

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: SHIFT SHOCK WHEN SHIFTING INTO 3RD, 5TH AND/OR REVERSE AT HIGH ELEVATIONS	Bulletin No.: 05-003/18
	Last Issued: 04/12/2018

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted below in Red.

Previously Issued TSBs:	Date(s) Issued:
05-003/17	10/05/17

APPLICABLE MODEL(S)/VINS

- 2017-2018 Mazda3 (Japan built) 2.0L with VINS lower than JM1BN*****168517 (produced before September 5, 2017)
- 2017-2018 Mazda3 (Japan built) 2.5L
- 2017-2018 Mazda3 (Mexico built) 2.0L with VINS lower than 3MZBN*****171648 (produced before August 23, 2017)
- 2017-2018 Mazda3 (Mexico built) 2.5L
- 2017 Mazda6
- 2018 CX-3 with VINS lower than JM1DK*****330861 (produced before February 6, 2018)

DESCRIPTION

Some customers who drive at elevations higher than 3,300 ft (1,000 m) may complain of a shift shock felt when shifting into 3rd, 5th and/or Reverse with no AT related DTCs stored. The symptom can be temporarily repaired using the AT initial learning procedure, but may recur after multiple driving cycles.

Applicable situations:

- Shifting up: 2-3 or 4-5
- Shifting down: 4-3 or 6-5

NOTE: Shifting from 2-3 or 4-3 is more likely to be felt due to the gear ratio.

- Shifting into Reverse: D-R, N-R or P-R

Improper control logic of the TCM may cause improper learning of R-3-5 brake engaging speed when the vehicle is driven at high elevations. To correct this issue, the control logic of the TCM has been modified. Customers having this concern should have their vehicle repaired using the following repair procedure.

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REPAIR PROCEDURE

1. Verify customer concern.
2. Using IDS **109.01** or later software, reprogram the TCM to the latest calibration (refer to “Calibration Information” table) by following the “Module Reprogramming” procedure.

NOTE:

- Verify the current TCM file name in the vehicle by the log view screen. If it is the same as found in the chart below (or later), it is not necessary to reprogram the TCM.
- Always update the IDS tool first, then follow the on-screen instructions to download the calibration file for TCM reprogramming.
- Refer to “Service Caution for reprogramming” on MGSS IDS Page.
- After reprogramming, verify the file name matches with the chart below.

NOTE:

- 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.
- **Start/Stop button vehicles only: DO NOT press the start/stop button during the reprogramming process.**
- **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, clear DTCs.
4. After clearing DTCs, start the engine and confirm that no warning lights stay on.

NOTE:

- If any DTCs should remain after performing DTC erase, diagnose the DTCs using MGSS.
- After TCM reprogramming, it is no longer necessary to road test the vehicle to “relearn” KAM (Keep Alive Memory).

5. Perform “Initial Learning” according to the instructions on MGSS (INITIAL LEARNING).

CALIBRATION INFORMATION

Model	Specification	Note	New File Name
Mazda3	US	2.0L	PS7S-21PS1-C
Mazda3	US	2.5L	PYKE-21PS1-B
Mazda6	US	without i-ELOOP	PYJN-21PS1-B
Mazda6	US	with i-ELOOP	PYJR-21PS1-B
CX-3	US	2WD	PSGC-21PS1-B
CX-3	US	AWD	PSGD-21PS1-B

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Federal Emissions Warranty (long term).
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	26
Damage Code	9W
Part Number Main Cause	5555-RP-TCM
Quantity	0
Operation Number / Labor Hours:	XXN8NFX / 0.3 Hrs.

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