

Clunk Noise at Low Speeds when Stopping or Turning

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2005 – 2007	Sequoia	Drive Type(s): 2WD Transmission(s): 5AT VDS(s): ZT34A, ZT38A
2005 – 2006	Tundra	Drive Type(s): 2WD Transmission(s): 5AT VDS(s): ET341, ET381, JT321, JU321, RT341, RT381, RU341

Introduction

Some customers of 2WD 2005 – 2007 model year Sequoia and 2005 – 2006 model year Tundra vehicles may complain about a clunk, thunk, or pop noise from the vehicle that is commonly heard when stopping, accelerating from a stop, or turning at low speeds. The source of the noise has been identified as the joint between the rear transmission mount and the frame crossmember. The transmission mount has been redesigned to prevent this. Use the following repair procedure to address customer concerns.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
TC9005	R & R Rear Transmission Mount and Frame Crossmember No. 3	1.5	12371-0F030	91	14

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

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Parts Information

MODEL	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Sequoia, Tundra	12371-0F030	12371-0F080	Insulator, Engine Mounting Rear	1
Sequoia, Tundra	90080-11387	90119-08895	Bolt, w/Washer	4
Sequoia, Tundra (2UZ)	51203-0C030	Same	No. 3, Frame Crossmember Sub-assembly	1
Tundra (1GR)	51203-0C011	Same		1

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
ChassisEAR™ (or equivalent)	ADE	JSPSM06606 (JS Products)	1

NOTE

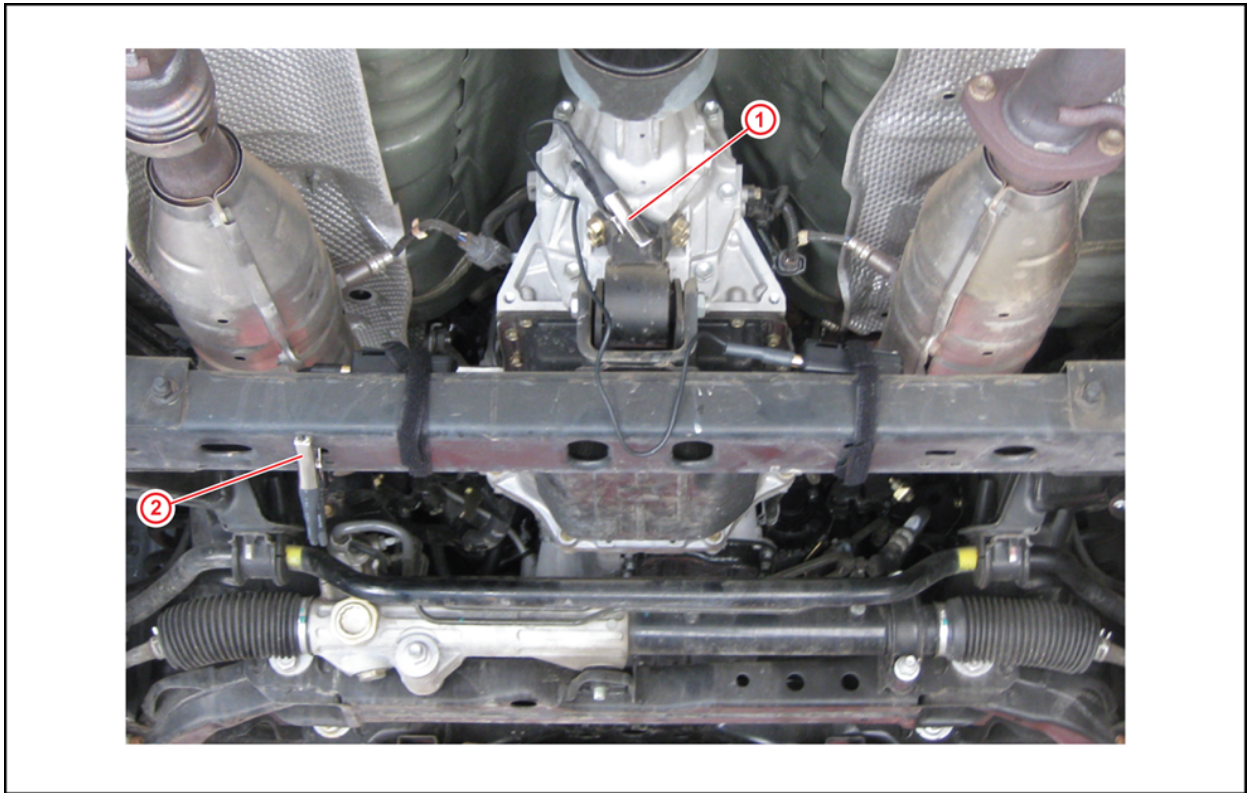
- A mechanic's stethoscope or similar tool may be used in place of ChassisEAR™.
- ChassisEAR™ may be ordered by calling Toyota Approved Dealer Equipment (ADE) at 1-800-368-6787.

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Repair Procedure

1. Place the vehicle on a lift and install ChassisEAR™ (or equivalent) on the following components to help isolate the source of the noise (see Figure 1):
 - On frame crossmember No. 3.
 - On rear transmission mount above rubber section of mount or on transmission extension housing assembly.

Figure 1.



1	ChassisEAR™ Sensor Mounted to Rear Transmission Mount
2	ChassisEAR™ Sensor Mounted to Frame Crossmember No. 3

2. Test drive the vehicle and duplicate the noise.

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Repair Procedure (Continued)

3. With ChassisEAR™ installed, the noise should be very loud from the frame crossmember No. 3 pickup location and NOT heard on the rear transmission mount above the rubber section of the mount.

Is the noise loudest when ChassisEAR™ has frame crossmember No. 3 selected?

- **YES** — Go to step 4.
 - **NO** — This TSB does NOT apply. Continue using ChassisEAR™ to identify the source of the noise and diagnose per the Repair Manual.
4. Replace the rear transmission mount, frame crossmember No. 3, and 4 bolts retaining the transmission mount to frame crossmember No. 3.

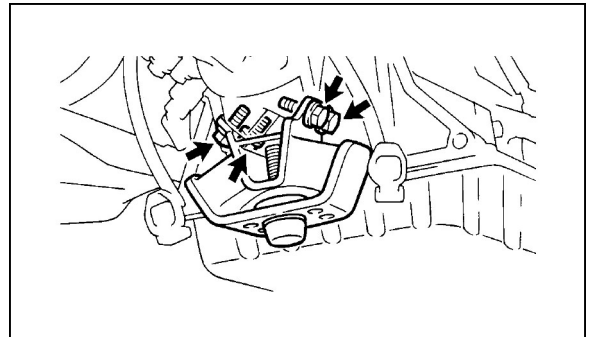
A. Place the vehicle on a lift.

HINT

Use a transmission jack and underhoist stand to lift and support the transmission assembly during the next 5 steps.

- B. Remove the 4 bolts retaining the transmission to the rear transmission mount.

Figure 2.

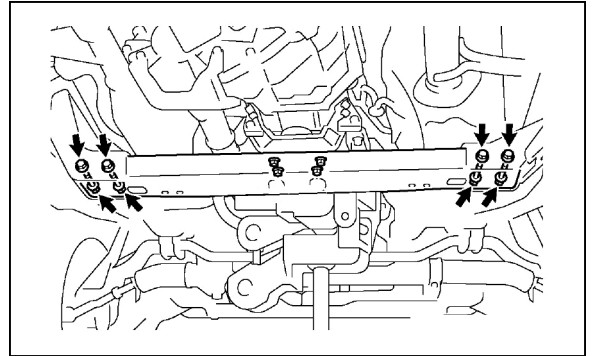


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Repair Procedure (Continued)

- C. Remove the 4 bolts retaining the frame crossmember No. 3 to the frame assembly and remove the frame crossmember No. 3 assembly with rear transmission mount from the vehicle.

Figure 3.



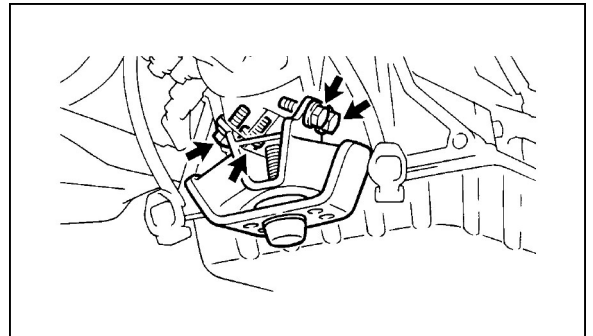
NOTE

Do NOT torque any of the bolts in steps D through F until ALL the bolts in steps D through F have been started.

- D. Install the NEW rear transmission mount (insulator, engine mounting rear) to the transmission extension housing using the 4 bolts.

Torque: 65 N*m (660 kgf*cm, 48 ft*lbf)

Figure 4.



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Repair Procedure (Continued)

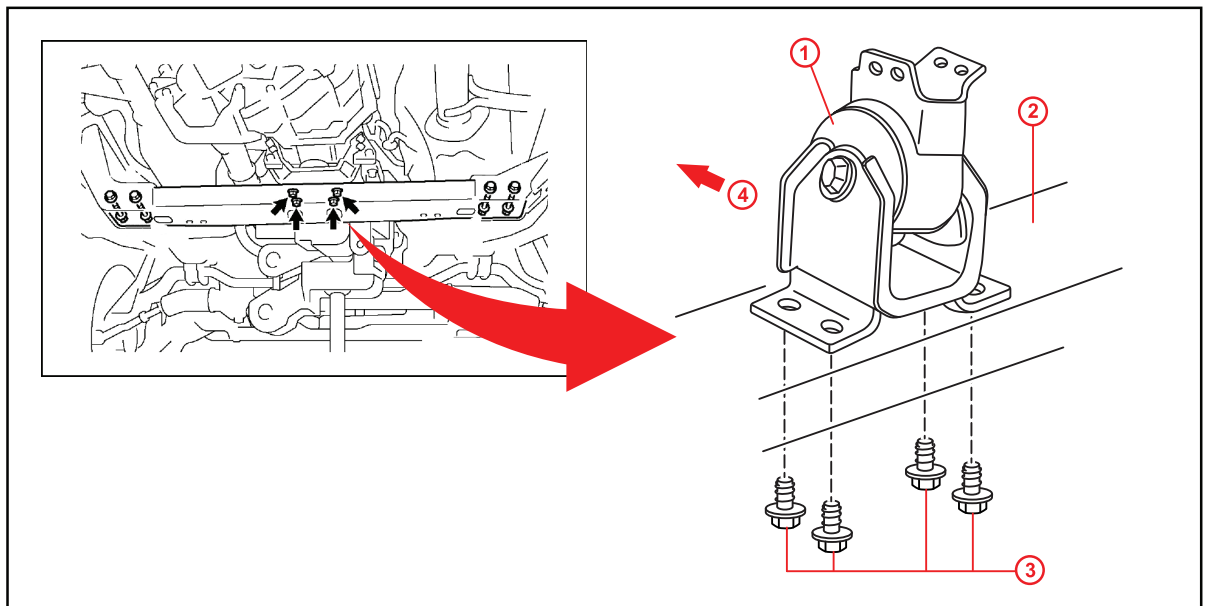
- E. Install the NEW rear transmission mount (insulator, engine mounting rear) to the NEW frame crossmember No. 3 using the 4 NEW bolts.

Torque: 30 N*m (300 kgf*cm, 22.1 ft*lbf)

NOTE

The torque value for these 4 bolts has been increased.

Figure 5.



1	Engine Mounting Rear Insulator (P/N 12371-0F080)
2	Frame Crossmember No. 3
3	Bolt w/Washer (P/N 90119-08895)
4	Front of Vehicle

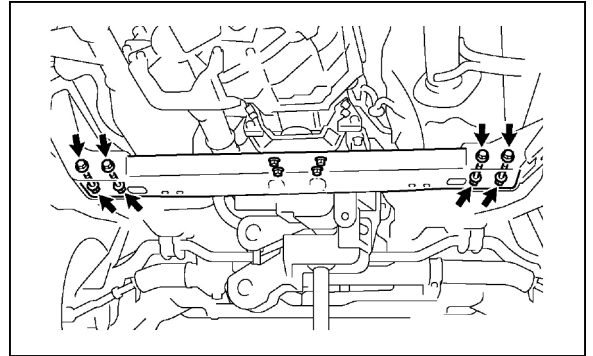
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Repair Procedure (Continued)

- F. Install the NEW frame crossmember No. 3 into the frame using the 4 bolts.

Torque: 72 N*m (734 kgf*cm, 53 ft*lbf)

Figure 6.



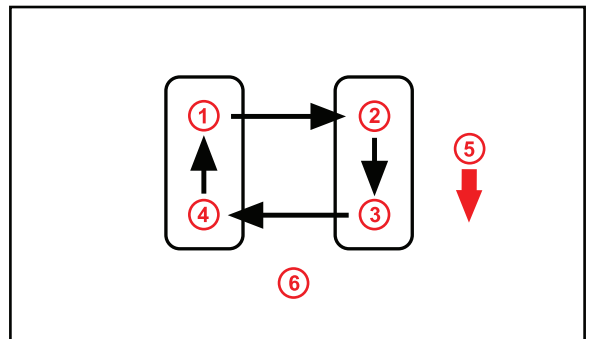
- G. Tighten all the bolts in steps D through F. Tighten the bolts retaining the NEW rear transmission mount (insulator, engine mount rear) to the NEW frame crossmember No. 3 in the order shown in Figure 7. Tighten bolt 1, then 2, then 3, then 4.

Torque: 30 N*m (300 kgf*cm, 22.1 ft*lbf)

Then tighten bolt 1 once again.

Torque: 30 N*m (300 kgf*cm, 22.1 ft*lbf)

Figure 7.



1-4	Bolt Tightening Order
5	Front of Vehicle
6	Bottom View

5. Test drive the vehicle and confirm the noise is eliminated.