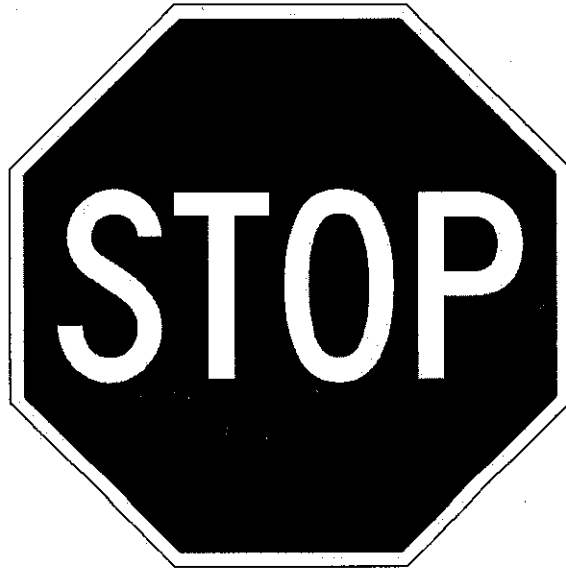


TECHNICAL INSTRUCTIONS
FOR
SAFETY RECALL A0G
SKID CONTROL ECU CALIBRATION UPDATE
2003 MODEL YEAR SEQUOIA

TECHNICAL INSTRUCTION REVISION NOTICE:

- **June 16, 2010:**
 - Additional reminders NOT to cycle the key during reprogramming have been included on pages 4, 6, and 8.
- **June 24, 2010:**
 - The procedure requiring the GR8 battery charger has been removed from the instructions.

Previous versions of this Technical Instruction should be discarded.



Important Note 1:

Before performing this repair you must have the “2003 Sequoia VSC Calibration Update Application” installed on your Techstream Toughbook.



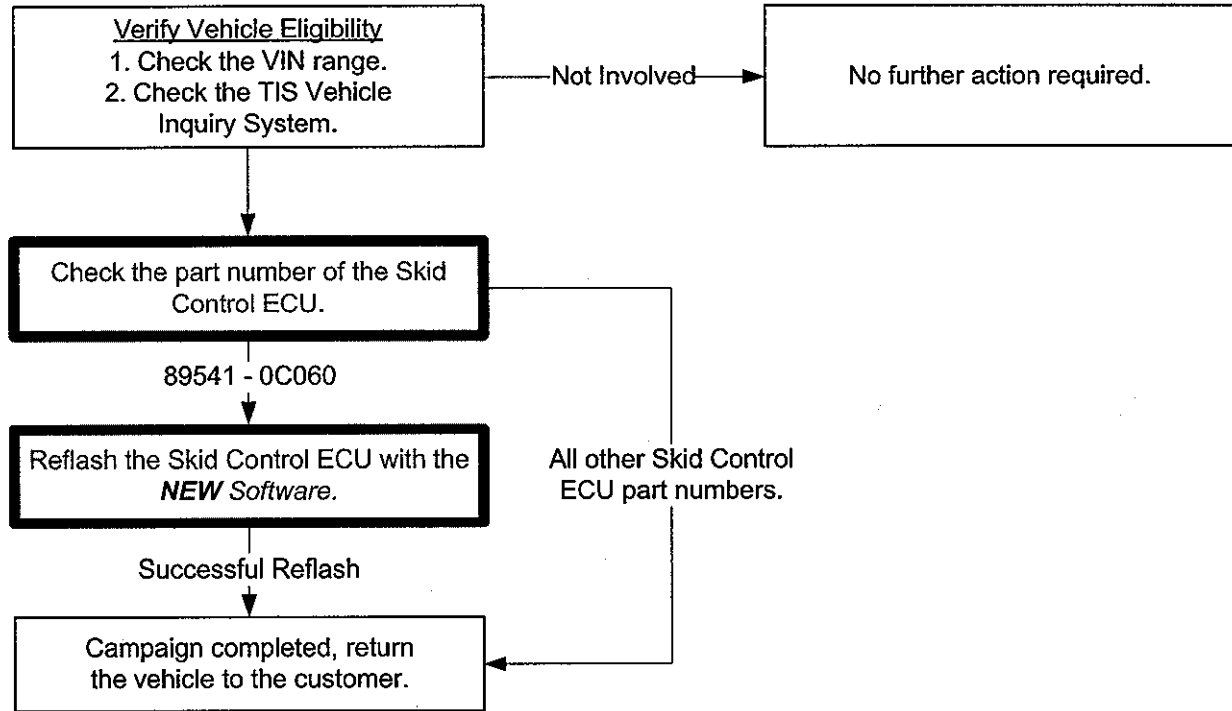
- 1. Click to download and read the application installation instructions.
NOTE: You must be a certified technician to access the application.**

Important Note 2:

This procedure also requires the use of a custom Techstream cable to connect and reprogram the Skid Control ECU.

- 2. You will not be able to reprogram the Skid Control ECU with the standard cable.**

I. OPERATION FLOWCHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE


Model	WMI	Year	VIN Range	
			VDS	Range
Sequoia	5TD	2003	BT44A	S101211 - S187555
			BT48A	S099426 - S187569
			ZT34A	S100033 - S187571
			ZT38A	S100343 - S187568

NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

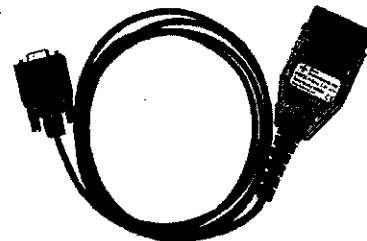
III. PREPARATION

A. TOOLS & EQUIPMENT

- Techstream Panasonic Toughbook. (Windows XP only) with A0G application software installed.
- A0G-CABLE (Special DLC3 to RS232 Connector) 

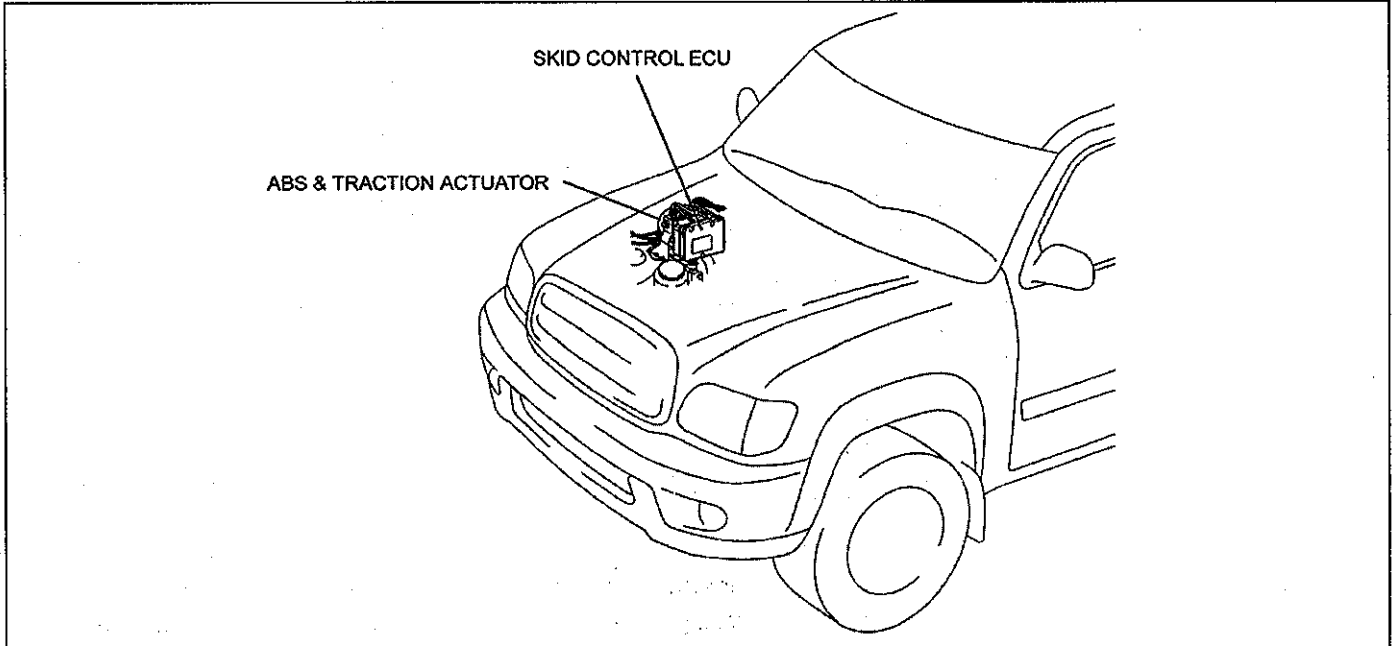
B. PARTS

- No parts are required.



IV. BACKGROUND

On certain 2003 Model Year Toyota Sequoia vehicles, the center position of the Steering Angle Sensor (SAS) may not be stored correctly due to improper logic of the Skid Control ECU programming. If this occurs, in most cases the VSC/TRAC warning light will illuminate. However, in limited situations the Vehicle Stability Control (VSC) system could activate at low speed (approximately 9 mph) for a few seconds after acceleration from a stopped position, and the vehicle may not accelerate as quickly as the driver expects.



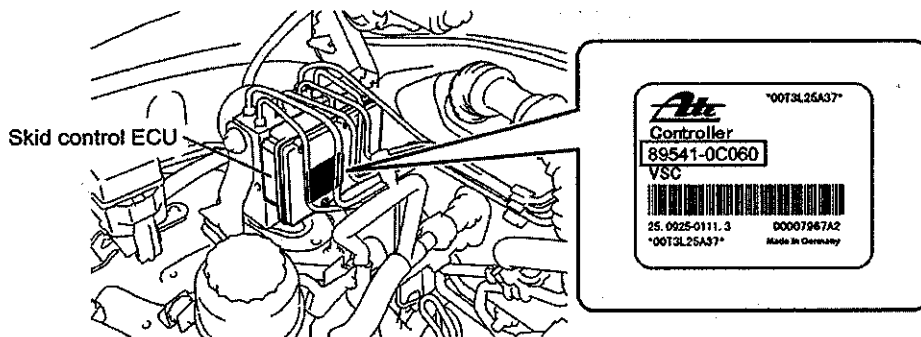
Prevent Skid Control ECU Damage During Reprogramming:

- Do NOT turn the ignition off during reprogramming.
- Do NOT allow the Techstream to shut off during reprogramming, keep it plugged in to an AC power supply.
- Do NOT close the application software window during reprogramming.

Remember:
NEVER cycle the key and
NEVER turn off the ignition during
the reprogramming process!
These actions will cause
permanent ECU damage!

V. WORK PROCEDURE

1. CHECK THE PART NUMBER OF THE SKID CONTROL ECU

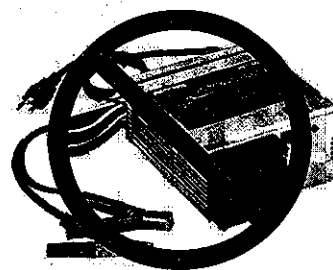


SKID CONTROL ECU PART NUMBER	WORK CONTENTS
89541-0C060	Reprogram the skid control ECU
All other Skid Control ECU part numbers	Vehicle does NOT require reprogramming

2. VEHICLE PREPARATION

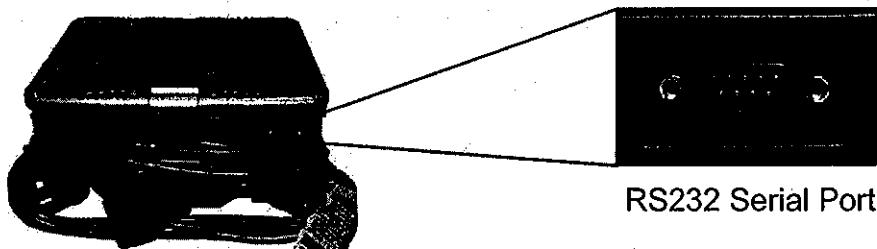
- Check for any preexisting VSC codes in the Skid Control ECU memory.
 - If DTC C1231, C1247, C1310 exists you may proceed with this procedure.
 - If any other VSC codes exist except for DTC C1231, C1247, C1310 troubleshoot according to the repair manual before proceeding.
- Confirm the vehicle/ignition is off.
- Open the hood and ensure the engine compartment temperatures do not exceed 212° F.
- Check the battery voltage.** If the battery voltage is lower than 12 volts, **CHARGE** the battery before reprogramming the skid control ECU.

Do NOT have any battery charger installed on the vehicle when performing this reprogramming procedure.



- Not using a battery charger during skid control ECU reprogramming applies to A0G reprogramming **ONLY**.

- Using the A0G-CABLE, connect one side to the RS232 Serial Port on the Techstream and the other side to the DLC3 connector on the vehicle.



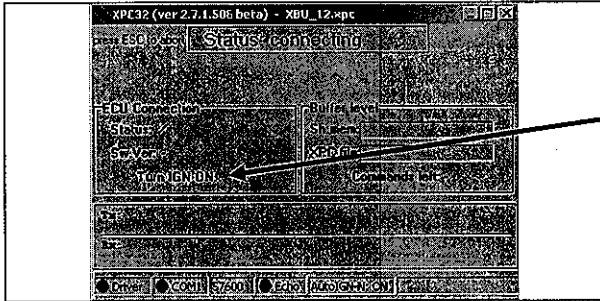
3. SKID CONTROL REPROGRAMMING



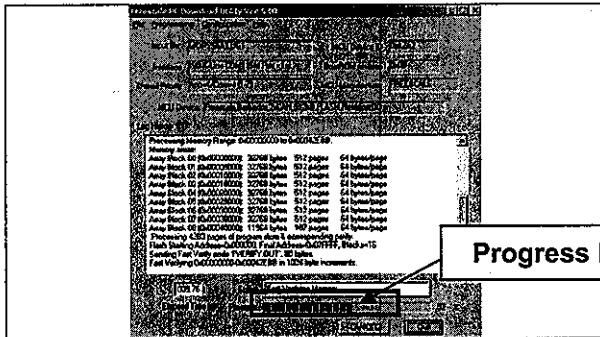
- Do NOT apply any electrical load while reprogramming. (i.e. audio, A/C, defroster...)
- Do NOT touch the mouse buttons / touch screen / or keyboard after the reprogramming has started until it completes.



a) Confirm the ignition is off and then double click this icon from the desktop.

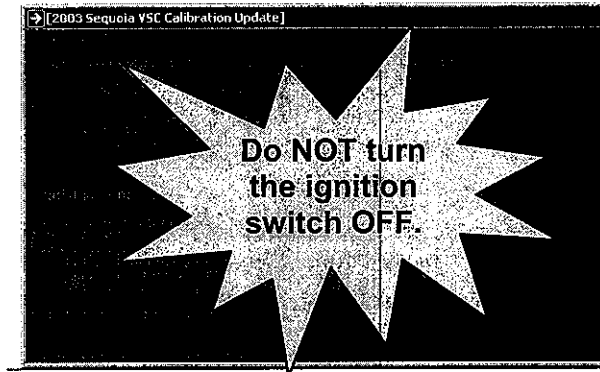


b) Turn the ignition on when prompted: **Turn IGN ON**

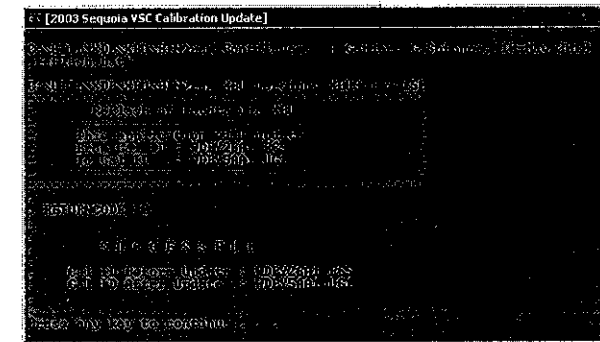


c) Wait approximately 6-7 minutes until the reprogramming completes.

Progress Bar



If you receive a RED screen after the reprogramming progress bar has started: **Keep the ignition ON – Confirm that NO battery charger is being used on the vehicle and immediately skip to the appendix for instructions on how to perform the VSC Failure Recovery.**



- d) A green screen will indicate the completion of the reprogramming or if the reprogramming has already been completed. (code "0" or "2073")
- e) Press any key to continue/close the reprogramming window.

NOTE: If the screen turns BLACK after reprogramming, immediately skip to the appendix for additional information.

4. CONFIRM VEHICLE CONDITION AFTER REPROGRAMMING THE SKID CONTROL ECU

- a) Turn off the ignition.
- b) Disconnect the GR8 Battery Diag. Station or PSC Power Supply Charger/Maintainer (MTRPSC550SKT).



Do NOT restart the vehicle until you have disconnected the GR8 from the vehicle.

- c) Start the vehicle and confirm the ABS warning light turns off.

5. CHECK FOR DTC CODES

- a) Connect the Techstream to the DLC3.
- b) Confirm NO new Skid Control DTC's have occurred.

NOTE:

If any Pending, Current, and/or History DTCs are set, troubleshoot according to the repair manual.

6. TEST DRIVE THE VEHICLE AND INSPECT FOR ANY PROBLEMS

- CAMPAIGN COMPLETE -

VI. APPENDIX

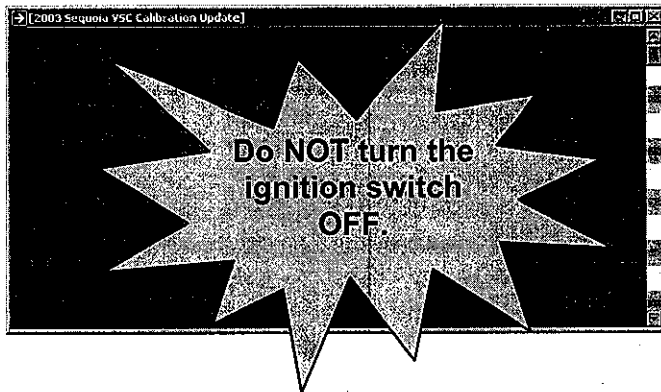
Only refer to this appendix if you have received a red or black error screen after attempting to reprogram the Skid Control ECU.

```
[2003 Sequoia VSC Calibration Update]
G:\UTILS\DIAG\BIN\Open Controllines. n.Gabler. G.Sofonea, 21-May-2010 "Toyota
_reflash.bat"
G:\UTILS\DIAG\BIN\Open KBU version: XBU3.1.9.152
=====
ReFlash of Toyota via XBU
=====
This application will update
From Cal ID : UBPV2601.PCS
To Cal ID : UBPV5001.UG1
=====
RETURNCODE 156
This application is not authorized to update this ECU !
Confirm if correct vehicle is being updated.
This application can only update
Cal ID UBPV2601.PCS to Cal ID UBPV5001.UG1.
Press any key to continue . . .
```

RETURNCODE 156: Wrong Calibration ID Number:

Cause:

This Skid Control ECU is not part of this safety recall.



If you received a red error screen proceed to the next page to perform the VSC Failure Recovery.

RED SCREEN Troubleshooting Chart

