

Harsh Downshift When Coming to a Stop

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2009	Corolla, Matrix	Drive Type(s): 2WD Engine(s): 2AZ Transmission(s): 5AT VDS(s): BE40E, GE40E, KE40E

Introduction

Some customers may experience a harsh downshift feeling when coming to a stop after the transaxle has up-shifted to 4th or 5th gear. The Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) calibration has been revised. Use the following repair procedure to address customer concerns.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EG9003	Recalibrate ECM (PCM) Engine & Transmission	0.6	89661-#####	87	99

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 correction of a problem based upon a customer's specific complaint.

Harsh Downshift When Coming to a Stop

Parts Information

MODEL	GRADE	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla	All	89661-02M31	89661-02M32	ECM (PCM)	–
Matrix	Sport	89661-02L21	89661-02L22		–
	XRS	89661-02L31	89661-02L32		–
–	–	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.

Calibration Information

MODEL	ENGINE	TRANS	GRADE	PREVIOUS CALIBRATION ID	NEW CALIBRATION ID	VDS
Corolla	2AZ-FE	5AT	All	30288000	30288200	BE40E
				30288100		
Matrix			Sport	30280000	30280200	KE40E
				30280100		
Matrix			XRS	30282000	30282200	GE40E
				30282100		

Harsh Downshift When Coming to a Stop


Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* NOTE: Software version 4.00.017 or later is required.	ADE	TSUNT	1

* Essential SST.

NOTE

- Additional TIS 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 for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST'S)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1

* Essential SST.

NOTE

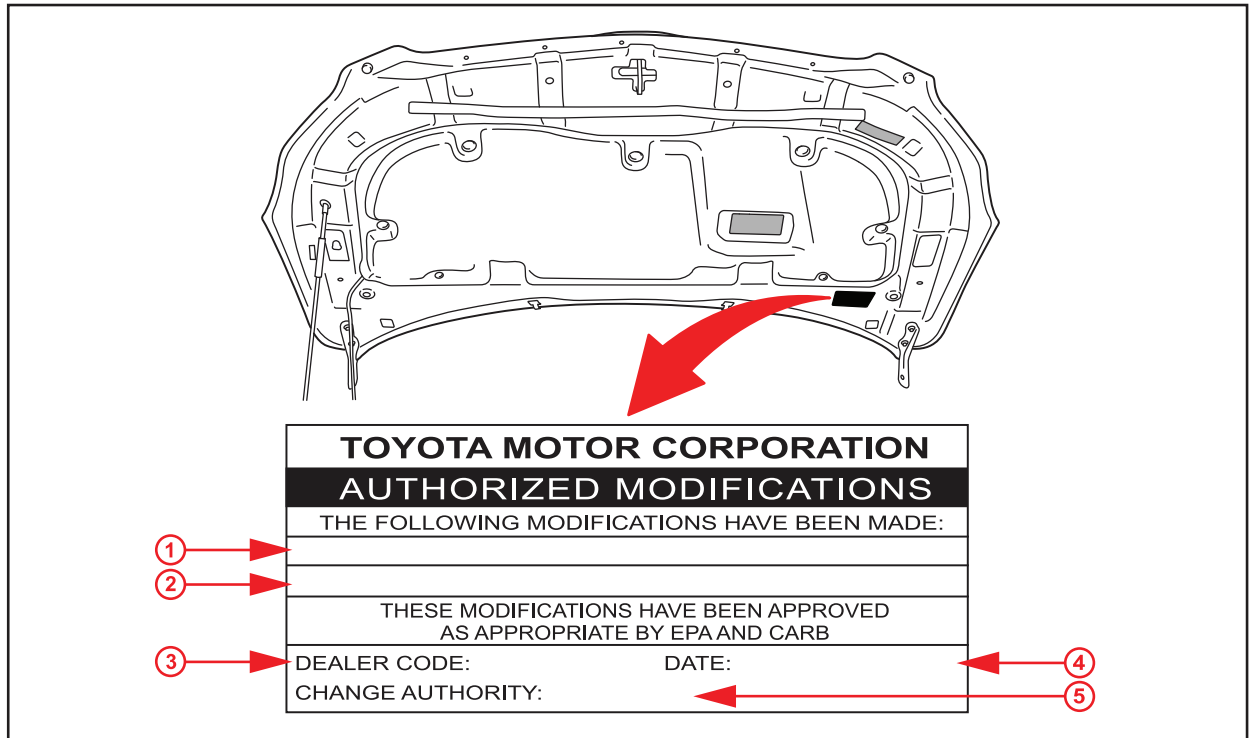
- Additional SSTs may be ordered by calling 1-800-933-8335.
- The GR8 Battery Diagnostic Station (P/N 00002-MCGR8) supersedes the Automatic Trickle Charger (P/N 00002-YA122-01) and Fast Battery Chargers (Associated P/N ASE6003 and Christie P/N CAPPDQ). P/N 00002-YA122-01, ASE6003, and CAPPDQ are now obsolete.

Harsh Downshift When Coming to a Stop

Repair Procedure

1. 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 2.

Figure 1. Location of Authorized Modifications Label on 2009 Corolla & Matrix



1	Replacement ECM (PCM) Part Number (i.e., 89661-02M32)
2	New Calibration ID(s) (i.e., 30288200)
3	Dealer Code

4	Date Completed
5	This TSB Number

2. 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 TSB No. [SS002-07](#), “Techstream ECU Flash Reprogramming Procedure”, and flash the ECM (PCM) with the NEW calibration file update.

Harsh Downshift When Coming to a Stop

Repair Procedure (Continued)

3. Reset the engine and ECT memory.

Refer to TIS, applicable model and model year Repair Manual:

2009 [Corolla](#) / [Matrix](#):

Drivetrain – Automatic Transmission/Transaxle – “U250E Automatic Transmission / Transaxle: Automatic Transaxle System: Initialization”

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

NOTE

During the initial test drive there may be some slightly harsh downshifts — these are **NORMAL**. They are a result of fuel cut control. Continue test driving until initial learning and smooth shifting are achieved.

Refer to TIS, applicable model and model year Repair Manual:

2009 [Corolla](#) / [Matrix](#):

Drivetrain – Automatic Transmission/Transaxle – “U250E Automatic Transmission/Transaxle: Automatic Transaxle System: Road Test”

6. 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 TSB 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.