

Subject: NO START DUE TO FROZEN MAIN RELAY	Bulletin No: 01-018/07
	Last Issued: 05/07/2007

BULLETIN NOTE

This bulletin supersedes the previous bulletin 01-007/06 issued on 03/15/06. The APPLICABLE MODEL(S)/VINS has been revised.

APPLICABLE MODEL(S)/VINS

2004-2006 Mazda3 vehicles with VINs lower than JM1 BK**** ** 485606 (produced before February 1, 2006)

DESCRIPTION

In extremely cold weather below -22°F (-30°C), some vehicles may experience a no-start condition. The contact point of the main relay may have frozen after short distance driving in extremely cold weather.

Due to the design, moisture can enter the inside of the relay, allowing the contact point to freeze. As a counter-measure for Mazda3 vehicles, a mass production change has occurred with the following

- For all Mazda3 vehicles (FED/CA/CAN) a breathing hole has been added to the main relay, and the capacity of relay coil has been increased.
- For FED and CAN spec Mazda3 vehicles, the PCM logic of the main relay electric current control has been changed. After the ignition is turned off, a small, regulated amount of electric current will continue to run through the relay for 10-20 minutes.

Customers having this concern should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

1. Verify customer concern.
2. For all vehicles (FED, CA, and CAN), replace the main relay with a modified one.
3. For FED and CAN spec vehicles, reprogram the PCM.

PCM REPROGRAMMING

1. Reboot the IDS to clear memory before reprogramming.
2. Using IDS 47.5 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 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 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 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.

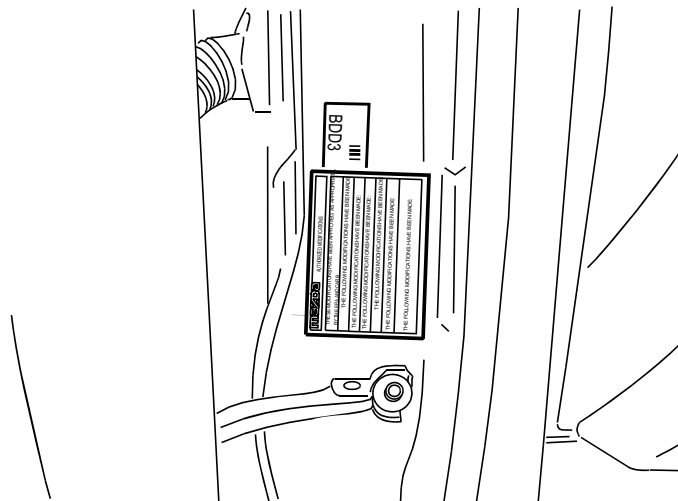
NOTE:

- If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate Troubleshooting section of the Workshop Manual.
 - After PCM reprogramming, it is no longer necessary to road test the vehicle to “relearn” KAM (Keep Alive Memory).
4. Fill out an “Authorized Modifications” label (P/N 9999-95-AMDC-97) with the new PCM calibration information, your dealer code, and today’s date.

mazda AUTHORIZED MODIFICATIONS
THESE MODIFICATIONS HAVE BEEN APPROVED, AS APPROPRIATE, BY THE EPA AND CARB
THE FOLLOWING MODIFICATIONS HAVE BEEN MADE:

1326c

5. Place the “Authorized Modifications” label on the “A” pillar below the tear tag in the driver door jamb.



1326d

CALIBRATION INFORMATION

Year	Specification	Engine	Transmission	New PCM Calibration Part Number	File Name
2004	FED/CAN	2.0L	MT	LFZE-18-881	SW-LFZEEA010
	FED/CAN	2.0L	AT	LFZF-18-881	SW-LFZFEB020
	FED/CAN	2.3L	MT	LJZ9-18-881	SW-LJZ9EA020
	FED/CAN	2.3L	AT	LJZA-18-881	SW-LJZAEA020
2005	FED/CAN	2.0L	MT	LFZE-18-881	SW-LFZEEA010
	FED/CAN	2.0L	AT	LFZF-18-881	SW-LFZFEB020
	FED/CAN	2.3L	MT	LJZ9-18-881	SW-LJZ9EA020
	FED/CAN	2.3L	AT	LJZA-18-881	SW-LJZAEA020
2006	FED/CAN	2.0L	MT	LF3H-18-881	SW-LF3HEA000
	FED/CAN	2.0L	AT	LF3J-18-881	SW-LF3JEA000
	FED/CAN	2.3L	MT	L37V-18-881	SW-L37VEA000
	FED/CAN	2.3L	AT	L37W-18-881	SW-L37WEA000

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.

PART(S) INFORMATION

Part Number	Description	Qty.	Notes
LF67-18-811	Main Relay	1	a

(a) - A new part can be used in place of former part, but former part cannot be used in place of new part.

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.
- Additional diagnostic time cannot be claimed for this repair.

	Replace Main Relay (CA Spec Vehicle Only)	Replace Main Relay and Reprogram PCM (FED and CAN Spec Vehicles Only)
Warranty Type	A	A
Symptom Code	02	02
Damage Code	9W	9W
Part Number Main Cause	LF67-18-811	LF67-18-811
Quantity	1	1
Operation Number / Labor Hours:	XXC042RX / 0.3 Hrs	XXB253RX / 0.6 Hrs