized Modification Label **MSP04** attached to the vehicle's hood.

NOTE: Verify the campaign number as the vehicle may have multiple labels.



eMDCS System - Vehicle Status Inquiry Results

If eMDCS displays:	Campaign Label is:	Action Required:
"Campaign: MSP04 Open"	Present	Contact the Mazda Corporate Dealer Assistance Group at (877) 727-6626 to update vehicle history
	Not present	Proceed to "REPAIR PROCEDURE"
"Campaign: MSP04 Closed"	Present	Return vehicle to inventory or customer
	Not present	Complete a label and apply it to vehicle's hood
"Campaign: MSP04 Open" or "Closed" is not displayed	Does not apply	Campaign does not apply to this vehicle. Return the vehicle to inventory or customer

REPAIR PROCEDURE

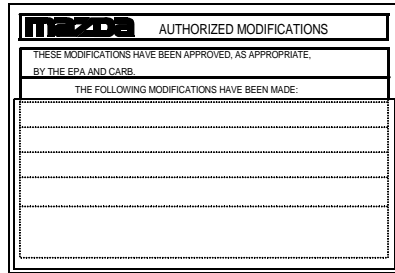
1. Verify vehicle is within VIN range.
2. Reboot WDS PTU before performing the next procedure.
3. Using WDS B35.5 or later software, reprogram the PCM to the latest calibration (refer to “Calibration Information” table) by following the “Module Reprogramming” procedure.

NOTE:

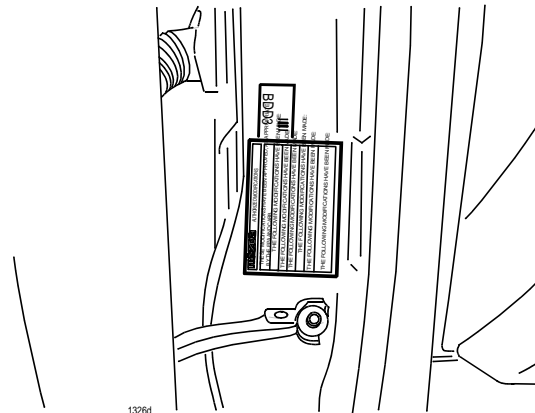
- Always update the WDS PTU first, then install the needed calibration file that WDS shows during PCM reprogramming. Go to “WDS Calibration” on ESI and download the “update” file. If the PTU is not updated to the latest WDS calibration level, the calibration file will not install into the PTU.
 - It 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).

- 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.

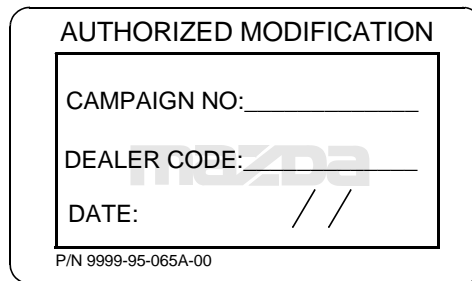


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- Verify repair.
- Complete the blue "Authorized Modification" label (9999-95-065A-00) with the Campaign number "MSP04" written on the sticker and affix it to the vehicle's hood.



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- Return the vehicle to the customer.

CALIBRATION INFORMATION

Transmission	New PCM Calibration Part Number	File Name
A/T	N3Z1-18-881N	SW-N3Z1EN000
M/T	N3Z2-18-881N	SW-N3Z2EN000

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.

Warranty Type	A
Symptom Code	99
Damage Code	99
Process Number	A4432H
Part Number Main Cause	N3H4-18-881A - A/T N3H6-18-881A - M/T
Quantity	0
Operation Number / Labor Hours	XX682XRX / 0.3 Hrs.