TOYOTA

Technical Service BULLETIN

November 18, 2003

Title:

VSC COMPUTER LOGIC MODIFICATION FOR DTC C1231

Models:

'03 Sequoia

TSB

REVISED

BRAKES

BR003-03

TSB REVISION NOTICE:

May 13, 2004: The Diagnostic Tester screen flows on pages 3 – 5 have been changed. All previous versions of this TSB should be discarded.

Introduction

Some 2003 model year Sequoia vehicles may experience a VSC light ON condition with DTC C1231 in the Skid Control Computer memory. A modification to the Skid Control Computer logic has been made to prevent this condition.

Applicable Vehicles

- **2003** model year **Sequoia** vehicles produced **BEFORE** the Production Change Effective VIN shown below.

Production Change Information

MODEL	PRODUCTION CHANGE EFFECTIVE VIN
Sequoia	5TD*T##A#3S196512

Required SSTs

SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QUANTITY
Toyota Diagnostic Tester Kit* 	01001271	1
12 Megabyte Diagnostic Tester Program Card with version 10.2a Software (or later)* 	01002593-005	1

* Essential SSTs.

NOTE:

Additional Diagnostic Tester Kits, Program Cards or SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
896011	R & R Skid Control Computer Assembly	1.4	89541–0C060	8A	71

Applicable Warranty*:

This repair is covered under the Toyota Comprehensive Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.

* Warranty application is limited to correction of a problem based upon a customer's specific complaint.

Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
89541–0C060	89541–0C062	Computer Assembly, Skid Control	1

Repair Procedure

In the event that no problem can be identified in the diagnostic procedure for DTC C1231, replace the Skid Control Computer.

NOTE:

2003 model year Sequoia vehicles produced after the VIN in the Production Change Information table, or the vehicles of which the Skid Control ECU has been changed to the new part will also have changes in the operation procedure of the calibration. Calibrate according to the following procedure.

Calibration Procedure

NOTE:

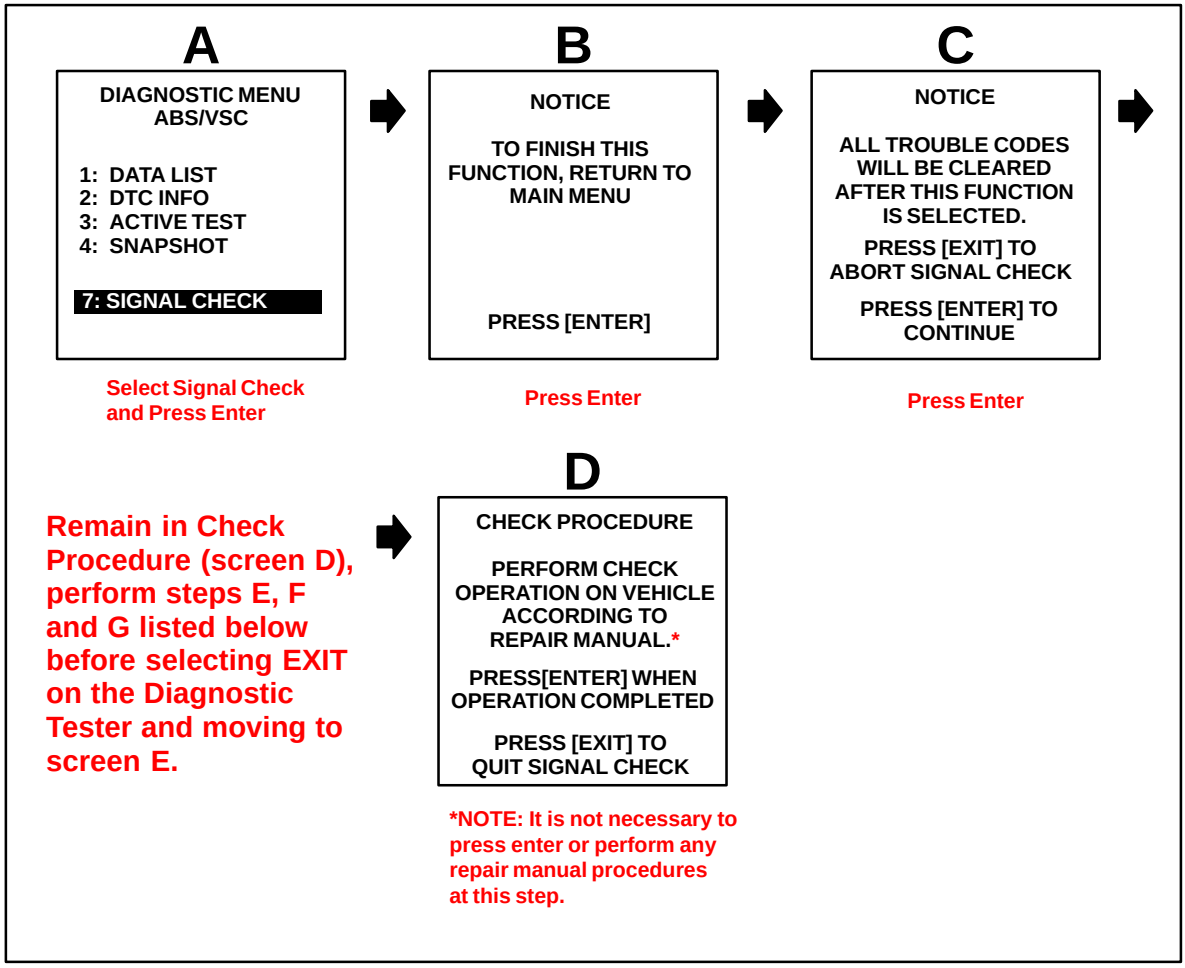
Whenever replacing the master cylinder pressure sensor, yaw rate and deceleration sensor, or the Skid Control ECU, make sure to perform zero point calibration.
While performing the zero point calibration:

- **Do not tilt, move, or shake the vehicle.**
- **The vehicle must maintain a stationary position.**
- **Do not start the engine.**
- **Be sure to perform calibration on a level surface (within an inclination of 1%).**

1. Whenever replacing the Skid Control ECU, registration of the new ECU must first be performed.
   A. For 2WD models: registration is complete. Proceed to step 2.
   B. For 4WD models:
      a. After turning the ignition switch ON, with the shifter in the “P” position, move the transfer lever to the “L4” position.
      b. At this time, the VSC system buzzer will sound for 3 seconds indicating that registration is complete. Now turn the ignition switch OFF. Proceed to step 2.

Calibration Procedure (Continued)

2. Perform master cylinder pressure, yaw rate and deceleration sensor zero point calibration.
   A. Connect Diagnostic Tester to DLC3.
   B. Move the shift lever to the “P” position.
   C. Start the engine.
   D. Place the Diagnostic Tester into Signal Check mode under the ABS/VSC menu.



   E. Keep the vehicle in a stationary position on a level surface for 4 seconds or more.
   F. For 2WD models: press the TRAC OFF switch 3 times within 3 seconds without pressing the brake pedal.
   G. For 4WD models: press the center differential lock switch 3 times within 3 seconds without pressing the brake pedal.

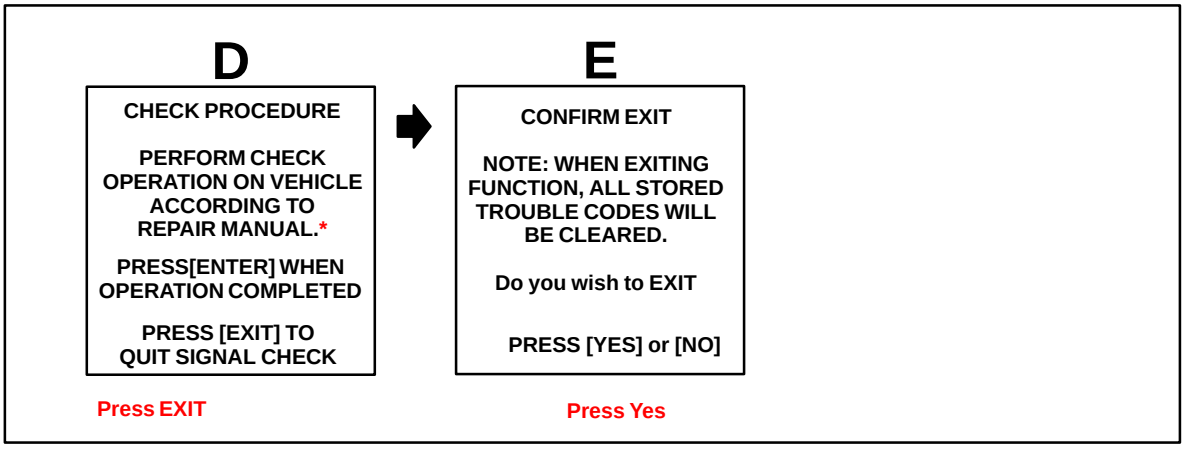
Calibration Procedure (Continued)

H. Check that the VSC buzzer sounds for 3 seconds.

NOTE:

If the VSC buzzer does not sound:

- **Repeat the zero point calibration procedures listed in Step 2.**
- **Check the VSC buzzer circuit.**



I. Zero point of master cylinder pressure, yaw rate and deceleration sensor is complete. Proceed to step 3.

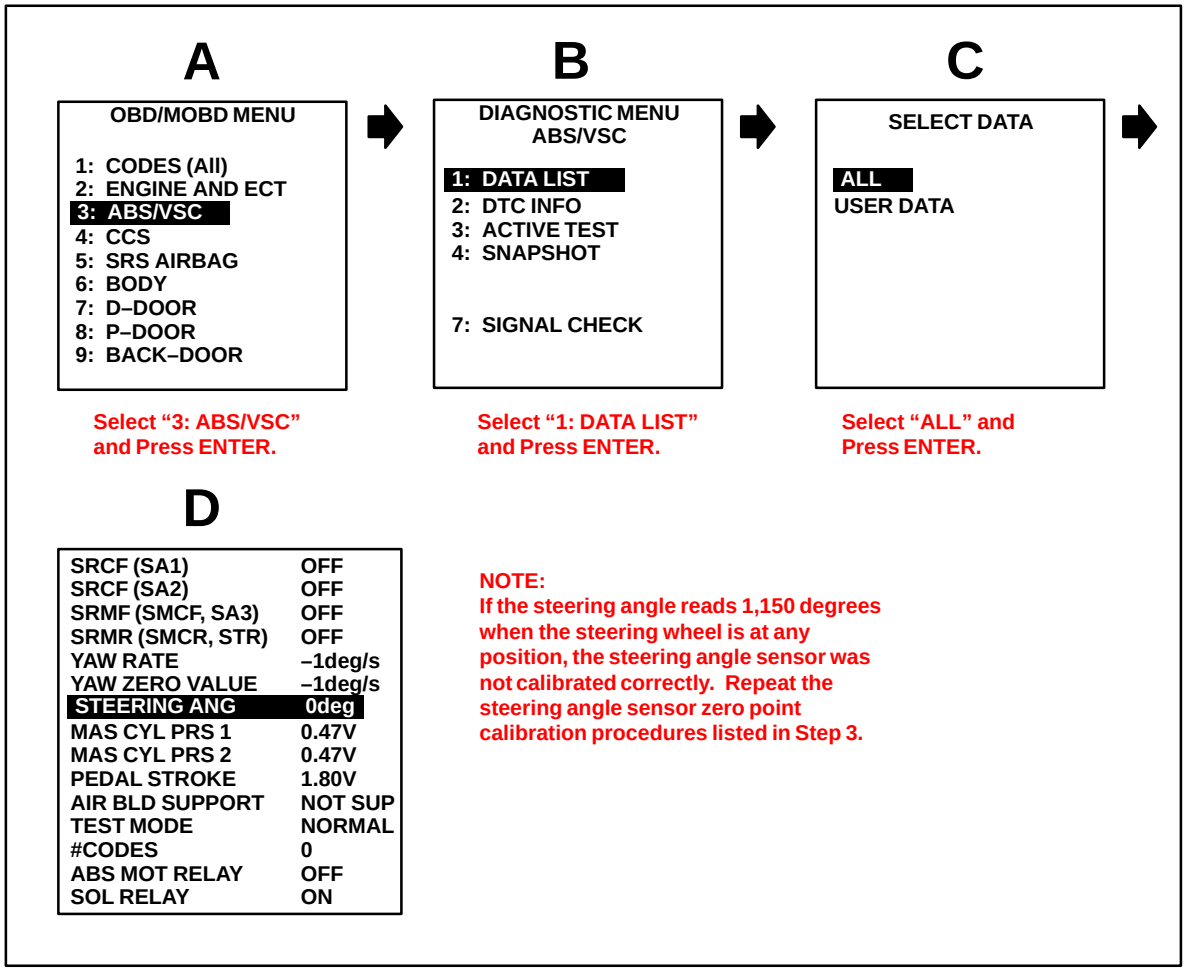
3. Perform steering angle sensor zero point calibration.

A. Disconnect the Diagnostic Tester.

B. Calibrate the steering angle sensor by driving the vehicle above 28 mph (45 km/h).

Calibration Procedure (Continued)

4. Confirm zero point calibration.
   A. Stop the vehicle.
   B. Place the shifter in the “P” position.
   C. Connect the Diagnostic Tester to DLC3.
   D. View the ABS/VSC Data List to see that the steering angle value changes when turning the steering wheel.



5. Disconnect the Diagnostic Tester and turn the ignition switch OFF.