

MIL On With P030000, P030027, and/or P030085

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023 - 2024	Sequoia HV	
2022 - 2024	Tundra, Tundra HV	

Introduction

Some 2023 – 2024 model year Sequoia Hybrid and 2022 – 2024 model year Tundra and Tundra Hybrid vehicles may exhibit a MIL ON condition with one or more of the following Diagnostic Trouble Codes (DTCs) present:

- P030000 – Random/Multiple Cylinder Misfire Detected
- P030027 – Random/Multiple Cylinder Misfire Detected (Emission) Signal Rate of Change Above Threshold
- P030085 – Random/Multiple Cylinder Misfire Detected (Over Temperature) Signal Above Allowable Range

The Engine Control Module (ECM) (SAE term: Powertrain Control Module / PCM) logic has been modified to address this condition. Follow the Repair Procedure in this bulletin to address the condition.

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Production Change Information

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

MODEL	MODEL YEAR	PRODUCTION CHANGE EFFECTIVE VIN
Sequoia HV	2023 – 2024	7SVAAAAA#RX003226
		7SVAAABA#RX032467
Tundra	2022 – 2024	5TF#A5A##RX033763
		5TF#B5A##RX033763
		5TF#A5B##RX003170
		5TF#A5C##RX001860
		5TF#B5C##RX001860
		5TF#A5D##RX172984
		5TF#B5D##RX172984
		5TF#A5E##RX026503
		5TF#A5G##RX003146
		5TF#B5G##RX003146
Tundra HV	2022 – 2024	5TF#C5AB#RX003657
		5TF#C5BC#RX001198
		5TF#C5DB#RX065677
		5TF#C5EC#RX006475

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2424	Reprogram the ECM (PCM)	0.7	89661-0C###*	8A	74

*Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP 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 Emission Warranty. This warranty is in effect for 96 months or 80,000 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.

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Parts Information

PART NUMBER	PART NAME	QTY
89661-0C###	Computer, Engine Control (ECM/PCM)	–

NOTE

The ECM (PCM) should NOT be replaced as part of the Repair Procedure.

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool	DCA-8000P T	1

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-368-6787 or by visiting *Home – Service Resources – Toyota Special Service Tools (SSTs)*.

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 2024.03.004.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 or by visiting *TIS – Diagnostics – Tools & Equipment – Techstream Order Portal*.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.

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Calibration Information

MODEL	MODEL YEAR	VEHICLE MODEL	CALIBRATION ID	
			PREVIOUS	NEW
Sequoia HV	2023 – 2024	VXKH80L-GKVLZA VXKH80L-GKVSZA VXKH80L-GKVZZA	896630CS4000 896630CS4100	896630CS4200
			896630CS4001 896630CS4101	896630CS4201
		VXKH85L-GKVLZA VXKH85L-GKVSZA VXKH85L-GKVZZA	896630CS5000 896630CS5100	896630CS5200
			896630CS5001 896630CS5101	896630CS5201
		VXKA70L-CRUSZA VXKA70L-PSUSZA VXKA72L-CHUSZA	896630CR2000 896630CR2100 896630CR2200 896630CR2300	896630CR2400
			896630CR2001 896630CR2101 896630CR2201 896630CR2301	896630CR2401
Tundra	2022 – 2023	VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CR3000 896630CR3100 896630CR3200 896630CR3300	896630CR3400
			896630CR3001 896630CR3101 896630CR3201 896630CR3301	896630CR3401
		VXKA70L-CRULZA VXKA70L-CRUSZA VXKA70L-PSULZA VXKA70L-PSUSZA VXKA70L-PSUZZA VXKA72L-CHUSZA	896630CR4000 896630CR4100 896630CR4200 896630CR4300	896630CR4400
			896630CR4001 896630CR4101 896630CR4201 896630CR4301	896630CR4401
		VXKA70L-CRULZA VXKA70L-CRUSZA VXKA70L-PSULZA VXKA70L-PSUSZA VXKA70L-PSUZZA VXKA72L-CHUSZA	896630CR4000 896630CR4100 896630CR4200 896630CR4300	896630CR4400
			896630CR4001 896630CR4101 896630CR4201 896630CR4301	896630CR4401

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Calibration Information (continued)

MODEL	MODEL YEAR	VEHICLE MODEL	CALIBRATION ID	
			PREVIOUS	NEW
Tundra	2022 – 2023	VXKA75L-CRULZA VXKA75L-CRUSZA VXKA75L-PSULZA VXKA75L-PSUSZA VXKA75L-PSUZZA VXKA77L-CHUSZA	896630CR5000 896630CR5100 896630CR5200 896630CR5300	896630CR5400
		VXKA70L-CRULZA VXKA70L-CRUSZA VXKA70L-PSULZA VXKA70L-PSUSZA VXKA70L-PSUZZA VXKA71L-PRULZA VXKA71L-PRUSZA VXKA71L-PRUZZA VXKA72L-CHUSZA	896630CR5001 896630CR5101 896630CR5201 896630CR5301	896630CR5401
		VXKA75L-CRULZA VXKA75L-CRUSZA VXKA75L-PSULZA VXKA75L-PSUSZA VXKA75L-PSUZZA VXKA76L-PRULZA VXKA76L-PRUSZA VXKA76L-PRUZZA VXKA77L-CHUSZA	896630CR6000 896630CR6100 896630CR6200 896630CR6300	896630CR6400
		VXKA75L-CRULZA VXKA75L-CRUSZA VXKA75L-PSULZA VXKA75L-PSUSZA VXKA75L-PSUZZA VXKA76L-PRULZA VXKA76L-PRUSZA VXKA76L-PRUZZA VXKA77L-CHUSZA	896630CR6001 896630CR6101 896630CR6201 896630CR6301	896630CR6401
		VXKA70L-CRUSZA VXKA70L-PSUSZA VXKA72L-CHUSZA	896630CR7000 896630CR7100 896630CR7200 896630CR7300	896630CR7400
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA75L-PSUZZA VXKA76L-PRULZA VXKA76L-PRUSZA VXKA76L-PRUZZA VXKA77L-CHUSZA	896630CR7001 896630CR7101 896630CR7201 896630CR7301	896630CR7401
	2024	VXKA70L-CRUSZA VXKA70L-PSUSZA VXKA72L-CHUSZA	896630CU9000	896630CU9100
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CU9001	896630CU9101
		VXKA70L-CRUSZA VXKA70L-PSUSZA VXKA72L-CHUSZA	896630CV0000 896630CV0001	896630CV0100 896630CV0101
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CV1000 896630CV1001	896630CV1100 896630CV1101
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CV2000 896630CV2001	896630CV2100 896630CV2101
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CV2000 896630CV2001	896630CV2100 896630CV2101
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CV2000 896630CV2001	896630CV2100 896630CV2101
		VXKA75L-CRUSZA VXKA75L-PSUSZA VXKA77L-CHUSZA	896630CV2000 896630CV2001	896630CV2100 896630CV2101

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Calibration Information (continued)

MODEL	MODEL YEAR	VEHICLE MODEL	CALIBRATION ID	
			PREVIOUS	NEW
Tundra	2024	VXKA70L-CRULZA	896630CV3000	896630CV3100
		VXKA70L-CRUSZA	896630CV3001	896630CV3101
		VXKA70L-PSULZA		
		VXKA70L-PSUSZA		
		VXKA70L-PSUZZA		
		VXKA71L-PRULZA		
		VXKA71L-PRUSZA		
		VXKA71L-PRUZZA		
Tundra	2024	VXKA72L-CHUSZA		
		VXKA75L-CRULZA	896630CV4000	896630CV4100
		VXKA75L-CRUSZA	896630CV4001	896630CV4101
		VXKA75L-PSULZA		
		VXKA75L-PSUSZA		
		VXKA75L-PSUZZA		
		VXKA76L-PRULZA		
		VXKA76L-PRUSZA		
		VXKA76L-PRUZZA		
Tundra HV	2022 – 2024	VXKA77L-CHUSZA		
		VXKH70L-PSVLZA	896630CS1000	896630CS1300
		VXKH70L-PSVZZA	896630CS1100	
		VXKH70L-PSVZZA	896630CS1200	
		VXKH71L-PRVLZA	896630CS1001	896630CS1301
		VXKH71L-PRVZZA	896630CS1101	
		VXKH71L-PRVZZA	896630CS1201	
		VXKH75L-PSVLZA	896630CS2000	896630CS2300
		VXKH75L-PSVUZA	896630CS2100	
		VXKH75L-PSVZZA	896630CS2200	
		VXKH76L-PRVLZA	896630CS2001	896630CS2301
		VXKH76L-PRVZZA	896630CS2101	
		VXKH76L-PRVZZA	896630CS2201	

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Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit a MIL ON condition with ANY of the following DTC(s)?

- P030000 – Random/Multiple Cylinder Misfire Detected
- P030027 – Random/Multiple Cylinder Misfire Detected (Emission) Signal Rate of Change Above Threshold
- P030085 – Random/Multiple Cylinder Misfire Detected (Over Temperature) Signal Above Allowable Range
- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Use GTS+ to confirm if the ECM (PCM) calibration has been updated.

Is the calibration ID listed in GTS+ the latest ECM (PCM) calibration?

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

3. Flash reprogram the ECM (PCM).

NOTE

- The battery diagnostic tool MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic station, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin [T-SB-0107-20](#), *GTS+ ECU Flash Reprogramming With Security Signature*, and flash reprogram the ECM (PCM) with the NEW calibration file update.

4. Using GTS+, clear ANY DTCs and test-drive the vehicle to confirm the condition has been addressed.