

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

Service

Category Drivetrain

Section Axle/Differential Market USA



# **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	OFP	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.



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

## **Parts Information**

ENGINE	TOWING PACKAGE	FINAL GEAR RATIO	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
0117 FF	No	3.909	41110-34481	41110-34482		1
2UZ-FE	Yes	4.100	41110-34491	41110-34492	Front Differential Carrier Assembly	1
3UR-FE	Yes	4.300	41110-34502	Same	7.000	1
_	-	-	-	43425-0C010	Ring, Shaft Snap (for Front Drive Inner Shaft Outer)	2
_	_	-	-	95381-04050	Cotter Pins (for Front Axle Shaft Lock Nut)	2
_	1	1	-	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)

**TOYOTA** T-SB-0121-08 June 30, 2008 Page 3 of 5

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

## **Required Tools & Equipment**

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

<sup>\*</sup> 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<sup>™</sup> may be ordered by calling Toyota Approved Dealer Equipment (ADE) at 1-800-368-6787.

T-SB-0121-08 June 30, 2008 Page 4 of 5

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

#### **Repair Procedure**

**TOYOTA** 

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:

<u>2007</u> or <u>2008</u> Tundra, *Drivetrain – Axle/Differential – "Differential: Front Differential Carrier Assembly (for 4WD): Removal"* 

**TOYOTA** T-SB-0121-08 June 30, 2008 Page 5 of 5

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

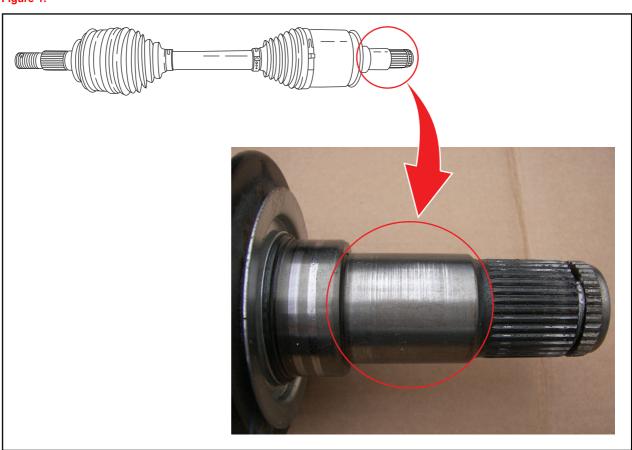
## **Repair Procedure (Continued)**

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:

<u>2007</u> or <u>2008</u> Tundra, *Drivetrain – Axle/Differential – "Differential: Front Differential Carrier Assembly (for 4WD): Installation"* 

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