

MIL ON With DTC P0087/P008700 - Fuel Rail/System - Pressure Too Low

Service Category Engine/Hybrid System

Section Fuel System

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2015	NX200T	

REVISION NOTICE

May 21, 2020 Rev1:

- The entire bulletin has been updated.
- Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2015 model year NX 200t vehicles equipped with 8AR-FTS engines may exhibit a MIL ON condition with Diagnostic Trouble Code (DTC) P0087/P008700 (ECM/PCM Fuel Rail/System Pressure – Too Low). 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	PRODUCTION CHANGE EFFECTIVE VIN
NX 200t	TMK	FF/F-Sport	JTJYARBZ#F2021027
		AWD/F-Sport	JTJBARBZ#F2043919

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL1509	Reprogram ECM (PCM)	0.4	89661-78050-B	8A	99

APPLICABLE WARRANTY

- This repair is covered under the Lexus 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

DRIVETRAIN	PART NUMBER		PART NAME	QTY
	PREVIOUS	NEW		
FF	89661-78050-B	89661-78051	Computer, Engine Control (ECM/PCM)	-
FF/F-Sport				
AWD	89661-78060-B	89661-78061		
AWD/F-Sport	89661-78070-B	89661-78071		
All	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*.

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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.

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Calibration Information

MODEL	DRIVETRAIN	ECM (CPU)	CALIBRATION ID		VDS
			PREVIOUS	NEW	
NX 200t	FF	Main	896637805200	896637805300	YARBZ
	FF/F-Sport				
	AWD		896637806200	896637806300	BARBZ
	AWD/F-Sport		896637807200	896637807300	

Repair Procedure

1. Confirm the condition exists.

Using Techstream, check for DTC P0087/P008700 (ECM/PCM Fuel Rail/System Pressure – Too Low).

Is DTC P0087/P008700 present?

 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Use Techstream to confirm if the ECM (PCM) calibration has been updated and check for the Authorized Modifications Label affixed to the vehicle in the location shown below.

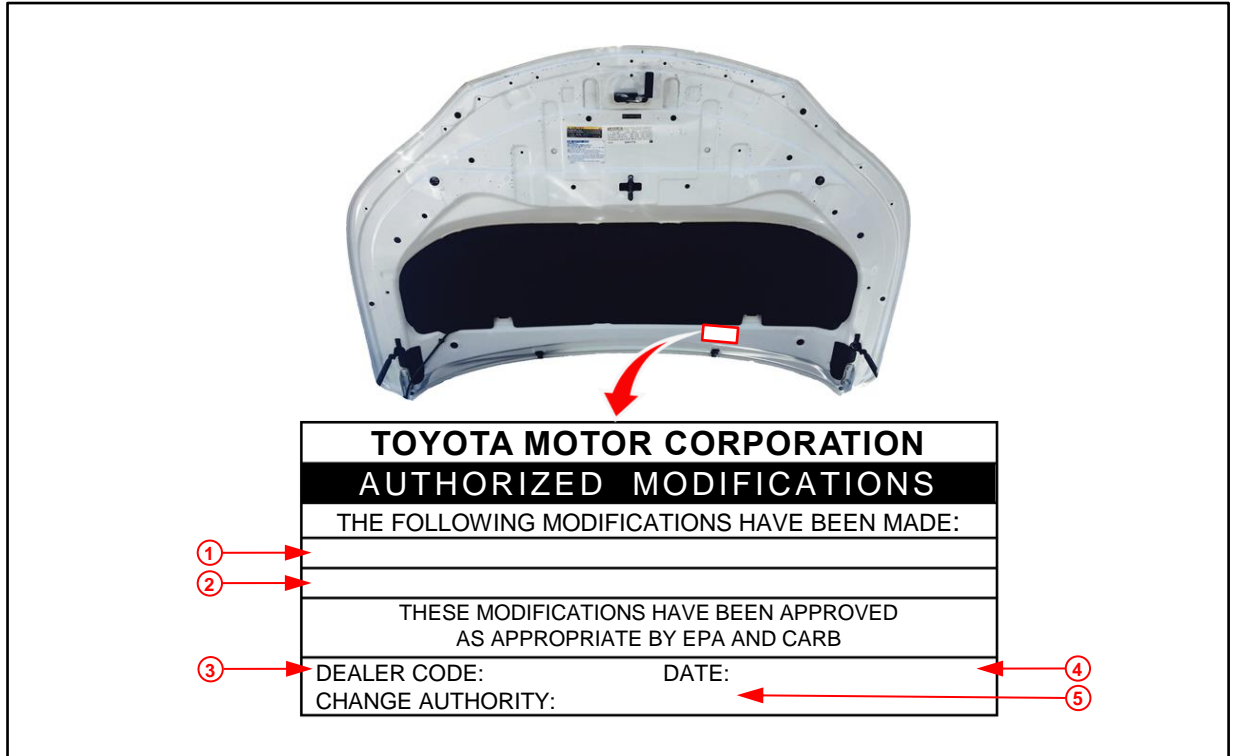
Is the calibration ID listed in Techstream and on the label the latest ECM (PCM) calibration?

 - **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)

Figure 1. Location of Authorized Modifications Label on 2015 NX 200t



1	Replacement ECM (PCM) Part Number (e.g., 89661-78051)
2	New Calibration ID (e.g., 896637805300)
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 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 tool, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin [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. Install the Authorized Modifications Label onto the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.

5. Complete the Confirmation Driving Pattern to confirm the DTC is no longer present. Refer to TIS, applicable model and model year Repair Manual:
 - 2015 NX 200t: [Engine/Hybrid System – Engine Control – “8AR-FTS \(Engine Control\): SFI System: P008700; Fuel Rail / System Pressure - Too Low”](#)