



Subject: ROUGH IDLE DUE TO EGR VALVE NOT CLOSING	Bulletin No.: 01-001/21
	Last Issued: 01/14/2021

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)
2018 CX-9 with SKYACTIV-G 2.5T with VINS lower than JM3TC*****237358 (produced before July 1, 2018)

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 in 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 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.

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 **120.03** or later software. Refer to IDS Reprogramming Procedure.

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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 INFORMATION

Model	Drive	File Name
Mazda6	-	PYH7-188K2-E
CX-9	2WD	PYD7-188K2-F
	4WD	PYD8-188K2-F

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.

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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	A
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.

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