Technical Service Information Bulletin

Nonlinear Acceleration (2WD ONLY)

Service Category Engine/Hybrid System

Section Engine Control **Market** USA

Lexus Supports ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2013 - 2014	LS460	

Introduction

Some 2013 – 2014 model year LS 460 (2WD) vehicles may exhibit a non-linear acceleration or hesitation feeling due to inappropriate spark knock or detonation detection and may set Diagnostic Trouble Code (DTC) P2119 (Throttle Actuator Control Throttle Body Range Performance). To enhance the smoothness of acceleration, the Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) calibration has been revised. Use the following Repair Procedure to address this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL1610	Recalibrate ECM (PCM)	0.4	89661-50L00 89661-50L70 89661-50M00 89661-50M50 89661-50P10 89661-50P11 89661-50P20 89661-50P30 89661-50P40	04	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.**

© 2016 Lexus, a division of Toyota Motor Sales, USA

Nonlinear Acceleration (2WD ONLY)

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
89661-50L00 89661-50P10 89661-50L01	89661-50P40 89661-50P11	Computer, Engine Control (ECM)	–
–	00451-00001-LBL	Authorized Modifications Label	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*.**

Calibration Information

MODEL	MODEL YEAR	OPTIONS	CALIBRATION ID	
			PREVIOUS	NEW
L460	2013	Non F Sport	35065000	35065100
		F Sport	35065001	35065101
	2014	Non F Sport	350G5000	350G5100
		F Sport	350G5001	350G5101

© 2016 Lexus, a division of Toyota Motor Sales, USA

Nonlinear Acceleration (2WD ONLY)

Required Tools & Equipment

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

NOTE

- **Only ONE of the Techstream units listed above is required.**
- **Software version 11.10.034 or later is required.**
- **Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.**
- **The Diagnostic Tester is NOT recommended for flash reprogramming. Please 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

NOTE

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

* Essential SST.

Repair Procedure

1. Confirm the condition.

   Does the non-linear acceleration or hesitation condition duplicate when accelerating?

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

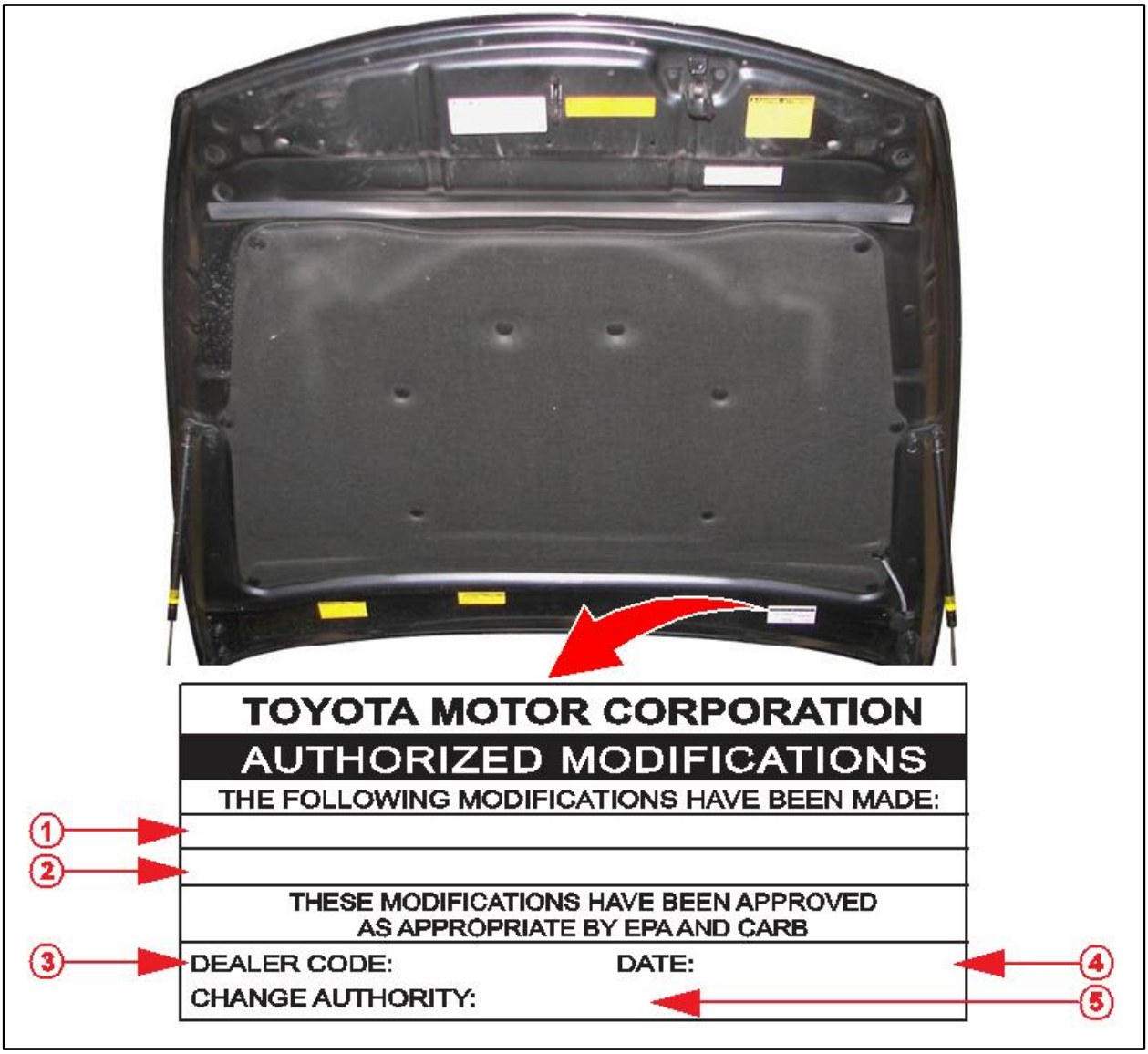
© 2016 Lexus, a division of Toyota Motor Sales, USA

Nonlinear Acceleration (2WD ONLY)

Repair Procedure (Continued)

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. If the calibration ID is the latest, go to step 5.

Figure 1.



1	Replacement ECM (PCM) Part Number (i.e., 89661-50C04)
2	New Calibration ID(s) (i.e., 35065100)
3	Dealer Code

4	Date Completed
5	This SB Number

© 2016 Lexus, a division of Toyota Motor Sales, USA

Nonlinear Acceleration (2WD ONLY)

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 13.5 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 – Tools & Equipment – Battery Diagnostics.**

Follow the procedures outlined in Service Bulletin No. L-SB-0021-14 "Techstream ECU Flash Reprogramming Procedure," and flash the ECM (PCM) with the NEW calibration file update.

4. Install the Authorized Modifications Label.
   A. Using a permanent marker, enter the following information on the label:
      - ECM 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**]*
      - 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 that the non-linear acceleration or hesitation is no longer present.

© 2016 Lexus, a division of Toyota Motor Sales, USA