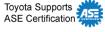


Service

Category Vehicle Interior

Section Meter/Gauge/Display Market USA



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2024	Grand Highlander	VDS(s): AAAA5, AAAB5 Engine(s): T24

REVISION NOTICE

January 10, 2024 Rev1:

• The Production Change Information section has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2024 model year Grand Highlander vehicles equipped with a T24A-FTS engine may exhibit a MIL ON condition with Diagnostic Trouble Code (DTC) P05CE00 (Cold Start "B" Camshaft Position Timing Performance Bank 1) present. The Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of this condition. 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	ENGINE	PRODUCTION CHANGE EFFECTIVE VIN
Grand Highlander	ТММІ	FWD	T24A-FTS	5TDAAAA5#RS009619
		AWD		5TDAAAB5#RS034424



Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2323	Reprogram the ECM (PCM)	0.7	89661-0EL##*	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 Emissions 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.

Parts Information

PART NUMBER	PART NAME		
89661-0EL##	Computer, Engine Control	1	

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

December 20, 2023

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY	
Techstream ADVI*		TSADVUNIT		
Techstream 2.0	٨٥٢	TS2UNIT] ,	
Techstream Lite	ADE	TSLITEPDLR01] '	
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.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.

Calibration Information

MODEL YEAR	MODEL	ENGINE	DRIVE TYPE	CALIBRATION ID									
MODEL TEAK				PREVIOUS	NEW								
		T24A-FTS	FWD T24A-FTS	8A2220E17000	8A2220E17300								
2024				8A2220E17100									
	Crond Highlandar			8A2220E17200									
	Grand Highlander	(Conv.) 4WD	(Conv.)	(Conv.)	(Conv.)	(Conv.)	(Conv.)	(Conv.)	(Conv.)	(Conv.)		8A2220E16000	
			4V								4WD	8A2220E16100	8A2220E16300
					8A2220E16200								

^{*}Essential SST.

Repair Procedure

Confirm the condition exists.

Does the vehicle exhibit a MIL ON DTC P05CE00 (Cold Start "B" Camshaft Position timing Performance Bank 1) present?

December 20, 2023

- 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 <u>DCA-8000 Instruction Manual</u> located at TIS Diagnostics Tools & Equipment Battery Diagnostics.

Follow the procedures outlined in <u>T-SB-0107-20</u> *GTS+ ECU Flash Reprogramming With Security Signature*, and flash the ECM (PCM) with the NEW calibration file update.

- 4. Using GTS+, clear ANY DTCs and test-drive the vehicle in accordance with the driving pattern described in the confirmation driving pattern to confirm the condition is no longer present. Refer to TIS, applicable model and model year Repair Manual:
 - 2024 Grand Highlander:

Engine/Hybrid System – Engine Control – "T24A-FTS (Engine Control): SFI System (for Gasoline Model): P001400,P001500,P05CE00; Camshaft Position "B" – Timing Over-Advanced or System Performance Bank 1"