

MIL ON with Low Oil Pressure DTCs P05202A and/or P052477 and Milky/Discolored Engine Oil in Freezing Temperatures

Service Category Engine/Hybrid System

Section Lubrication

Market USA

Toyota Supports
ASE Certification 

**Final
Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2019 - 2022	Avalon HV, Corolla Hatchback, RAV4, RAV4 HV	
2021 - 2022	Avalon	VDS(s): KB1BB, LB1BB, MB1BB, NB1BB Engine(s): A25
2018 - 2022	Camry HV	
2018 - 2022	Camry	VDS(s): A11AK, B11HK, B61HK, BF1FK, BZ1HK, C11AK, C11BK, C31AK, E11AK, E11BK, E31AK, F11AK, F11BK, G11AK, G11BK, H11AK, H11BK, J11AK, J11BK, K31AK, K61AK, K61BK, L11AK, L11BK, M11AK, M11BK, NZ1AK, PZ1AK, R11AK, R11BK, S11AK, S11BK, T11AK, T11BK Engine(s): A25
2022	Corolla Cross	
2020 - 2022	Corolla	VDS(s): B4MBE, B4RBE, M4MCE, M4RCE, P4MCE, P4RCE, S4MCE, S4RCE, T4MCE, T4RCE Engine(s): M20
2020 - 2022	Highlander HV	
2021 - 2022	RAV4 Prime, Sienna HV, Venza HV	

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Introduction

Some 2018 – 2022 model year Toyota vehicles equipped with an A25A-FKS, A25A-FXS, or M20A-FKS engine may exhibit one or more of the following conditions:

- Milky/Discolored engine oil.
- An “Oil Pressure Low” warning message on the Multi-information Display (MID).
- A MIL ON condition with Diagnostic Trouble Codes (DTCs) P05202A (Engine Oil Pressure Sensor/Switch "A" Signal Stuck in Range) and/or P052477 (Engine Oil Pressure too low [Severe]).

Moisture from blow-by gases condenses and accumulates in the engine oil during short trips in extreme cold weather. When the moisture in the oil freezes, the oil pressure may drop, and the aforementioned warning indicators may display. Follow the procedures in this bulletin to address these conditions.

Figure 1. Engine Oil (Normal Appearance)



Figure 2. Engine Oil (Milky/Discolored)



Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–

Parts Information

PART NUMBER	PART NAME	QTY
90915-YZZN1	Oil Filter	1
90430-12031	Gasket (For Oil Pan Drain Plug)	1

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Required Tools & Equipment

REQUIRED TOOLS & MATERIAL	ENGINE	QUANTITY
Clean Shop Towel	—	1
API SN/RC Multigrade Engine Oil (SAE 0W-16)	A25	4.8 qts.
	M20	4.9 qts.

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVI*	ADE	TSADVUNIT	1
Techstream 2.0		TS2UNIT	
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 16.20.027 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Confirmation Procedure

NOTE

If any internal coolant system leaks are present, coolant can mix with oil and create a similar milky/discolored appearance. Be sure to address any cooling system leaks BEFORE proceeding.

1. Check the appearance of the engine oil on the oil level gauge (dip stick).

NOTE

The oil should be transparent with a brown or amber color.

Does the engine oil have a milky/discolored appearance as shown in Figure 2?

- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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Confirmation Procedure (continued)

2. Perform a cooling system pressure check to test for any internal coolant leaks.

Refer to TIS, applicable model and model year Repair Manual:

- 2019 – 2022 Avalon HV:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2019 – 2022 Corolla Hatchback:
Engine/Hybrid System – [“M20A-FKS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2019 – 2022 RAV4:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2019 – 2022 RAV4 HV:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2021 – 2022 Avalon:
Engine/Hybrid System – [“A25A-FKS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2018 – 2022 Camry HV:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2018 – 2022 Camry:
Engine/Hybrid System – [“2GR-FKS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2022 Corolla Cross:
Engine/Hybrid System – [“M20A-FKS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2022 Highlander HV:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2021 – 2022 RAV4 Prime:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2021 – 2022 Sienna HV:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)
- 2021 – 2022 Venza HV:
Engine/Hybrid System – [“A25A-FXS \(Cooling\): Cooling System: On-Vehicle Inspection”](#)

Did the cooling system hold pressure?

- **YES** — Continue to step 3.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

3. Is an “Oil Pressure Low” warning displayed on the MID and/or are DTCs P05202A and/or P052477 present?

- **YES** — Go to Repair Procedure 1.
- **NO** — Go to Repair Procedure 2 to ONLY address the milky/discolored oil condition.

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Repair Procedure 1

1. Using Techstream, clear ANY DTCs.
2. Start the engine.
 - A. Use maintenance mode for hybrid models.

Refer to TIS, applicable model and model year Repair Manual:

 - 2019 – 2022 Avalon HV:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - 2019 – 2022 RAV4 HV:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - 2018 – 2022 Camry HV:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - 2020 – 2022 Highlander HV:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - 2021 – 2022 RAV4 Prime:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - 2021 – 2022 Sienna HV:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - 2021 – 2022 Venza HV:
General – Introduction – “[Introduction: Repair Instruction: Inspection Mode Procedure](#)”
 - B. Allow the engine to idle until the engine coolant temperature reaches 122°F.
 - C. Did the “Oil Pressure Low” warning display or did DTC(s) P05202A and/or P052477 return?
 - **YES** — Continue to step 3.
 - **NO** — Go to Repair Procedure 2.
3. Replace the engine oil and oil filter.
4. Using Techstream, clear ANY DTCs.

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Repair Procedure 1 (continued)

5. Start the engine.

A. Use maintenance mode for hybrid models.

Refer to TIS, applicable model and model year Repair Manual:

- 2019 – 2022 Avalon HV:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)
- 2019 – 2022 RAV4 HV:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)
- 2018 – 2022 Camry HV:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)
- 2020 – 2022 Highlander HV:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)
- 2021 – 2022 RAV4 Prime:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)
- 2021 – 2022 Sienna HV:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)
- 2021 – 2022 Venza HV:
General – Introduction – [“Introduction: Repair Instruction: Inspection Mode Procedure”](#)

B. Allow the engine to idle until the engine coolant temperature reaches 122°F.

C. Did the “Oil Pressure Low” warning display or did DTC(s) P05202A and/or P052477 return?

- **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- **NO** — Continue to step 6.

6. Turn OFF the engine.

7. Remove and inspect the oil filler cap.

- A. Check for ANY milky/discolored residue on the underside of the filler cap as shown.
- B. Wipe off ANY milky/discolored residue with a clean shop towel.

8. Reinstall the oil filler cap.

9. Confirm the engine oil on the oil level gauge (dip stick) no longer has a milky/discolored appearance.

Figure 3.



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Repair Procedure 2

1. Replace the engine oil and oil filter.
2. Remove and inspect the oil filler cap.
 - A. Check for ANY milky/discolored residue on the underside of the filler cap as shown.
 - B. Wipe off ANY milky/discolored residue with a clean shop towel.
3. Reinstall the oil filler cap.
4. Confirm the engine oil on the oil level gauge (dip stick) no longer has a milky/discolored appearance.

Figure 4.

