

# 1st to 2nd Gear Upshift Shudder

**Service Category** Drivetrain

**Section** Automatic Transmission/Transaxle

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2010 – 2012	4Runner	Drive Type(s): 4WD, 2WD Engine(s): 1GR Transmission(s): 5AT VDS(s): BU5JR, ZU5JR

## Introduction

Some 2010 – 2012 model year 4Runner vehicles equipped with the A750 transmission may exhibit a shudder condition during the 1–2 upshift. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) calibration and the transmission assembly have been revised to address this condition.

## Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
4Runner	2WD	JTEZU5JR#C5035781
	4WD	JTEBU5JR#C5084131

## Warranty Information

### NOTICE

When replacing the A750 transmission on a 2010 – 2012 MY 4Runner for reasons other than this bulletin, the ECM calibration must also be updated to the latest calibration in order to prevent future transmission shifting issues.

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### Warranty Information (Continued)

OP CODE	DESCRIPTION	MODEL YEAR	MODEL	DRIVE-TRAIN	TIME	OFF	T1	T2
EG1111	Recalibrate ECM (PCM) Engine and R & R Transmission	2010–2011	4Runner	2WD	5.0	89661-35F20 89661-35J40	9B	74
		2012				89661-35F21 89661-35J80		
		2010–2011		4WD	6.0	89661-35F30 89661-35J50		
		2012				89661-35F31 89661-35J90		

#### APPLICABLE WARRANTY

- This repair is covered under the Toyota 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.

### Parts Information

MODEL	DRIVETRAIN	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
4Runner	2WD	35000-35B50 35010-35B50-84	35010-35D00-84	Automatic Transmission Assembly	1
	4WD	35000-60C20 35010-60C20-84	35010-60E00-84		1
	2WD	89661-35F20 89661-35F21 89661-35J40 89661-35J80	89661-35J81	Computer, Engine Control (ECM/PCM)	–
	4WD	89661-35F30 89661-35F31 89661-35J50 89661-35J90	89661-35J91		–
	–	00451-00001-LBL	Same	Authorized Modification Labels	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.

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## Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* or Techstream Lite  NOTE: Software version 7.10.030 or later is required.	ADE	TSPKG1 or TSLITEDLR01	1

**NOTE**

- 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 with this calibration file. Please use TIS Techstream or an approved J2534 interface to perform this update. Visit [techinfo.toyota.com](http://techinfo.toyota.com) for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	<a href="#">00002-MCGR8</a>	1

**NOTE**

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

\* Essential SST.

## Calibration Information

MODEL	DRIVETRAIN	MODEL YEAR	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
4Runner	2WD	2010 – 2011	335B1000 33579000 33579100	<a href="#">335B1100</a>	ZU5JR
		2012	335B5000	<a href="#">335B5100</a>	
	4WD	2010 – 2011	335B2000 33580000 33580100	<a href="#">335B2100</a>	BU5JR
		2012	335B6000	<a href="#">335B6100</a>	

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### Repair Procedure

1. Bring the vehicle up to operating temperature and test drive the vehicle.

Can a shudder or vibration be felt with light throttle **ONLY** during the 1–2 upshift?

- **YES** — Go to step 2.
- **NO** — This bulletin does NOT apply, refer to the Repair Manual for further diagnosis.

2. Does the shudder condition occur below 15 mph?

- **YES** — Go to step 3.
- **NO** — This bulletin does NOT apply, refer to the Repair Manual for further diagnosis.

3. Replace the transmission assembly.

Refer to the Technical Information System (TIS), applicable model year 4Runner Repair Manual:

*Drivetrain – Automatic Transmission/Transaxle – “A750E / A750F Automatic Transmission/Transaxle: Automatic Transmission Assembly: Removal / Installation”*

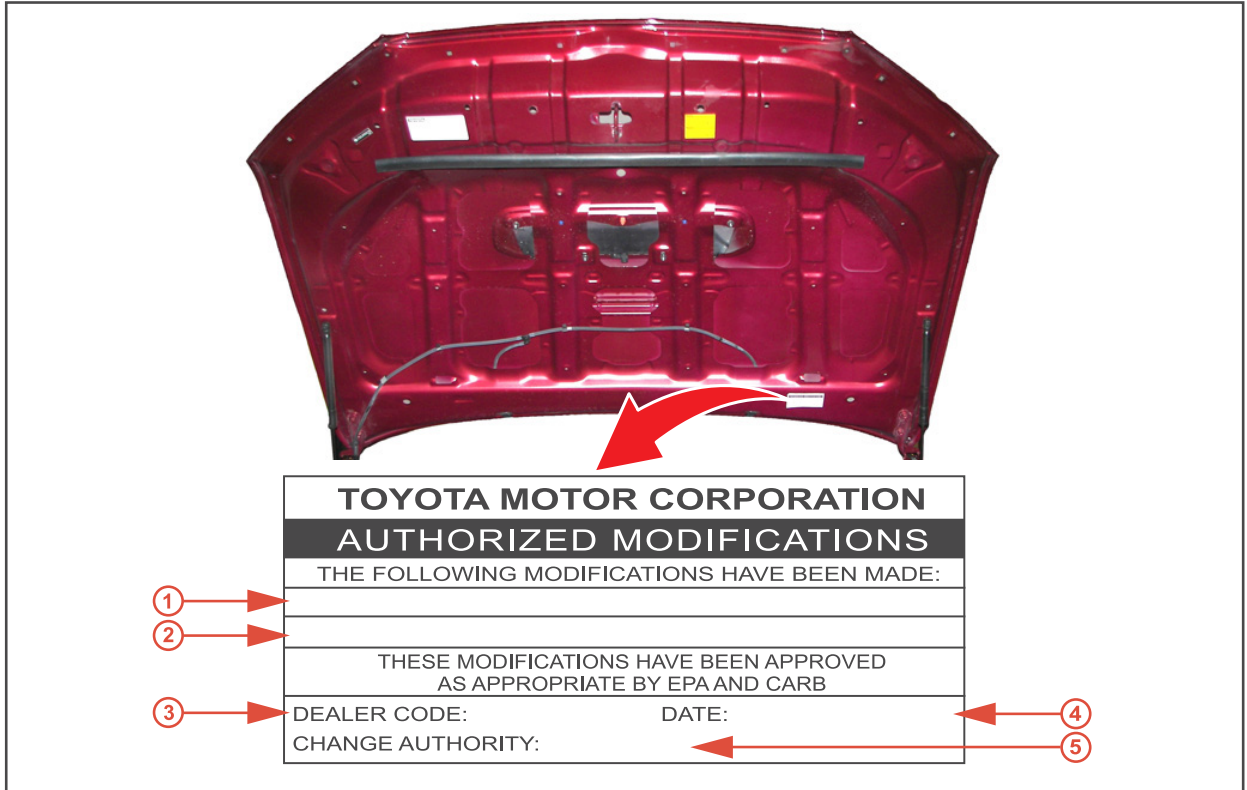
- 2010 4Runner:
  - A750E: [Removal](#) / [Installation](#)
  - A750F: [Removal](#) / [Installation](#)
- 2011 4Runner:
  - A750E: [Removal](#) / [Installation](#)
  - A750F: [Removal](#) / [Installation](#)
- 2012 4Runner:
  - A750E: [Removal](#) / [Installation](#)
  - A750F: [Removal](#) / [Installation](#)

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## Repair Procedure (Continued)

4. 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 5.

**Figure 1. Location of Authorized Modifications Label on 2010 – 2012 4Runner**



<b>1</b>	Replacement ECM (PCM) Part Number (i.e., 89661-35J81)
<b>2</b>	New Calibration ID(s) (i.e., 335B1100)
<b>3</b>	Dealer Code

<b>4</b>	Date Completed
<b>5</b>	This Bulletin Number

5. 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 – Battery*.

Follow the procedures outlined in Service Bulletin [T-SB-0064-10](#), “Techstream ECU Flash Reprogramming Procedure”, and flash the ECM (PCM) with the NEW calibration file update.

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### Repair Procedure (Continued)

6. Start the engine and warm it up to normal operating temperature before test driving.
7. Test drive the vehicle to confirm proper vehicle operation and ECM (PCM) initial learning.

Refer to TIS, applicable model year 4Runner Repair Manual:

- 2010 4Runner:  
*Drivetrain – Automatic Transmission/Transaxle – “[A750E](#) / [A750F](#) Automatic Transmission/Transaxle: Automatic Transmission System: Initialization”*
- 2011 4Runner:  
*Drivetrain – Automatic Transmission/Transaxle – “[A750E](#) / [A750F](#) Automatic Transmission/Transaxle: Automatic Transmission System: Initialization”*
- 2012 4Runner:  
*Drivetrain – Automatic Transmission/Transaxle – “[A750E](#) / [A750F](#) Automatic Transmission/Transaxle: Automatic Transmission System: Initialization”*

8. 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 **CURRENT PART NUMBER***]
- Calibration ID(s) [*Refer to the **Calibration Identification Chart** for the **NEW CALIBRATION ID***]
- 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.

9. Test drive the vehicle to confirm proper vehicle operation.