


# 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
2009	LS460	

## Introduction

This bulletin describes the initialization procedure for the Variable Gear Ratio Steering (VGRS) system.

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 VGRS system will be inoperative and the steering wheel may be off-center. After the DCC is 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 following 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
TIS Techstream* NOTE: Software version 3.01.000 or later is required.	ADE	TSPKG1	1

\* Essential SST.

### NOTE

**Additional TIS Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.**

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### 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, and the steering wheel should be centered.
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, go to step 1.
5. Confirm initialization has been completed.
  - A. Access the VGRS Data List using TIS 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 Technical Information System (TIS), 2009 model year LS 460 Repair Manual, [“Steering – Steering Column – “Steering Column: Variable Gear Ratio Steering: Calibration”](#) and [“Steering Column: Variable Gear Ratio Steering: Test Mode Procedure”](#).
- 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.