

MIL ON With DTC P0A1B1F (Mechanical Key Only)

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023 - 2024	Corolla HV	VDS(s): BCMFE, BDMHE

Introduction

Some 2023 – 2024 model year Corolla Hybrid vehicles that utilize a mechanical key (without a smart key) may exhibit a MIL ON condition with Diagnostic Trouble Code (DTC) P0A1B1F (Generator Control Module Circuit Intermittent) present. The Hybrid Vehicle Control Computer (HV ECU) 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	PRODUCTION CHANGE EFFECTIVE VIN
Corolla HV	Takaoka No.1	2WD	JTDBCMFE#RJ031631
		AWD	JTDBDMHE#RJ009594

MIL ON With DTC P0A1B1F (Mechanical Key Only)

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2431	Hybrid Vehicle Control Computer (HV ECU) Reprogramming	1.1	89981-12####*	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 Hybrid System Warranty. This warranty is in effect for 96 months or 100,000 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	QTY
PREVIOUS	NEW		
89981-12####	89981-12420	Computer, Hybrid Vehicle Control	–

NOTE

The HV ECU should NOT be replaced as part of the Repair Procedure.

MIL ON With DTC P0A1B1F (Mechanical Key Only)

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
DCA-8000 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.

Calibration Information

MODEL	ENGINE	DRIVETRAIN	CALIBRATION ID		VDS	
			PREVIOUS	NEW		
Corolla HV (With Mechanical Key)	2ZR-FXE	2WD	8A2521202100 (Main) 899851218000 (Sub)	8A2521202300 (Main) 899851218100 (Sub)	BCMFE	
			8A2521202200 (Main) 899851218000 (Sub)			
		AWD	8A2521205100 (Main) 899851218001 (Sub)	8A2521205300 (Main) 899851218101 (Sub)		BDMHE
			8A2521205200 (Main) 899851218001 (Sub)			

MIL ON With DTC P0A1B1F (Mechanical Key Only)

Repair Procedure

1. Confirm vehicle applicability.
Does the vehicle utilize a mechanical key (without a smart key)?
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
2. Confirm the condition exists.
Does the vehicle exhibit a MIL ON condition with DTC P0A1B1F (Generator Control Module Circuit Intermittent) present?
 - **YES** — Continue to step 3.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
3. Use GTS+ to confirm if the HV ECU calibration has been updated.
Is the calibration ID listed in GTS+ the latest HV ECU calibration?
 - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - **NO** — Continue to step 4.
4. Flash reprogram the HV ECU.

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 HV ECU with the NEW calibration file update.

5. Using GTS+, clear ANY DTCs and confirm the condition is no longer present.