

MIL ON With DTCs P24517F and/or P14502A

Service Category Engine/Hybrid System

Section Fuel System

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2020 - 2023	Highlander HV	
2021 - 2023	RAV4 HV, RAV4 Prime, Sienna HV, Venza HV	

Introduction

Some 2020 – 2023 model year Highlander Hybrid and 2021 – 2023 model year RAV4 Hybrid, RAV4 Prime, Sienna Hybrid, and Venza Hybrid vehicles may exhibit a MIL ON condition with one or both of the following Diagnostic Trouble Codes (DTCs) present:

- P24517F – Evaporative Emission System Switching Valve Actuator Stuck Off.
- P14502A – Fuel Tank Pressure Sensor Signal Stuck in Range.

Follow the repair procedure in this bulletin to address this condition.

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
Sienna HV	TMMI	2WD	5TDZRKEC#PS151019 5TDERKEC#PS151019 5TDGRKEC#PS151019 5TDDRKEC#PS151019 5TDCRKEC#PS151019 5TDXRKEC#PS151019 5TDYRKEC#PS151019 5TDJRKEC#PS151019 5TDKRKEC#PS151019 5TDBRKEC#PS151019

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Production Change Information (continued)

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
Sienna HV	TMMI	AWD	5TDZSKFC#PS083228 5TDGSKFC#PS083228 5TDESKFC#PS083228 5TDXSKFC#PS083228 5TDCKSKFC#PS083228 5TDDSKFC#PS083228 5TDJSKFC#PS083228 5TDASKFC#PS083228 5TDYSKFC#PS083228 5TDBSKFC#PS083228 5TDKSKFC#PS083228
RAV4 Prime	TICO	4WD	JTMAB3FV#PD112920
RAV4 HV			Takaoka
	JTMRWRFV#PJ056039 JTM16RFV#PJ056039 JTMP1RFV#PJ056039 JTMW1RFV#PJ056039 JTMC1RFV#PJ056039 JTMD6RFV#PJ056039 JTME6RFV#PJ056039		
	TMMC		2T3DWRFV#PW353009 2T3RWRFV#PW353009 2T35WRFV#PW353009 2T34WRFV#PW353009 2T3MWRFV#PW353009 2T3LWRFV#PW353009 2T3BWRV#PW353009 2T3D6RFV#NW037936 2T3E6RFV#NW037936 2T3B6RFV#NW037936 2T3R6RFV#NW037936 2T3T6RFV#NW037936 2T3M6RFV#NW037936 2T3L6RFV#NW037936

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Production Change Information (continued)

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
RAV4 HV	TMMK	4WD	4T3DWRFV#PU090125 4T3RWRFV#PU090125 4T3MWRFV#PU090125 4T3LWRFV#PU090125 4T3D6RFV#PU114639 4T3E6RFV#PU114639 4T3R6RFV#PU114639 4T3B6RFV#PU114639 4T3T6RFV#PU114639 4T3L6RFV#PU114639 4T3M6RFV#PU114639
Highlander HV	TMMI	2WD	5TDFARAH#PS017752 5TDYARAH#PS017752 5TDLA3AH#PS017752 5TDGARAH#PS017752 5TDAARAH#PS017752 5TDHARAH#PS017752 5TDZARAH#PS017752
		AWD	5TDEBRCH#PS115785 5TDXBRCH#PS115785 5TDFBRCH#PS115785 5TDDBRCH#PS115785 5TDLB3CH#PS115785 5TDLC3CH#PS115785 5TDGBRCH#PS115785 5TDHBRCH#PS115785 5TDABRCH#PS115785 5TDBBRCH#PS115785
Venza HV	Takaoka	4WD	JTEAAAAH#PJ120842

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Warranty Information

OP CODE	MODEL	DESCRIPTION	TIME	OFF	T1	T2
237851	Sienna HV	R & R Fuel Evaporative Separator Sub-assembly	0.6	90910-15085	8A	83
	RAV4 Prime		0.7			
	RAV4 HV		0.5	77070-##### *		
	Highlander HV		0.5			
	Venza HV		0.6			

*Warranty claim MUST be submitted with the correct 10-digit OFF. Choose the correct OFF for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

APPLICABLE WARRANTY

- This repair is covered under the Toyota Federal Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.
- For 2021 – 2023 model year Sienna HV, 2021 model year RAV4 HV, and 2021 model year Venza HV equipped with a California Certified Emission Control System that are registered and operated in California or any state that adopts California emission warranty) — California Emission Short-Term Defect Warranty is in effect for 3 years or 50,000 miles from the vehicle's in-service date, whichever occurs first. (Please reference Policy 4.7 and/or the Owner's Warranty & Maintenance Guide for additional information).
- For 2020 – 2023 model year Highlander HV, 2022 – 2023 model year RAV4 HV, and 2022 – 2023 model year Venza HV equipped with a California Certified Emission Control System that are registered and operated in California or any state that adopts California emission warranty — California Emission Long-Term Defect Warranty is in effect for 7 years or 70,000 miles from the vehicle's in-service date, whichever occurs first. (Please reference Warranty Policy 4.7 and/or the Owner's Warranty & Maintenance Guide for additional information).
- For 2021 – 2023 model year RAV4 Prime vehicles equipped with a California Certified Emission Control System that are registered and operated in California or any state that adopts California emission warranty — Partial Zero Emission Vehicle (PZEV) Emission Warranty Coverage is in effect for 15 years or 150,000 miles, from the vehicle's in-service date, whichever occurs first. (Please reference Warranty Policy Bulletin POL14-09, Warranty Policy 4.7, and/or the Owner's Warranty & Maintenance Guide for additional information).

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Parts Information

MODEL	PART NUMBER		PART NAME	QTY
	PREVIOUS	NEW		
Sienna HV	90910-15085	90910-15089	Valve Assy, Close Tank	1
RAV4 Prime				
RAV4 HV	77070-48010	77070-48011		
Highlander HV				
Venza HV				

Required Tools & Equipment

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.
- GTS+ software version 2023.02.001.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Repair Procedure

1. Confirm the condition exists.
 - A. Using Techstream, does the vehicle exhibit a MIL ON condition with one or both of the following DTCs stored?
 - P24517F – Evaporative Emission System Switching Valve Actuator Stuck Off
 - P14502A – Fuel Tank Pressure Sensor Signal Stuck in Range
 - B. Are ANY of the DTCs listed above present?
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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Repair Procedure (continued)

2. Remove the fuel vapor containment valve (close tank with bolt valve assembly).
Refer to TIS, applicable model and model year Repair Manual:
 - [2020 – 2023](#) Highlander HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Removal”
 - [2021 – 2023](#) RAV4 HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve (w/ Canister Pump Module): Removal”
 - [2021 – 2023](#) RAV4 Prime:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Removal”
 - [2021 – 2023](#) Sienna HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Removal”
 - [2021 – 2023](#) Venza HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Removal”

3. Install the NEW fuel vapor containment valve (close tank with bolt valve assembly).
Refer to TIS, applicable model and model year Repair Manual:
 - [2020 – 2023](#) Highlander HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Installation”
 - [2021 – 2023](#) RAV4 HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve (w/ Canister Pump Module): Installation”
 - [2021 – 2023](#) RAV4 Prime:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Installation”
 - [2021 – 2023](#) Sienna HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Installation”
 - [2021 – 2023](#) Venza HV:
Engine/Hybrid System – Emission Control – “A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Installation”

4. Clear ALL DTCs and confirm the condition is no longer present.