

MIL ON With DTC P0300 and/or Cold Start Misfire

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2017 - 2020	86	

REVISION NOTICE

July 09, 2020 Rev1:

- The Repair Procedure has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2017 – 2020 model year 86 vehicles with automatic transmissions may exhibit one or both of the following conditions:

- MIL ON condition with Diagnostic Trouble Code (DTC) P0300.
- Rough idle at cold start noticeable when engine coolant temperature is around 50°F (10°C).

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 VIN shown below.

MODEL	DRIVETRAIN	ENGINE	PRODUCTION CHANGE EFFECTIVE VIN
86	ATM	FA20	JF1ZNAE1#L8751145

MIL ON With DTC P0300 and/or Cold Start Misfire

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG1913	Engine ECU Reprogramming	0.7	SU003-07935	8A*	74

*Based on the condition in the description.

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	QTY
PREVIOUS	NEW		
22765AK040	22765AK041	Computer, Engine Control (ECM/PCM)	—
22765AM110	22765AM111		
22765AN220	22765AN221		
22765AP180	22765AP181		
00451-00001-LBL		Authorized Modifications Labels	1

NOTE

- The ECM (PCM) should NOT be replaced as part of the Repair Procedure.
- Authorized Modifications Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Parts – Dealer Support Materials Orders*.

MIL ON With DTC P0300 and/or Cold Start Misfire

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.
- Software version 15.00.028 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.

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

*Essential SST.

NOTE

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

MIL ON With DTC P0300 and/or Cold Start Misfire

Calibration Information

MODEL	ENGINE	CALIBRATION ID	
		PREVIOUS	NEW
86	FA20	ZA1JK00D	ZA1JK01D
		ZA1JN00D	ZA1JN11D
		ZA1JN10D	
		ZA1JS00D	ZA1JS01D
		ZA1JV00D00G	ZA1JV01D00G

Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit one or both of the following conditions?

- MIL ON condition with Diagnostic Trouble Code (DTC) P0300.
- Rough idle at cold start noticeable when engine coolant temperature is around 50°F (10°C).
- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

MIL ON With DTC P0300 and/or Cold Start Misfire

Repair Procedure (continued)

2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown below. Confirm if the Engine ECU calibration has been updated.
Is the calibration ID listed the latest Engine ECU calibration?
 - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - **NO** — Continue to step 3.

Figure 1. Location of Authorized Modifications Label on 2017 – 2020 86



TOYOTA MOTOR CORPORATION	
AUTHORIZED MODIFICATIONS	
THE FOLLOWING MODIFICATIONS HAVE BEEN MADE:	
①	
②	
THESE MODIFICATIONS HAVE BEEN APPROVED AS APPROPRIATE BY EPA AND CARB	
③	DEALER CODE: _____
	DATE: _____
	CHANGE AUTHORITY: _____
④	
⑤	

1	Replacement ECM (PCM) Part Number (e.g., 22765AK041)	4	Date Completed
2	New Calibration ID (e.g., ZA1JK01D)	5	This SB Number
3	Dealer Code		

MIL ON With DTC P0300 and/or Cold Start Misfire

Repair Procedure (continued)

3. Flash reprogram the Engine ECU.

NOTE

- The battery diagnostic tool **MUST** be used in Power Supply mode to maintain battery voltage at **13.0 – 13.5V** while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic tool, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin [T-SB-0134-16](#) *Techstream ECU Flash Reprogramming Procedure* and flash the Engine ECU with the NEW calibration file update.

4. Prepare and install the Authorized Modifications Label.
 - A. Using a permanent marker, enter the following information on the label:
 - Engine ECU part number [Refer to the **Parts Information** section for the **NEW PART NUMBER**]
 - Calibration ID(s) [Refer to the **Calibration Information** section for the **NEW CALIBRATION ID**]
 - Dealer Code
 - Repair Date
 - Change Authority [**This bulletin number**]
 - B. Affix the Authorized Modifications Label to the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
5. If possible, test-drive the vehicle from cold start at 50°F (10°C) to confirm the condition is no longer present.