

MIL ON With DTC P05CE00

Service Category Vehicle Interior

Section Meter/Gauge/Display

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023	Highlander	VDS(s): KDRAH, KDRBH Engine(s): T24

REVISION NOTICE

November 17, 2023 Rev1:

- The Repair Procedure section has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2023 model year 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). 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.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2313	Reprogram the ECM (PCM)	0.7	89661-0EM##*	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.

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Parts Information

PART NUMBER	PART NAME	QTY
89661-0EM60	Computer, Engine Control	–

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 1-800-933-8335.

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 2023.03.002.02 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.

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Calibration Information

MODEL YEAR	MODEL	ENGINE	DRIVE TYPE	CALIBRATION ID	
				PREVIOUS	NEW
2023	Highlander	T24A-FTS	FWD With Start/Stop	896630EG3000	896630EG3100
			FWD Without Start/Stop	896630EG4000	896630EG4100
			4WD	896630EG5000	896630EG5100

Repair Procedure

1. Confirm the condition exists.

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

- **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.

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Repair Procedure (continued)

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 [T-SB-0057-23](#) *GTS+ ECU Flash Reprogramming Procedure*, and flash the ECM (PCM) with the NEW calibration file update.

4. 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:

- [2023](#) Highlander:
Engine/Hybrid System – Engine Control – “T24A-FTS (Engine Control): SFI System: P001400, P001500, P05CE00; Camshaft Position “B” – Timing Over-advanced or System Performance Bank 1”