

Service Bulletin

Mazda North American Operations
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Subject:

SHIFT SHOCK/LONG TIME LAG WHEN SHIFTING INTO REVERSE

Bulletin No: 05-006/12**Last Issued:** 12/19/2012

BULLETIN NOTE

- This bulletin supersedes the previous bulletin 05-006/12 issued on 11/21/12. The REPAIR PROCEDURE has been revised.
- Changes are noted below in Red beside the change bar.

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. Reboot the IDS to clear memory before reprogramming.
2. Using IDS 81.05 or 82.01 or later software, reprogram the TCM 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 TCM reprogramming.
- It is not necessary to remove any fuses or relays during TCM reprogramming when the IDS screen prompts you to do so. You may accidentally stop power to one of the TCM terminals and cause the TCM to be blanked, or you may receive error messages during the IDS reprogramming procedure.
- IDS shows the calibration part numbers after programming the TCM.
- Please be aware that TCM 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 TCM, 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.

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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.

- 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 TCM 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 reprogramming is complete, perform the Initial Learning Procedure. Refer to MS3 online instructions or Workshop Manual section 05-17 INITIAL LEARNING [FW6A-EL].

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.