

Front Differential Growl/Howl/Rumble Noise at 15-30 MPH

Service Category Drivetrain

Section Axle/Differential

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2007 – 2008	Tundra	Body Type(s): Double CabCrew Max, Regular Cab, Drive Type(s): 4WD Engine(s): 2UZ, 3UR Transmission(s): 5AT, 6AT VDS(s): BT541, BT581, BV541, BV581, CT541, CV541, DT541, DT581, DV541, DV581, KT521, KV521, MT521, MV521

Introduction

Some owners of 4WD equipped 2007 or 2008 model year Tundra trucks may complain about a cyclic noise heard from the front of the vehicle between 15 and 30 mph ONLY when driving in 2WD. This noise can be described as a howl, growl, grind, or drone noise. Production changes have been implemented to help prevent this noise. Follow the repair procedure below to address customer concerns.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
TC8008	R & R Front Differential Carrier Assembly and Inspection of Front Axles	4.2	41110-34###	91	19

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

ENGINE	TOWING PACKAGE	FINAL GEAR RATIO	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
2UZ-FE	No	3.909	41110-34481	41110-34482	Front Differential Carrier Assembly	1
	Yes	4.100	41110-34491	41110-34492		1
3UR-FE	Yes	4.300	41110-34502	Same		1
-	-	-	-	43425-0C010	Ring, Shaft Snap (for Front Drive Inner Shaft Outer)	2
-	-	-	-	95381-04050	Cotter Pins (for Front Axle Shaft Lock Nut)	2
-	-	-	-	90252-04003	Cotter pins (for Tie Rod End Lock Nut)	2
-	-	-	-	95381-03225	Cotter Pins (for Lower Ball Joint)	2

REQUIRED MATERIAL	QUANTITY
Toyota Genuine Differential Gear Oil LT 75W-85 GL-5	2.05 – 2.15 liters (2.17 – 2.27 qts)

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Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST'S)	PART NUMBER	QTY
Drive Shaft Remover Attachment*	09520-01010-02	1
Differential Side Gear Shaft Tool (Attachment, Shocker Set)	09520-24010 (09520-04010, 09521-32040)	1
39 mm Socket*	00002-00039	1

* Essential SST.

NOTE

Additional SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

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. Test drive the vehicle to confirm the customer complaint.

Is the condition present below 30 mph?

- **YES** — Go to step 2.
- **NO** — This TSB does NOT apply.

2. Does the noise go away or is it significantly reduced when driving in 4WD?

- **YES** — Go to step 4.
- **NO** — Go to step 3.

3. Install ChassisEAR™ (or equivalent) on the vehicle and attempt to isolate the source of the noise in 2WD.

Is the noise loudest near the front differential assembly?

- **YES** — This TSB applies. Go to step 4.
- **NO** — This TSB does NOT apply. Continue diagnosis to isolate the source of this noise.

4. Remove the front differential carrier assembly.

Refer to the Technical Information System (TIS), 2007 or 2008 model year Tundra Repair Manual:

[2007](#) or [2008](#) Tundra, *Drivetrain – Axle/Differential – “Differential: Front Differential Carrier Assembly (for 4WD): Removal”*

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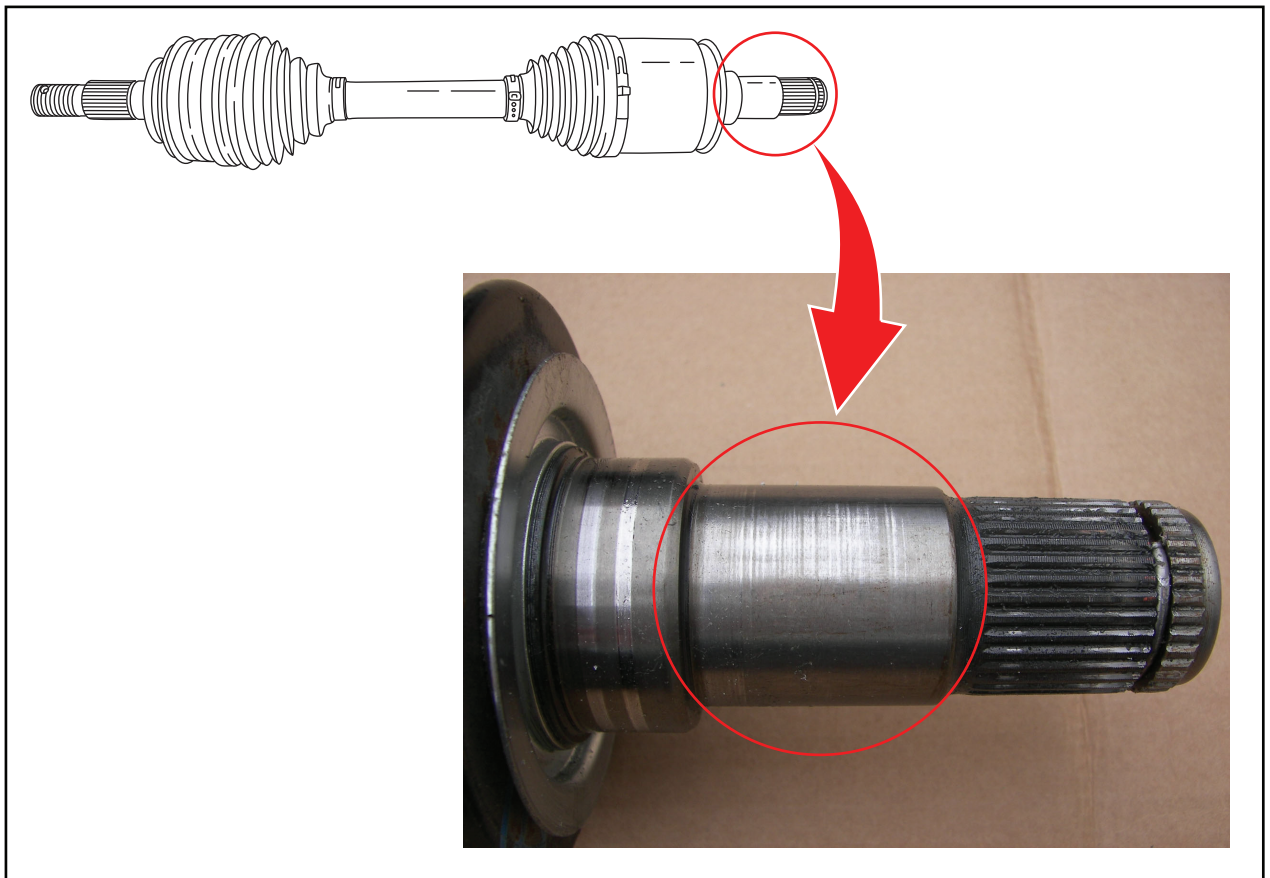
Repair Procedure (Continued)

5. Examine both front axle assemblies for unusual wear.

Do the axles display any unusual wear where they are inserted into the front differential carrier assembly?

- **YES** — Replace the affected axle(s).
- **NO** — Do NOT replace axles. Go to step 6.

Figure 1.



6. Install the NEW front differential carrier assembly.

Refer to TIS, 2007 or 2008 model year Tundra Repair Manual:

[2007](#) or [2008](#) Tundra, *Drivetrain – Axle/Differential – “Differential: Front Differential Carrier Assembly (for 4WD): Installation”*

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