

Torque Converter Flex Lock-up Shudder

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
 ASE Certification 

Applicability

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

SUPERSESSON 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Service Bulletin No. T-SB-0086-12 is Obsolete and any printed versions should be discarded.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 improve this condition.

Warranty Information

OP CODE	DESCRIPTION	TIME	QFP	T1	T2
TC1401	R & R Torque Converter Clutch and Reprogram ECM (PCM) Engine	8.4	32000-06040 32000-06050 32000-33141 32000-73011	9B	60

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.

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Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
32000-06040 32000-06050 32000-33141 32000-73011	32000-06051	Converter Assy, Torque	1
90430-12008 90430-A0002		Gasket, Drain Plug	1
35168-73010		Gasket, Transaxle Oil Pan	1
90430-18008 90430-A0003		Gasket, Transaxle Rear Cover	1
35394-30011		Magnet, Oil Cleaner	4
00289-ATFWS		ATF WS	5.6 US qts. (5.3 liters)

EMISSION SPEC	GRADE	PART NUMBER		PART NAME	QTY
		PREVIOUS	NEW		
ULEV	Base, LE, XLE	89661-06K60 89661-06K61 89661-06K62 89661-06K63	89661-06K64	Computer, Engine Control (ECM/PCM)	-
	SE	89661-06K70 89661-06K71 89661-06K72 89661-06K73	89661-06K74		-
PZEV	Base, LE, XLE	89661-06K80 89661-06K81 89661-06K82 89661-06K83	89661-06K84		-
	SE	89661-06K90 89661-06K91 89661-06K92 89661-06K93	89661-06K94		-
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*.

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Calibration Information

EMISSION SPEC	GRADE	ECM (CPU)	CALIBRATION ID	
			PREVIOUS	NEW
ULEV	Base, LE, XLE	Main	30679000 30679100 30679200 30679300	<u>30679400</u>
		Sub	50611000 50611100 50611200 50611300	<u>50611400</u>
PZEV		Main	30680000 30680100 30680200 30680300	<u>30680400</u>
		Sub	50611000 50611100 50611200 50611300	<u>50611400</u>
ULEV	SE	Main	306A3000 306A3100 306A3200 306A3300	<u>306A3400</u>
		Sub	50612000 50612100 50612200 50612300	<u>50612400</u>
PZEV		Main	306A4000 306A4100 306A4200 306A4300	<u>306A4400</u>
		Sub	50612000 50612100 50612200 50612300	<u>50612400</u>

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
TIS Techstream		TSPKG1	
Techstream Lite		TSLITEDLR01	

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

NOTE

- Only **ONE** of the Techstream units listed above is required.
- Software version 9.00.026 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Additional SSTs may be ordered by calling 1-800-933-8335.
- The Diagnostic Tester is **NOT** recommended for flash reprogramming. Please use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.



* Essential SST.

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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.

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

- [2012](#) / [2013](#) / [2014](#) Camry:
Drivetrain – Automatic Transmission/Transaxle – “U760E Automatic Transmission/Transaxle: Automatic Transaxle Assembly: Removal”
- [2012](#) / [2013](#) / [2014](#) Camry:
Drivetrain – Automatic Transmission/Transaxle – “U760E Automatic Transmission/Transaxle: Automatic Transaxle Assembly: Installation”

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

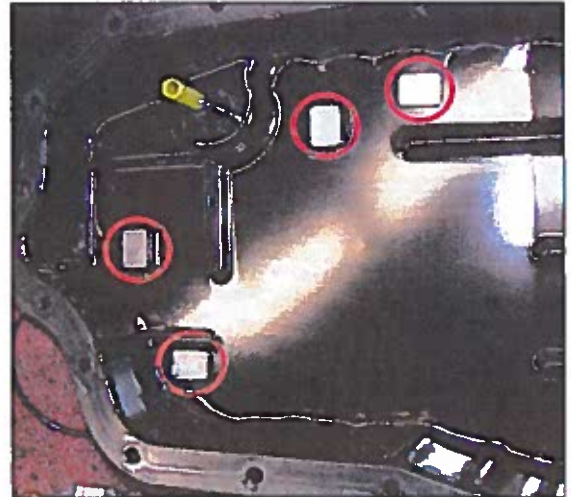
Do NOT use any chemical cleaners to clean the inside of the oil pan.

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Repair Procedure (Continued)

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:

- [2012](#) / [2013](#) / [2014](#) 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:

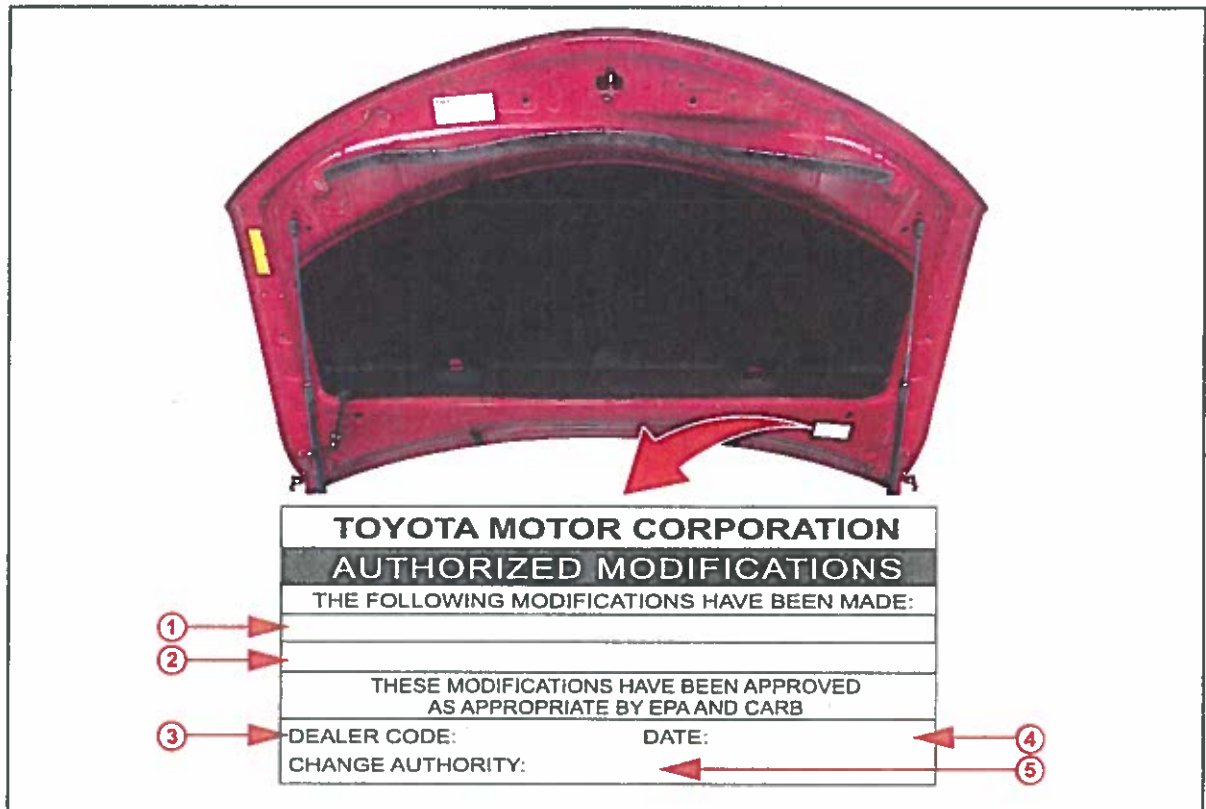
- [2012](#) / [2013](#) / [2014](#) Camry:
Drivetrain – Automatic Transmission/Transaxle – “U760E Automatic Transmission/Transaxle: Automatic Transaxle Fluid: Replacement”

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Repair Procedure (Continued)

- 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

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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. [T-SB-0012-13](#), "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 Figures 2. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
12. Test drive to confirm the repair.