TOYOTA Technical Service Bulletin

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

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2019 - 2022	Avalon HV	
2021 - 2022	Avalon	VDS(s): KB1BB, LB1BB, MB1BB, NB1BB Engine(s): A25
2018 - 2024	Camry HV	
2018 - 2024	Camry	VDS(s): A11AK, B11AK, B11BK, B11HK, B61AK, B61BK, B61HK, BZ1HK, C11AK, C11BK, E11AK, E11BK, F11AK, F11BK, G11AK, G11BK, H11AK, H11BK, J11AK, J11BK, K61AK, K61BK, L11AK, L11BK, M11AK, M11BK, R11AK, R11BK, S11AK, S11BK, T11AK, T11BK Engine(s): A25
2023 - 2024	Corolla Cross HV	
2022 - 2024	Corolla Cross	
2019 - 2024	Corolla Hatchback, RAV4, RAV4 HV	
2020 - 2024	Corolla	VDS(s): B4MBE, B4RBE, M4MCE, M4RCE, P4MCE, P4RCE, S4MCE, S4RCE, T4MCE, T4RCE Engine(s): M20
2023 - 2024	Crown	VDS(s): AAAAF
2024	Grand Highlander HV	VDS(s): ABAA5, ACAB5
2020 - 2024	Highlander HV	
2023 - 2024	Prius Prime	
2023 - 2024	Prius	VDS(s): ACAAU, ADABU
2021 - 2024	RAV4 Prime, Sienna HV, Venza HV	

REVISION NOTICE

February 15, 2024 Rev2:

- Applicability has been updated to include 2024 model year Camry, Camry Hybrid, Corolla, Corolla Cross, Corolla Hatchback, Crown, Grand Highland Hybrid, Highlander Hybrid, Prius, Prius Prime, RAV4, RAV4 Hybrid, RAV4 Prime, Sienna Hybrid, and Venza Hybrid vehicles.
- Applicability has been updated to include Camry VDS(s) B11AK, B11BK, B61AK, and B61BK.
- Applicability has been updated to remove Camry VDS(s) BF1FK, C31AK, E31AK, K31AK, NZ1AK, and PZ1AK.

October 25, 2022 Rev1:

• Applicability has been updated to include 2023 model year Camry, Camry Hybrid, Corolla, Corolla Hatchback, Highlander Hybrid, RAV4, RAV4 Hybrid, RAV4 Prime, Sienna Hybrid, and Venza Hybrid vehicles.

Introduction

Some 2018 – 2024 model year Toyota vehicles equipped with an A25A-FKS, A25A-FXS, M20A-FKS, or M20A-FXS 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]) present.

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 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

Required Tools & Equipment

REQUIRED TOOLS & MATERIAL	ENGINE	QUANTITY	
Clean Shop Towel	-	1	
ADI SN/DC Multigrada Engine Oil (SAE 0)/(46)	A25	4.8 qts.	
API SN/RC Multigrade Engine Oil (SAE 0W-16)	M20	4 0. ato *	
API SN/RC Multigrade Engine Oil (SAE 0W-8)	ivi20	4.9 qts.*	

*Oil quantities will vary depending on the model year. Refer to applicable Repair Manual for details.

NOTE

Verify the oil required for the vehicle model and engine type by checking the under-hood sticker.

REQUIRED EQUIPMENT	SUPPLIER	PARTNUMBER	QTY	
Techstream ADVI*		TSADVUNIT		
Techstream 2.0		TS2UNIT	4	
Techstream Lite	n Lite ADE			
Techstream Lite (Green Cable)		TSLP2DLR01		

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- GTS + software version 2023.04.003.02 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.
- 2. Perform a cooling system pressure check to test for any internal coolant leaks. Refer to TIS, applicable model and model year Repair Manual:
 - <u>2021 2022</u> Avalon: Engine / Hybrid System – A25A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
 - <u>2019 2022</u> Avalon HV: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
 - <u>2018</u> Camry: Engine / Hybrid System – A25A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
 - <u>2019 2024</u> Camry: Engine / Hybrid System – A25A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
 - <u>2018 2024</u> Camry HV: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
 - <u>2020 2024</u> Corolla: Engine / Hybrid System – M20A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
 - <u>2022 2024</u> Corolla Cross: Engine / Hybrid System – M20A-FKS (Cooling) – Cooling System – On-Vehicle Inspection

Confirmation Procedure (continued)

- <u>2023 2024</u> Corolla Cross HV: Engine / Hybrid System – M20A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2019</u> Corolla Hatchback: Engine / Hybrid System – M20A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2020 2024</u> Corolla Hatchback: Engine / Hybrid System – M20A-FKS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2023 2024</u> Crown: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2024</u> Grand Highlander HV: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2020 2024</u> Highlander HV: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2023 2024</u> Prius: Engine / Hybrid System – M20A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2023 2024</u> Prius Prime: Engine / Hybrid System – M20A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2019 2024</u> RAV4: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2019 2024</u> RAV4 HV: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2021 2024</u> RAV4 Prime: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection
- <u>2021 2024</u> Sienna HV: Engine / Hybrid System – A25A-FXS (Cooling) – Cooling System – On-Vehicle Inspection

Confirmation Procedure (continued)

 <u>2021 – 2024</u> 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.

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:
 - <u>2019 2022</u> Avalon HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2018 2024</u> Camry HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2023 2024</u> Corolla Cross HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2023 2024</u> Crown: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2024</u> Grand Highlander HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2020 2024</u> Highlander HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2023 2024</u> Prius: General – Introduction – Repair Instruction – Inspection Mode Procedure
 - <u>2023 2024</u> Prius Prime: General – Introduction – Repair Instruction – Inspection Mode Procedure

Repair Procedure 1 (continued)

- <u>2019 2024</u> RAV4 HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2021 2024</u> RAV4 Prime: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2021 2024</u> Sienna HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2021 2024</u> Venza HV: General – 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.
- 5. Start the engine.
 - A. Use maintenance mode for hybrid models.

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

- <u>2019 2022</u> Avalon HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2018 2024</u> Camry HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2023 2024</u> Corolla Cross HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2023 2024</u> Crown: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2024</u> Grand Highlander HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2020 2024</u> Highlander HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2023 2024</u> Prius: General – Introduction – Repair Instruction – Inspection Mode Procedure

Repair Procedure 1 (continued)

- <u>2023 2024</u> Prius Prime: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2019 2024</u> RAV4 HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2021 2024</u> RAV4 Prime: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2021 2024</u> Sienna HV: General – Introduction – Repair Instruction – Inspection Mode Procedure
- <u>2021 2024</u> Venza HV: General – 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.



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.

Figure 4.



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