

# Initialization of VGRS System During PDS

Service  
Category General

Section Pre-Delivery Service

Market USA

Lexus Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2015	LS460, LS600H	

## Introduction

The DCC fuses are removed at the assembly plant to reduce parasitic current draw from the battery during transport and storage. As a result of the removal of the DCC fuses, the Variable Gear Ratio Steering (VGRS) system will be inoperative and the steering wheel may be off-center. After the DCC fuses are reinstalled, the VGRS system will be operative, but the steering wheel may become off-center by 5 – 10 degrees. This condition may also appear when the battery terminal has been disconnected.

Initialize the VGRS system using the procedure in this bulletin after installing the DCC fuses or when reconnecting the battery terminal.

### NOTE

Do NOT adjust the steering wheel centering (i.e., do NOT adjust tie rod ends) before initialization of the VGRS system, or the steering may be off-center after initialization.

## Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	

\* Essential SST.

### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 9.20.022 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

## Initialization of VGRS System During PDS

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
N/A	Not Applicable to Warranty	-	-	-	-

### Initialization Procedure

1. Drive the vehicle on a straight road at 22 mph (35 km/h) or more for at least 5 seconds. At this point, the steering wheel will still remain off-center by 5 – 10 degrees.

**NOTE**

In this step, the neutral position of the steering wheel is recorded in the VGRS ECU memory.

2. Perform normal cornering 2 – 3 times. The steering wheel position is automatically corrected in this step.
3. With the vehicle stopped, turn the steering wheel from lock to lock, then drive straight again.
4. Confirm the steering wheel is centered.
  - If the steering wheel is centered, initialization is complete. Go to step 5.
  - If the steering wheel is off-center, repeat steps 1 – 3.
5. Confirm initialization has been completed.
  - A. Access the VGRS Data List using Techstream:  
Chassis / VGRS / Data List
  - B. Confirm the "STRAIGH ANG FLG" parameter reads "VALID."

**NOTE**

Prior to initialization, the "STRAIGH ANG FLG" parameter will read "INVALID." When the VGRS initialization procedure is complete, the "STRAIGH ANG FLG" parameter will change to "VALID."

- If "VALID" and steering is off-center, refer to the following sections in the Repair Manual on the Technical Information System (TIS):
  - *Steering – Steering Column – "Steering Column: Variable Gear Ratio Steering System: Calibration (LS 460 / LS 600h)"*
  - *Steering – Steering Column – "Steering Column: Variable Gear Ratio Steering System: Test Mode Procedure (LS 460 / LS 600h)"*
- If "INVALID," return to step 1 and perform driving procedure again.
- If "INVALID" returns again, check for VGRS system DTCs and diagnose the condition following the procedures found in the Repair Manual.