


# Non-Linear Acceleration from a Stop

**Service Category** Engine/Hybrid System

**Section** Engine Control

**Market** USA

Lexus Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2010	SC430	

## Introduction

Some 2010 model year SC 430 vehicles may exhibit non-linear acceleration from a stop after driving under sustained conditions of low engine rpm with high engine load. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) logic has been revised to address this condition. Use the following repair procedure to recalibrate the ECM (PCM).

## Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
89661-24820	89661-24821	Computer, Engine Control (ECM/PCM)	–
00451-00001-LBL	Same	Authorized Modification Labels	1

### NOTE

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

## Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG1011	Recalibrate ECM (PCM) Engine	0.4	89661-2482#	04	74

### 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.

## Non-Linear Acceleration from a Stop

### Calibration Information

MODEL	MODEL YEAR	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID
SC 430	2010	32421000	<a href="#">32421100</a>

### Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite  NOTE: Software version 5.10.029 or later is required.	ADE	TSPKG1 or TSLITEDLR01	1

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	<a href="#">00002-MCGR8</a>	1

**NOTE**

- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Additional SSTs may be ordered by calling 1-800-933-8335.
- The Diagnostic Tester is NOT recommended for flash reprogramming with this calibration file. Please use TIS Techstream or an approved J2534 interface to perform this update. Visit [techinfo.toyota.com](http://techinfo.toyota.com) for more information regarding J2534 reprogramming.



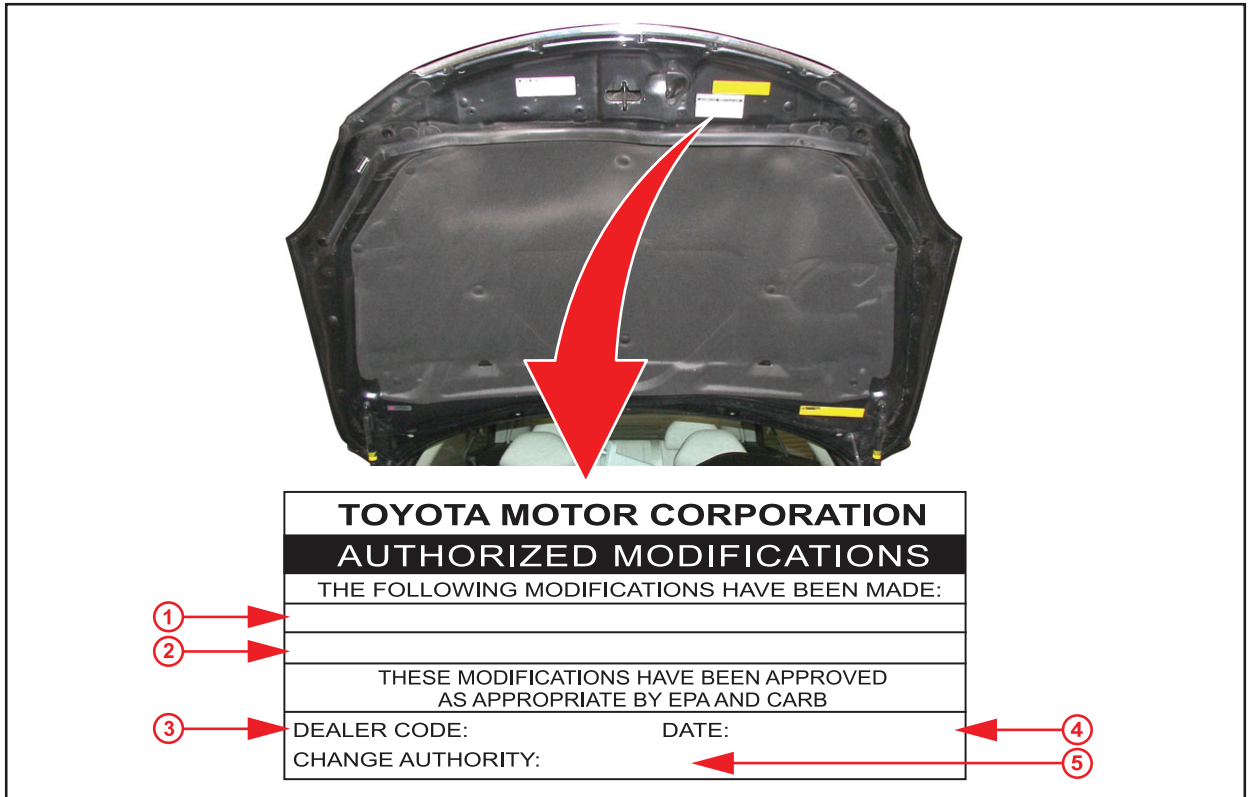
\* Essential SST.

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## Repair Procedure

1. Confirm the condition matches the Introduction.
2. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 1. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration — go to step 3.

**Figure 1. Location of Authorized Modifications Label on 2010 SC 430**



<b>1</b>	Replacement ECM (PCM) Part Number (i.e., 89661-24821)
<b>2</b>	New Calibration ID(s) (i.e., 32421100)
<b>3</b>	Dealer Code

<b>4</b>	Date Completed
<b>5</b>	This TSIB Number

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### Repair Procedure (Continued)

- Flash reprogram the ECM (PCM).

**NOTE**

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

Follow the procedures outlined in TSIB No. [L-SB-0015-10](#), “Techstream ECU Flash Reprogramming Procedure”, and flash the ECM (PCM) with the NEW calibration file update.

- Install the Authorized Modifications Label.
  - Using a permanent marker, enter the following information on the label:
    - ECM part number [Refer to the **Parts Information** section for the **CURRENT PART NUMBER**]
    - Calibration ID(s) [Refer to the **Calibration Identification Chart** for the **NEW CALIBRATION ID**]
    - Dealer Code
    - Repair Date
    - Change Authority [**This TSIB** number]
  - 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.
- Test drive the vehicle to confirm proper vehicle operation.