

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922

**Subject:**

CHECK ENGINE LIGHT ON WITH DTC P0524 OR P055F

Bulletin No.: 01-004/23

Last Issued : 02/03/2023

BULLETIN NOTES**BULLETIN NOTE**

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

Previous TSBs:	Date(s) Issued:
01-004/21	04/30/21 and 02/05/21
01-020/18	10/18/18

APPLICABLE MODEL(S)/VINS

- 2018-2020 CX-5 2.5L (US spec with cylinder deactivation) vehicles with VINs lower than JM3KF*****869654 (produced before Aug. 24, 2020)
- 2021 CX-5 2.5L (US spec with cylinder deactivation and 10.5" center display) vehicles with VINs lower than JM3KF*****358113 (produced before Dec. 14, 2020)
- 2021 CX-5 2.5L (Canada spec with cylinder deactivation and 8" center display) vehicles with VINs lower than JM3KF*****120983 (produced before Dec. 14, 2020)
- 2020-2021 CX-30 2.5L (US spec with cylinder deactivation) vehicles with VINs lower than 3MVDM*****239819 (produced before Dec. 23, 2020)
- 2019-2020 Mazda3 2.5L (Japan built, US spec with cylinder deactivation) vehicles with VINs lower than JM1BP*****176405 (produced before Apr. 2, 2020)
- 2019-2021 Mazda3 2.5L (Mexico built, US spec with cylinder deactivation) vehicles with VINs lower than 3MZBP*****210133 (produced before Dec. 23, 2020)
- 2018-2021 Mazda6 2.5L (US spec with cylinder deactivation) vehicles with VINs lower than JM1GL*****610985 (produced before Feb. 24, 2021)

NOTE: To identify vehicles with cylinder deactivation, examine the 8th digit of the VIN.

- L: 2.5L without cylinder deactivation
- M: 2.5L with cylinder deactivation

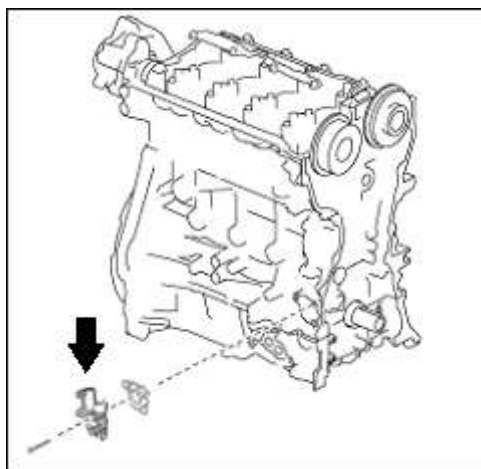
DESCRIPTION

Some vehicles may have the check engine light on with DTC P0524:00 or P055F:00 stored in memory. Contamination in the engine oil may cause the engine oil solenoid valve to become stuck, resulting in improper operation of the oil pump and improper oil pressure.

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- DTC P0524:00 (Engine oil pressure too low)
- DTC P055F:00 (Engine oil pressure malfunction)



The control software of the PCM has been modified to eliminate this concern. In addition, the production process has been modified to reduce contamination in the engine oil solenoid valve, oil pump, spacer and oil filter.

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

REPAIR PROCEDURE

1. Verify the customer concern.
2. Replace the engine oil solenoid valve with a new one according to MGSS online:
 - CX-5: (ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)])
 - CX-30: (ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)])
 - Mazda3: (ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)])
 - Mazda6: (ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)])
3. Replace the engine oil and engine oil filter.
4. Reprogram the PCM / ECU with Mazda Modular Diagnostic System (M-MDS) according to:
 - 2018-2020 CX-5 and Mazda6: IDS PCM REPROGRAMMING PROCEDURE **using IDS 128.06 or later**
 - 2021 CX-5, CX-30 and Mazda3: MDARS/ECU REPROGRAMMING PROCEDURE
5. Verify the repair.

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CALIBRATION**CX-5:**

Year	Drive	File Name	Note
2018	2WD	PYFA-188K2-L	Mitsubishi
		PYFB-188K2-L	Denso
	4WD	PYFC-188K2-L	Mitsubishi
		PYFD-188K2-L	Denso
2019	2WD	PX42-188K2-E	Mitsubishi
		PX43-188K2-E	Denso
	4WD	PX44-188K2-F	Mitsubishi
		PX45-188K2-F	Denso
2020-2021	2WD	PX2E-188K2-E	Mitsubishi
		PX2F-188K2-E	Denso
	4WD	PX2G-188K2-E	Mitsubishi
		PX2H-188K2-E	Denso

Mazda3:

Year	Factory	Transmission	Drive	File Name	Note
2019-2020	Japan Built	A/T	2WD	PX05-188K2-P	Mitsubishi
				PX06-188K2-P	Denso
			4WD	PX07-188K2-S	Mitsubishi
				PX08-188K2-S	Denso
		M/T	2WD	PX58-188K2-N	Mitsubishi
				PX59-188K2-N	Denso
2019-2021	Mexico Built	A/T	2WD	PX13-188K2-J	Mitsubishi
				PX14-188K2-J	Denso
			4WD	PX15-188K2-J	Mitsubishi
				PX16-188K2-J	Denso

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CX-30:

Year	Transmission	Drive	File Name	Note
2020-2021	A/T	2WD	PXH7-188K2-G	Mitsubishi
			PXH8-188K2-G	Denso
		4WD	PXJ9-188K2-G	Mitsubishi
			PXK1-188K2-G	Denso

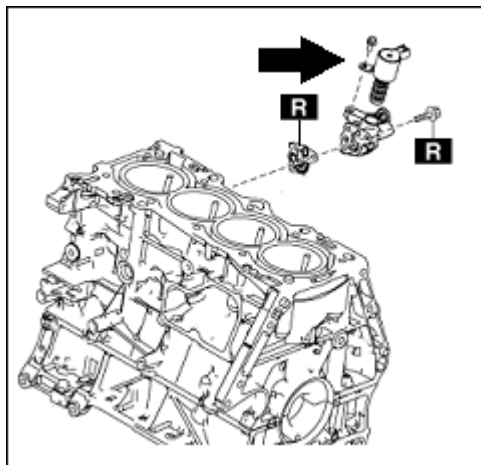
Mazda6:

Year	File Name
2018	PYH3-188K2-M
2019-2020	PXD8-188K2-D
2021	PX4F-188K2-C

PARTS INFORMATION

Parts Number	Description	Qty.	Notes
PYFA-14-440C	VALVE,OIL CONTROL	1	CX-5, Mazda6 and Mazda3 (Japan built)
P5PW-14-440	VALVE,OIL CONTROL	1	CX-30 and Mazda3 (Mexico built)
PY8W-14-365	GASKET	1	[R]
PY8W-14-275	BOLT	3	[R]
1WPE-14-302	CARTRIDGE,OIL FILTER	1	---

[R]: Replacement parts



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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 Mazda's New Vehicle Fed. Emission Warranty **(long term)**.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9W
Part Number Main Cause	5555-RP-PCM (CX-5 / Mazda6) 5555-18-881 (CX-30 / Mazda3)
Quantity	0
Operation Number / Labor Hours:	XXT19XFX / 0.8 Hrs.

NOTE: Claim the parts and engine oil as related parts.

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