

MIL "ON" DTC P050B00 - Cold Start Ignition Timing Performance

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2018	LS500	

Introduction

Some 2018 model year LS 500 vehicles equipped with a V35A-FTS engine may exhibit a MIL "ON" condition with Diagnostic Trouble Code (DTC) P050B00 (Cold Start Ignition Timing Performance). The Engine Control Module/ECM (SAE Term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of this condition occurring. 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
LS 500	Tahara	2WD	JTHB51FF#J5002077
		AWD	JTHC51FF#J5001838

Warranty Information

OP CODE	DESCRIPTION	TIME	OPF	T1	T2
EG1801	Reprogram ECM (PCM)	0.5	89661-50S30 89661-50S90	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Lexus 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

DRIVETRAIN	PART NUMBER		PART NAME	QTY
	PREVIOUS	NEW		
2WD	89661-50S30	89661-50S31	Computer, Engine Control (ECM/PCM)	-
AWD	89661-50S90	89661-50S91		
-	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*.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

* Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 13.00.022 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
GR8 Battery Diagnostic Station*	00002-MCGR8	1

* Essential SST.

NOTE

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

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Calibration Information

MODEL	ENGINE	CALIBRATION ID		VDS
		PREVIOUS	NEW	
LS 500	2WD	8966A5005000	8966A5005100	B51FF
		8966350K6000	8966350K6100	
		896655065000	896655065100	
	AWD	8966A5011000	8966A5011100	C51FF
		8966350L2000	8966350L2100	
		896655071000	896655071100	

Repair Procedure

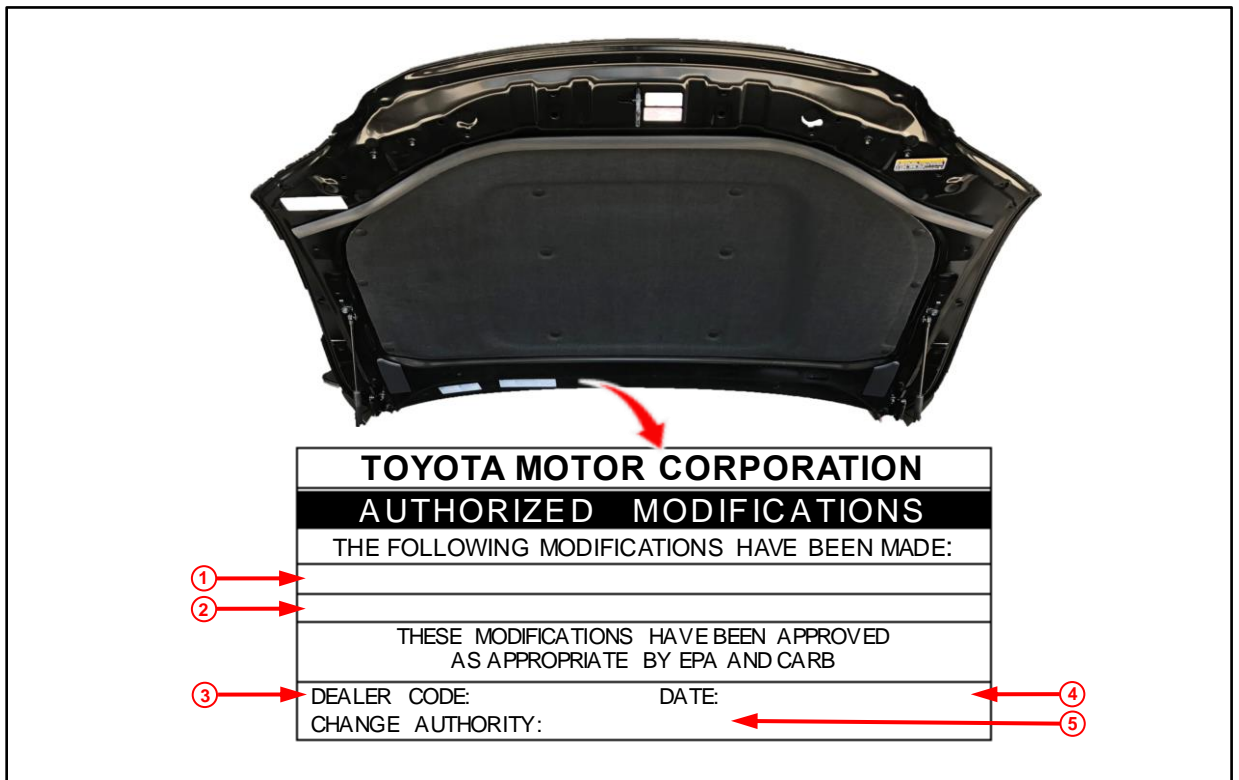
- Using Techstream, check for the following stored DTC:
P050B00 – Cold Start Ignition Timing Performance
Is the DTC present?
 - YES** — Continue to step 2.
 - NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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Repair Procedure (continued)

2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown below. Confirm if the ECM (PCM) calibration has been updated.
Is the calibration ID listed the latest ECM (PCM) 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 for 2018 LS 500



1	Replacement ECM (PCM) Part Number (e.g., 89661-50S31)
2	New Calibration ID (e.g., 8966A5005100)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (continued)

3. Flash reprogram the ECM (PCM).

NOTE

- The GR8 Battery Diagnostic Station MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming vehicle.
- For details on how to use the GR8 Battery Diagnostic Station, refer to the ["GR8 Instruction Manual"](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin No. [L-SB-0001-18](#) "Techstream ECU Flash Reprogramming Procedure," and flash the ECM (PCM) 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:
 - ECM (PCM) 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. Test drive the vehicle to confirm the DTC does NOT reset.