

# Torque Converter Shudder

**Service Category** Drivetrain

**Section** Automatic Transmission/Transaxle

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012	Camry	Engine(s): 2AR Transmission(s): 6AT VDS(s): BF1FK WMI(s): 4T1, 4T4

## Introduction

Some 2012 Camry vehicles may exhibit an intermittent shudder when lightly accelerating after an upshift around the following speeds: 26 mph (42 km/h) (4th), 36 mph (58 km/h) (5th) and/or 44 mph (71 km/h) (6th). Changes have been made in the torque converter assembly to reduce this condition. Refer to the repair procedure below for diagnostic instructions to confirm if the torque converter needs to be replaced to address this condition.

## Warranty Information

OP CODE	DESCRIPTION	TIME	OPF	T1	T2
TC1209	3 ATF Drain & Fill Operations with Test Driving	3.5	32000-06040 (AWNC) 32000-33141 (AW Japan) 32000-73011 (Kinuura)	9B	50
Combo A	R & R Torque Converter Clutch Assembly with A/C Line	7.3			

### 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.

# Torque Converter Shudder

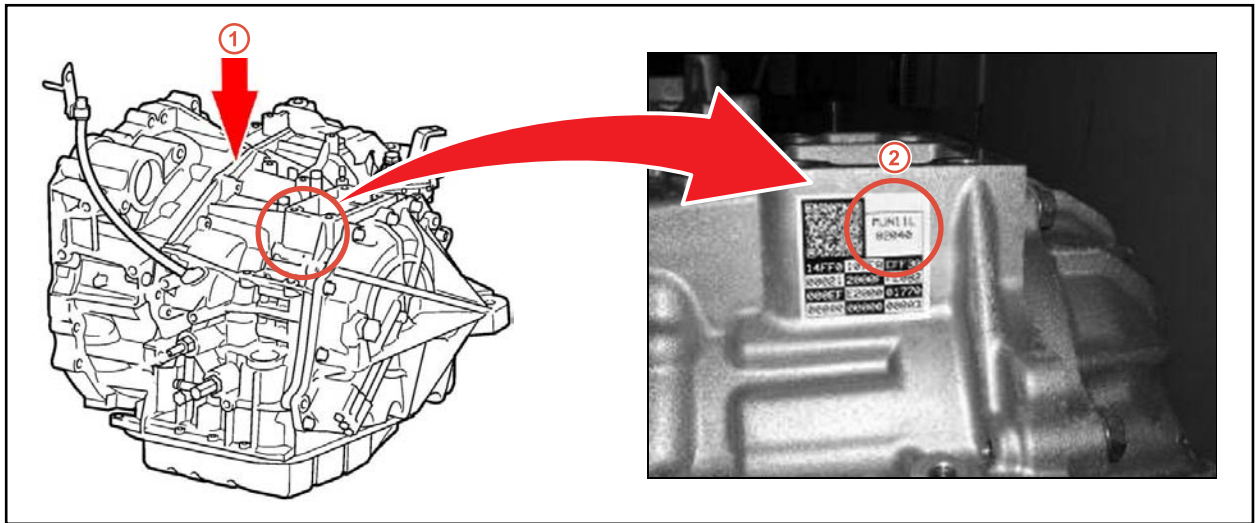
## Parts Information

SUPPLIER	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
AWNC	32000-06040	Same	Torque Converter Assembly	1
AW Japan	32000-33141	Same		
TMC Kinurra	32000-73011	Same		
-	00289-ATFWS	Same	ATF WS	5.6 U.S. qts (5.3 liters)
-	90430-A0003	Same	Gasket (for Transaxle Rear Cover)	1
-	90430-A0002	Same	Gasket, Drain Plug (ATM)	1
-	90080-17238	Same	Nut (for Front Axle Shaft)	2 (if Necessary)

### HINT: U760 SUPPLIER IDENTIFICATION

Identify the transaxle serial number in 2 locations: Casting and Sticker.

Figure 1.



**1** Casting Easily Seen From Above

**2** Sticker Difficult to See (Behind Battery/Airbox)

SUPPLIER	TORQUE CONVERTER PART NUMBER	SERIAL NUMBER EXAMPLE
AW North Carolina	32000-06040	<u>MJN</u> 11L02040
AW Japan	32000-33141	<u>MTA</u> 11J17935
TMC Kinuura	32000-73011	<u>24T</u> 11922165 (Also <u>23T</u> )

## Torque Converter Shudder

### 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.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Transmission Fill System*	<a href="#">00002-11100-02</a>	1

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

\* Essential SST.

### Repair Procedure Overview

1. Verify the condition.
2. Confirm the condition is related to flex lock-up operation.
3. Perform three ATF drain, refill, and test drive operations to remove contaminated fluid and resolve the concern.
  - If the condition is resolved, no further action needed.
  - If the condition is still present, replace the torque converter assembly.

### Repair Procedure

1. Connect Techstream to the vehicle and perform Health Check. Confirm NO DTC(s) are stored in the ECT or ECM (SAE term: Powertrain Control Module/PCM).  
Are there any DTC(s) present in the ECT or ECM (PCM)?
  - **YES** — This bulletin does NOT apply. Refer to the Technical Information System (TIS) and diagnose DTC(s).
  - **NO** — Go to step 2.
2. Test drive the vehicle and confirm condition.

## Torque Converter Shudder

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### Repair Procedure (Continued)

3. Use Techstream to take a snapshot when shudder is occurring to determine if it is occurring during flex lockup.

Configure snapshot as follows:

**All Data**

**30 Second Duration**

**Trigger Point at Midpoint (50%)**

**NOTE**

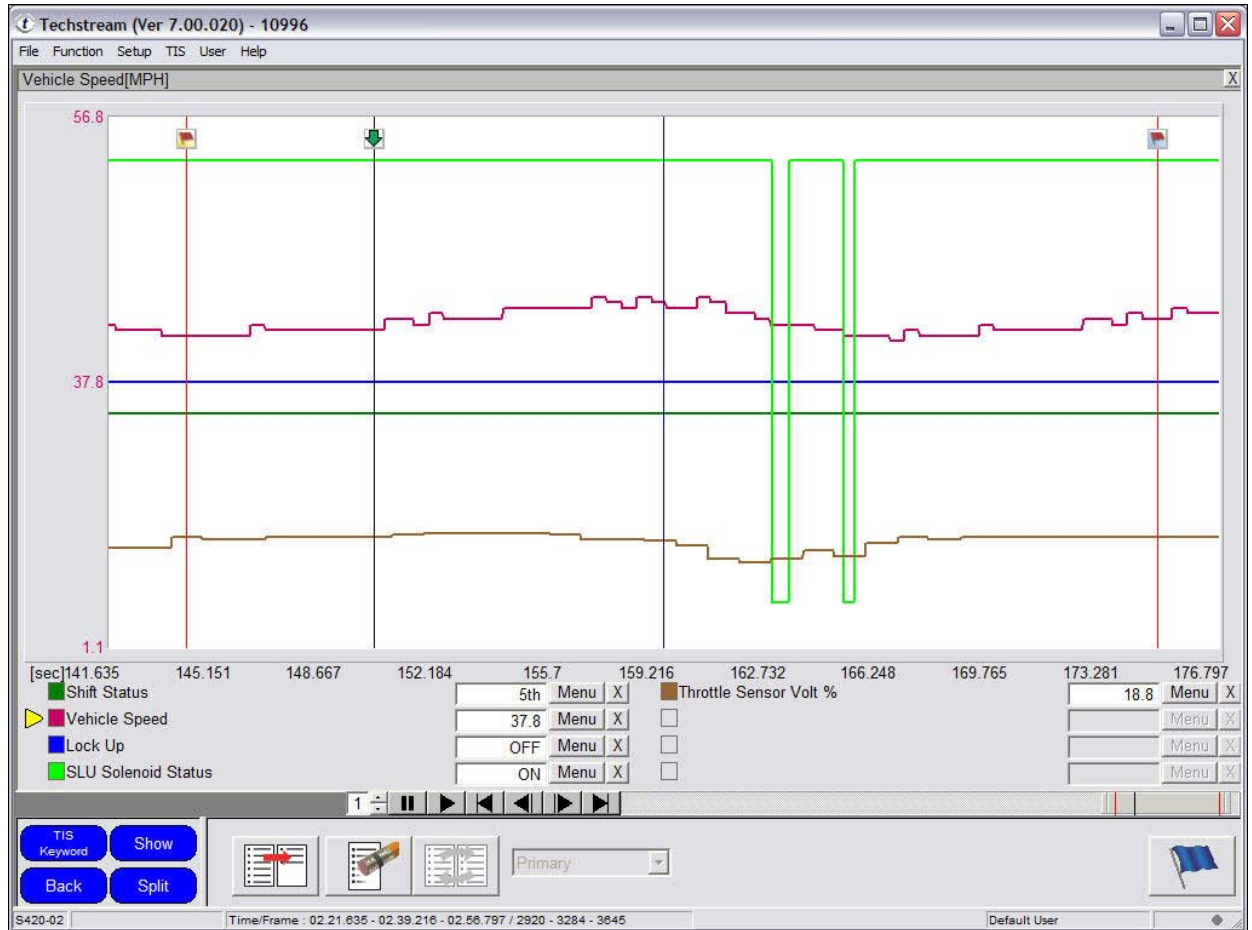
Refer to the University of Toyota online training class P901C “*Techstream InDepth*” for information about taking snapshots and graphing snapshots on Techstream.

4. Use Data List and the graphing functions of the Snapshot feature to confirm the following data parameters when the shudder condition occurs:
  - Vehicle Speed
  - Shift Status
  - Lock Up
  - SLU Solenoid Status
  - Throttle Sensor Volt %

# Torque Converter Shudder

## Repair Procedure (Continued)

**Figure 2. Techstream Snapshot of Shudder Occurring During Flex Lockup**



- If the shudder occurs with the following parameters:
  - Lock Up “OFF”
  - SLU Solenoid Status “ON”

Then the shudder is related to torque converter flex lockup. **Go to step 5.**

- If the shudder occurs with the following parameters:
  - Lock Up “OFF”
  - SLU Solenoid Status “OFF”

Then the condition is **NOT** related to torque converter flex lockup and this bulletin **DOES NOT APPLY.**

Continue diagnosis to identify the root cause for this shudder.

## Torque Converter Shudder

### Repair Procedure (Continued)

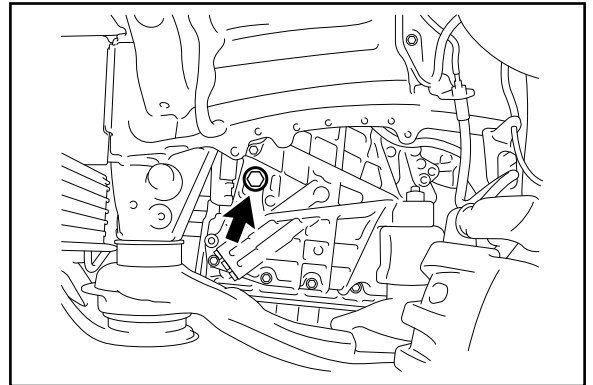
5. Replace the automatic transaxle fluid to remove possible contamination.
  - A. Lift the vehicle.

**NOTICE**

Set the vehicle on a lift so that the vehicle is kept level when it is lifted up (make sure that the tilt angle from the front to rear of the vehicle is within  $\pm 1^\circ$ ).

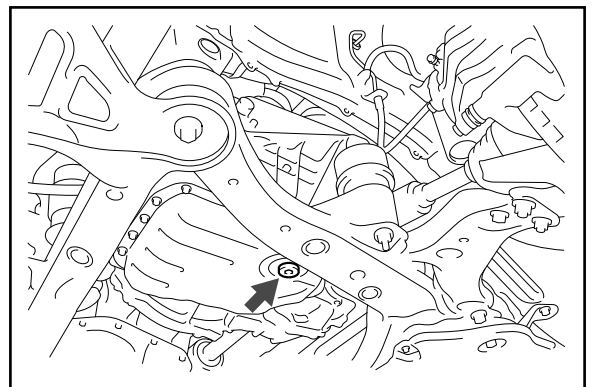
- B. Remove the front wheel opening extension pad LH, engine under cover LH and front fender apron seal LH.
- C. Remove the refill plug and gasket from the automatic transaxle.

Figure 3.



- D. Using a 6 mm hexagon socket wrench, remove the overflow plug and gasket from the automatic transaxle.

Figure 4.



**CAUTION**

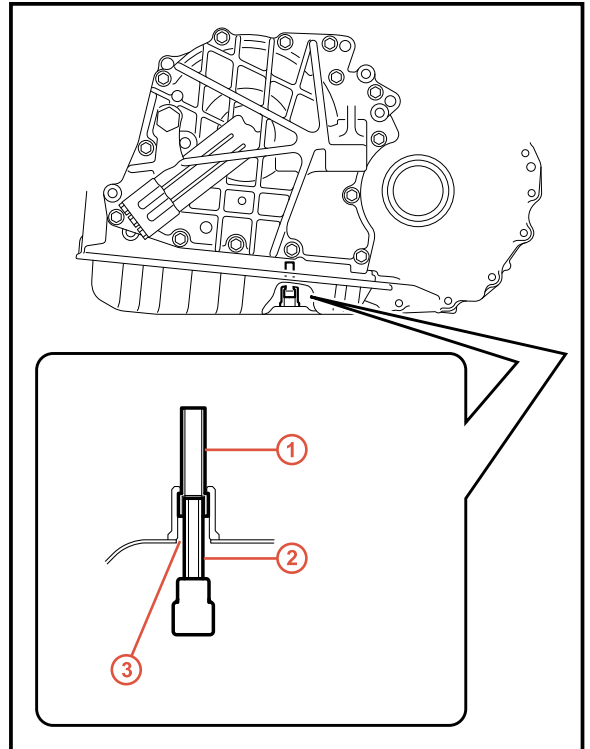
Automatic transaxle fluid may be hot if the vehicle was not allowed to cool prior to draining the fluid.

## Torque Converter Shudder

### Repair Procedure (Continued)

- E. Using a 6 mm hexagon socket wrench, remove the No. 1 transmission oil filler tube from the oil pan and drain the automatic transaxle fluid.

**Figure 5.**

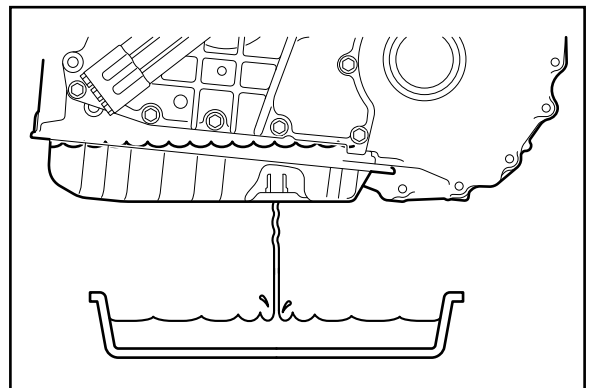


<b>1</b>	<b>No. 1 Transmission Oil Filler Tube</b>
<b>2</b>	<b>Hexagon Socket Wrench</b>
<b>3</b>	<b>Overflow Plug Hole</b>

- F. Measure the amount of fluid that you drained.

**Figure 6.**

**HINT**  
Add the same amount of fluid in step I.



## Torque Converter Shudder

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### Repair Procedure (Continued)

- G. Using a 6 mm hexagon socket wrench, install the No. 1 transmission oil filler tube to the oil pan.

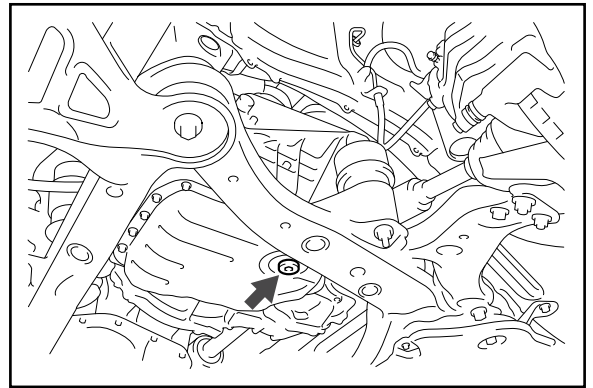
**Torque: 1.7 N\*m (17 kgf\*cm, 15 in\*lbf)**

- H. Temporarily install the gasket and the overflow plug.

**Figure 7.**

**HINT**

Reuse the old gasket. The plug will be removed again to adjust the fluid level.

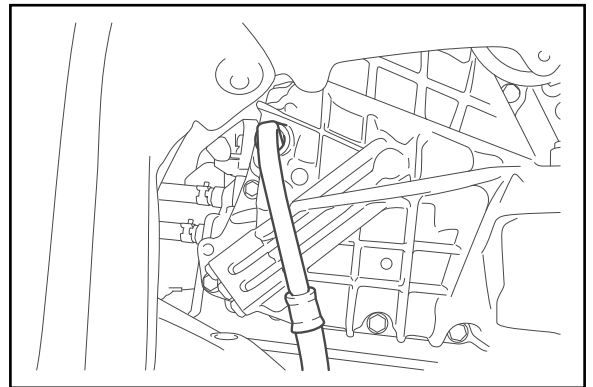


- I. Add fluid to the refill hole using the same amount of fluid drained in step F.

**Figure 8.**

**NOTICE**

Use Toyota Genuine ATF WS.





## Torque Converter Shudder

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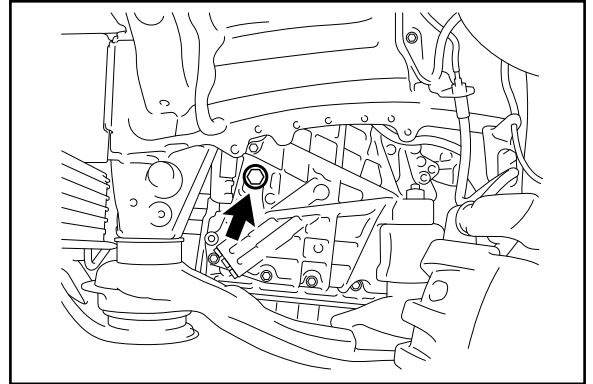
### Repair Procedure (Continued)

- J. Temporarily install the gasket and refill plug to avoid fluid spillage.

**HINT**

Reuse the old gasket. The plug will be removed again to adjust the fluid level.

Figure 9.



- K. Lower the vehicle.
- L. Start the engine.
- M. Slowly move the shift lever from P to D, and then back to P.
- N. Allow the engine to idle for 30 seconds to warm it up.
- O. Turn the engine switch off.
- P. Adjust fluid temperature, then adjust fluid level.

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

- 2012 Camry:

*Drivetrain – Automatic Transmission/Transaxle – “U760E Automatic Transmission/Transaxle: Automatic Transaxle Fluid: [Adjustment](#)”*

- 6. Test drive the vehicle until the A/T oil temperature has reached and maintained 160°F (71°C) for at least 10 minutes.
- 7. Repeat steps 5 and 6 two more times.

**HINT**

Only replace the refill and overflow plug gaskets with new ones on the 3rd fluid adjustment procedure.

- 8. Perform a leak check and reassembly.
  - A. Lift the vehicle.
  - B. Clean each part.

## Torque Converter Shudder

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### Repair Procedure (Continued)

- C. Check for fluid leaks.
  - D. Install the front wheel opening extension pad LH, engine under covers LH and front fender apron seal LH.
  - E. Lower the vehicle.
9. Is the shudder concern resolved?
- **YES** — The repair is completed.
  - **NO** — Go to step 10.
10. Replace the torque converter.

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

- 2012 Camry:

*Drivetrain – Automatic Transmission/Transaxle – “U760E Automatic Transmission/Transaxle: Automatic Transaxle Assembly: [Removal](#) / [Installation](#)”*

11. Adjust the transmission fluid level in the transmission.

**NOTICE**

**Failure to use WS transmission fluid and to properly adjust transmission fluid level can cause transmission shifting issues, MIL “ON”, and/or transmission damage.**

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

- 2012 Camry:

*Drivetrain – Automatic Transmission/Transaxle – “U760E Automatic Transmission/Transaxle: Automatic Transaxle Fluid: [Adjustment](#)”*

12. Test drive the vehicle and confirm the shudder condition is eliminated.