

<b>Subject:</b>  <b>SHIFT SHOCK/LONG TIME LAG WHEN SHIFTING INTO REVERSE</b>	<b>Bulletin No:</b> 05-006/12
	<b>Last Issued:</b> 11/21/2012

## APPLICABLE MODEL(S)/VINS

2012-2013 Mazda3 vehicles (with 2.0L SKYACTIV-G and A/T) with VINs lower than JM1BL\*\*\*\*\*617690 (produced before Feb. 21, 2012)

## DESCRIPTION

Some vehicles may experience excessive shift shock or a long time lag when shifting from P to R or from N to R. This is caused by miss learning of the TCM for shift timing. To correct the problem, the learning logic of the TCM has been changed.

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

## REPAIR PROCEDURE

1. Verify customer concern.
2. Reprogram the TCM with M-MDS using IDS 81.05 or 82.01 or later software following the Service Cautions for Reprogramming.

**NOTE:** Always update IDS tool first, then follow the on-screen instructions to download the needed calibration file for PCM reprogramming.

3. Verify repair.

## SERVICE CAUTIONS FOR REPROGRAMMING

### *Before Reprogramming*

1. Perform reprogramming only when the concern matches the condition described. Unnecessary reprogramming may change drive feeling and result in customer complaint.
2. Remove all aftermarket electrical parts and modifications.
3. DO NOT perform reprogramming with modules originally equipped on other vehicles.
4. Perform reprogramming under proper Internet environment. Make sure you have a good connection, especially when using a wireless network.
5. During reprogramming, DO NOT run any other applications installed on the PC.
6. Make sure to keep the proper amount of free space on the laptop HDD. If there is not enough free space, the PC may freeze during reprogramming.
7. Verify the software on the M-MDS and the calibration data are the latest.
8. DO NOT connect the AC adapter to the VCM when the M-MDS is communicating with the vehicle.
9. Connect AC adapter to the laptop PC in order to stabilize voltage fluctuation during reprogramming. DO NOT use vehicle battery as a power source for the laptop.

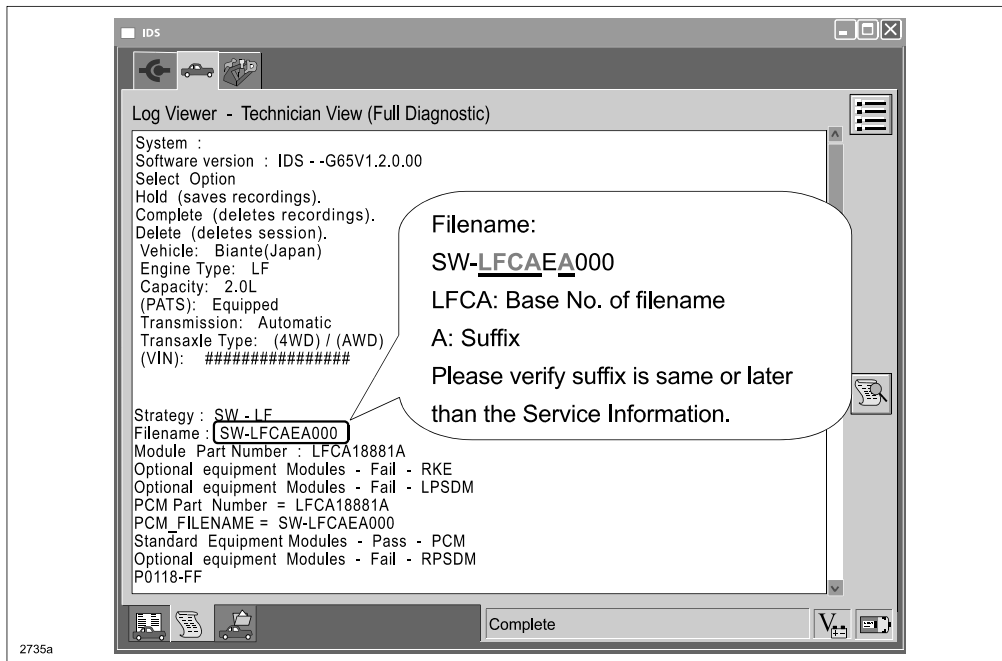
10. During reprogramming, connect a battery charger (max. charge rate 20A) to the vehicle to stabilize voltage fluctuation. Low voltage may result in abnormal termination and/or PCM data corruption.
11. Perform self test and verify no DTC is stored. If any DTC is stored, fix the concern and delete the DTC.
12. Turn off all electrical loads, especially A/C (blower), audio, rear defogger and room lamp.

### ***During Reprogramming***

1. When it is necessary to press the check button after taking some action indicated by M-MDS (e.g. turning on ignition), wait for a few seconds before pressing the check button. If actions are too fast, the PC may freeze.
2. DO NOT touch the VCM or DLC cable to prevent noise or bad connection.

### ***After Reprogramming***

1. After reprogramming, delete all DTCs, then perform self test and verify no DTC is stored.
2. Close the session even if it continues to reprogram the same model.
3. Confirm the file name after reprogramming using Log Viewer.



## **CALIBRATION INFORMATION**

File Name
PE08-21PS1-K

## WARRANTY INFORMATION

**NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's Powertrain Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	27
Damage Code	9W
Part Number Main Cause	5555-RP-TCM
Quantity	0
Operation Number / Labor Hours:	XXH9HXFX / 0.3 Hrs.