# Technical Service Bulletin

## Mazda North American Operations Irvine, CA 92618-2922



Subject:	
ROUGH IDLE DUE TO EGR VALVE NOT CLOSING	Bulletin No.: 01-001/21
	Last Issued : 07/26/2021

### **BULLETIN NOTES**

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

Previous TSBs:	Date(s) Issued:
01-001/21	01/14/21

## APPLICABLE MODEL(S)/VINS

2018 Mazda6 (US spec) with SKYACTIV-G 2.5T with VINS lower than JM1GL\*\*\*\*\*\*336737 (produced before December 22, 2018)

2019 Mazda6 (Mexico spec) with SKYACTIV-G 2.5T with VINS lower than JM1GL\*\*\*\*\*336562 (produced before December 22, 2018)

2016-2021 CX-9 (US spec) with SKYACTIV-G 2.5T with VINS lower than JM3TC\*\*\*\*\*\*519519 (produced before January 26, 2021)

2016-2021 CX-9 (Mexico spec) with SKYACTIV-G 2.5T with VINS lower than JM3TC\*\*\*\*\*454021 (produced before January 29, 2021)

#### **DESCRIPTION**

Some vehicles may exhibit an occasional rough idle accompanied with DTC P0300:00 (Random misfire) due to the following:

- 1. While closing the EGR valve, carbon deposit etc. pinched at the valve seat prevents the valve from closing completely.
- 2. The closed position of the EGR valve is learned improperly as it is not equipped with a position sensor.
- 3. While idling, the EGR gas improperly mixes with fresh air through the EGR valve that is not closed properly.
- 4. Misfire occurs.

To eliminate this concern, the control software of the PCM has been modified (for service) to force the learning of the closed position of the EGR valve when a misfire is detected at idle.

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

Page 1 of 3

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Last Issued : 07/26/2021

Bulletin No.: 01-001/21

### REPAIR PROCEDURE

- 1. Verify customer concern.
  - If the concern continues even after cycling the engine off and on, check the EGR valve and clean the carbon deposit if it prevents the valve from closing.
  - If damage is found on the valve seat in the EGR valve, replace the EGR valve.
- 2. Reprogram the PCM with Mazda Modular Diagnostic System (M-MDS) using IDS **122.05** or later software. Refer to IDS Reprogramming Procedure.
- 3. Verify the repair by starting the engine and making sure there is no rough idle, CHECK ENGINE light ON or abnormal warning lights present.

**NOTE:** If any DTCs should remain after performing DTC erase, diagnose the DTCs according to the appropriate troubleshooting on MGSS.

#### **CALIBRATION**

Model	Year	Drive	File Name
Mazda6	2018 (US) 2019 (Mexico)	-	PYH7-188K2-E
CX-9	2016-2017 (US and Mexico)	2WD	PYFL-188K2-R
	2010-2017 (OS and Mexico)	4WD	PYFM-188K2-R
CX-9 2018 (US ar	2019 (LIS and Maxica)	2WD	PYD7-188K2-F
	2016 (OS and Mexico)	4WD	PYD8-188K2-F
CX-9	2019 (US)	2WD	PX23-188K2-D
		4WD	PX24-188K2-D
CX-9	2020 2024 (US)	2WD	PXM3-188K2-D
	2020-2021 (US)	4WD	PXM4-188K2-D
CX-9	2019 (Mexico)	2WD	PXB3-188K2-D
		4WD	PXB4-188K2-D
CX-9	2020-2021 (Mexico)	2WD	PXM8-188K2-C
		4WD	PXM9-188K2-C

Page 2 of 3

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### **PARTS INFORMATION**

Parts Number	Description	Qty.	Notes
PY8V-20-305	Gasket, EGR Valve	1	Only if EGR valve needs to be cleaned or replaced.
PY8V-20-300	Valve, EGR	1	Only if EGR valve needs to be replaced.

**NOTE:** No part is required for PCM reprogramming.

### 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 Emission Warranty.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	А
Symptom Code	03
Damage Code	9W
Part Number Main Cause	5555-18-881
Quantity	0
Operation Number / Labor Hours:	XXS91AFX / 0.3 Hrs. (PCM reprogramming only) XXS91BFX / 0.6 Hrs. (PCM reprogramming and checking/cleaning EGR valve) XXS91CFX / 0.6 Hrs. (PCM reprogramming and checking/cleaning/replacing EGR valve)

**NOTE:** If the EGR valve is cleaned and/or replaced, claim the parts as related parts.

Page 3 of 3

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