Rev2

April 30, 2014



Torque Converter Flex Lock-up Shudder

Service

Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA



Applicability

YEAR(S) MODEL(S)		ADDITIONAL INFORMATION	
2012 – 2014	Camry	VDS(s): BF1FK	

REVISION NOTICE

April 23, 2015 Rev2:

• The Parts Information and Calibration Information sections have been updated.

September 25, 2014 Rev1:

- The Production Change Information section has been added.
- The Warranty Information, Parts Information, Tools & Equipment, and Repair Procedure sections have been updated.

Any previous printed versions of this bulletin should be discarded.

SUPERSESSION NOTICE

The information contained in this bulletin supersedes SB No. T-SB-0086-12.

- Applicability has been updated to include 2013 2014 model year Camry vehicles.
- · The entire bulletin has been updated.

Service Bulletin No. T-SB-0086-12 is Obsolete and any printed versions should be discarded. Be sure to review the entire content of this bulletin before proceeding.

Introduction

Some 2012 – 2014 Camry vehicles with a U760 transmission may exhibit a brief shudder intermittently while driving under light loads between approximately 25 and 50 mph. The torque converter and Engine Control Module/ECM (SAE term: Powertrain Control Module/PCM) logic have been modified to reduce the possibility of this condition occurring. Please follow the Repair Procedure below to address this condition.

Rev2

Torque Converter Flex Lock-up Shudder

T-SB-0034-14

Production Change Information

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

MODEL	PLANT	LINE	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
Camry	ТММК	1	U760E	4T1BF1FK#EU435094
		2		4T1BF1FK#EU841977
	SIA	_		4T4BF1FK#ER425173

Warranty Information

OP CODE	DESCRIPTION		OFP	T1	T2
TC1403	R & R Torque Converter Clutch and Reprogram ECM (PCM) Engine	5.6	32000-06040 32000-06050 32000-33141 32000-73011	9B	50

APPLICABLE WARRANTY

- This repair is covered under the Toyota Powertrain Warranty. This warranty is in effect for 60 months or 60,000 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

PART NUMBER		PART NAME	OTV	
PREVIOUS	NEW	PARI NAME	QTY	
32000-06040 32000-06050 32000-33141 32000-73011	04004-48106	Converter Assy Kit, Torque	1	
00289-ATFWS		ATF WS	5.6 US qts. (5.3 liters)	



Parts Information (Continued)

EMISSION	CDADE	PART NUMBER		DART NAME	ОТУ
SPEC	GRADE	PREVIOUS NEW		PART NAME	QTY
111.57/	Base, LE, XLE	89661-06K60 89661-06K61 89661-06K62 89661-06K63 89661-06K64	89661-06K65		
SE		89661-06K70 89661-06K71 89661-06K72 89661-06K73 89661-06K74	89661-06K75	Computer, Engine Control	ı
PZEV	Base, LE, XLE	89661-06K80 89661-06K81 89661-06K82 89661-06K83 89661-06K84	89661-06K85	(ECM/PCM)	I
r ZL V	SE	89661-06K90 89661-06K91 89661-06K92 89661-06K93 89661-06K94	89661-06K95		-
All	All	00451-00001-LBL		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

	22.25	5011 (ODU)	CALIBRATION ID		
EMISSION SPEC	GRADE	ECM (CPU)	PREVIOUS	NEW	
			Main	30679000 30679100 30679200 30679300 30679400	20070500 / 50044500
ULEV		Sub	50611000 50611100 50611200 50611300 50611400	<u>30679500</u> / <u>50611500</u>	
PZEV	Base, LE, XLE	Main	30680000 30680100 30680200 30680300 30680400	30680500 / 50611500	
		Sub	50611000 50611100 50611200 50611300 50611400	30080300730011300	
ULEV	SE -	Main	306A3000 306A3100 306A3200 306A3300 306A3400	206 (2500 / 50612500	
		Sub	50612000 50612100 50612200 50612300 50612400	306A3500 / 50612500	
PZEV		Main	Main	306A4000 306A4100 306A4200 306A4300 306A4400	306A4500 / 50612500
		Sub	50612000 50612100 50612200 50612300 50612400	<u>300A4300</u> / <u>30012300</u>	



Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite	ADE	TSLITEPDLR01	

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 10.00.029 or later is required.
- 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. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit <u>techinfo.toyota.com</u> for more information regarding J2534 reprogramming.



SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
GR8 Battery Diagnostic Station*	00002-MCGR8	1
Transmission Fill System*	00002-11100-02	1

NOTE

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

^{*} Essential SST.



Repair Procedure

1. With the vehicle at operating temperature, confirm the condition described in the Introduction.

Is there a brief shudder intermittently present while driving under a light load between 25 – 50 mph? Typically, the condition will be most noticeable prior to an upshift.

- YES Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

NOTICE

Be sure to follow the procedure below in the order provided to prevent contamination of previously cleaned parts.

2. Drain the ATF from the transaxle by removing the drain plug.

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

- 2012 / 2013 / 2014 Camry: Drivetrain – Automatic Transmission/Transaxle – "U760E Automatic Transmission/Transaxle: Automatic Transaxle Fluid: Replacement"
- 3. Remove and replace the torque converter.

NOTE

Refer to Service Bulletin T-SB-0351-10, "Repair Manual Supplement: Transaxle Replacement."

4. With the transaxle installed in the vehicle, remove the transaxle oil pan.

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

- 2012 / 2013 / 2014 Camry: Drivetrain – Automatic Transmission/Transaxle – "U760E Automatic Transmission/Transaxle: Valve Body Assembly: Removal"
- 5. Remove and discard the 2 oil pan magnets and clean the inside of the oil pan by wiping it off with a clean cloth only.

NOTICE

Do NOT use any chemical cleaners to clean the inside of the oil pan.

Repair Procedure (Continued)

TOYOTA

6. Install 4 NEW magnets in the locations shown in Figure 1.

Figure 1. Magnet Installation Locations

7. Reinstall the oil pan using a NEW oil pan gasket.

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

- <u>2012</u> / <u>2013</u> / <u>2014</u> Camry: Drivetrain – Automatic Transmission/Transaxle – "U760E Automatic Transmission/Transaxle: Valve Body Assembly: Installation"
- 8. Reinstall the drain plug using a NEW drain plug gasket and refill the transaxle with ATF.

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

 2012 / 2013 / 2014 Camry: Drivetrain – Automatic Transmission/Transaxle – "U760E Automatic Transmission/Transaxle: Automatic Transaxle Fluid: Replacement"



Repair Procedure (Continued)

9. Check for the Authorized Modifications Label affixed to the vehicle in the location shown in Figure 2 below. Confirm if the ECM (PCM) calibration has been updated. If the calibration ID listed is NOT the latest ECM (PCM) calibration — go to step 10. If the calibration ID is the latest, go to step 12.

Figure 2. Location of Authorized Modifications Label on 2012 – 2014 Camry



1	Replacement ECM (PCM) Part Number (i.e., 89661-06K64)
2	New Calibration ID(s) (i.e., 30679400)
3	Dealer Code

4	Date Completed
5	This SB Number



Repair Procedure (Continued)

10. 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 – Tools & Equipment – Battery Diagnostics.

Follow the procedures outlined in Service Bulletin No. <u>T-SB-0012-13</u>, "Techstream ECU Flash Reprogramming Procedure," and flash the ECM (PCM) with the NEW calibration file update.

- 11. 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 **NEW PART NUMBER**]
 - Calibration ID(s) [Refer to the Calibration Information section 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 2. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
- 12. Perform the Techstream ECT Reset Memory Utility and test drive to confirm the repair.