T-SB-0023-19 Rev1 March 4, 2019



Rear Vibration or Noise While Braking

Service

Category Drivetrain

Section Axle/Differential Market USA



Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2017 - 2019	Tacoma	

REVISION NOTICE

May 17, 2019 Rev1:

The Production Change Information section has been updated.
 Any previous printed versions of this bulletin should be discarded.

SUPERSESSION NOTICE

The information contained in this bulletin supersedes Service Bulletin No. T-SB-0023-18.

Applicability has been updated to include 2019 model year Tacoma vehicles.
 Service Bulletin No. T-SB-0023-18 is obsolete and any printed versions should be discarded.

Introduction

Some 2017 – 2019 model year Tacoma vehicles with the BD20 differential may exhibit a noise or vibration from the rear of the vehicle at low speeds or while braking. This condition may be caused by excessive clearance between the brake drum and axle drum flange. Follow the Repair Procedure in this bulletin to address this condition.



Rear Vibration or Noise While Braking

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

Page 2 of 6

MODEL	PLANT	DRIVETRAIN	ENGINE	PRODUCTION CHANGE EFFECTIVE VIN
		2WD	2TR	5TFRX5GN#KX145148
				5TFAX5GN#KX145152
			2GR	5TFAZ5CN#KX080700
				5TFBZ5DN#KX004740
				5TFEZ5CN#KX080704
	TMMTX			5TFRZ5CN#KX080696
		4WD	2TR	5TFSX5EN#KX066596
			2GR	5TFCZ5AN#KX184778
Tacoma				5TFSZ5AN#KX184749
				5TFDZ5BN#KX042735
				5TFGZ5AN#KX184851
	ТММВС	2WD		3TMAZ5CN#KM093103
				3TMBZ5DN#KM019835
				3TMEZ5CN#KM093149
		4WD		3TMCZ5AN#KM229594
				3TMGZ5AN#KM229594
				3TMDZ5BN#KM065229

Warranty Information

OP CODE	DESCRIPTION		OFP	T1	T2
TC1801	R & R Rear Axle Shaft		42311-04082	91	50
Combo A*	Opposite Side	1.2		91	50

^{*}Combo A is ONLY applicable if both sides need to be replaced.

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.



Rear Vibration or Noise While Braking

Parts Information

PART NUMBER	PART NAME	QTY
42311-04082	Shaft, Rear Axle	1
90942-02081	Bolt Hub, Type B	6
90942-02049	Bolt Hub, Type A	6
42450-04010	Hub & Bearing Assy, Rear Axle (RH)	1
42460-04010	Hub & Bearing Assy, Rear Axle (LH)	1
42443-60010	Drum, Oil Deflector Gasket	1
90301-83002	Ring, O Rear, Axle Bearing Case	1
42444-35050	Brake Drum, Gasket	1
42423-60050	Rear Axle Bearing, Inner Retainer	1
90520-41019	Ring, Snap Rear Axle Shaft	1
90310-58003	Seal, Oil	1

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Seal Ring Tool*	<u>09631-12090</u>	1
Oil Seal Puller*	<u>09308-00010</u>	1
Rear Axle Shaft Puller*	<u>09521-25011-01</u>	1
Rear Axle Shaft Puller Adapter*	<u>09521-25021-01</u> or <u>09521-60010-01</u>	1
Hub Bolt Remover (Special Order)	<u>09650-17011</u>	1
Bearing Replacer Set 2*	<u>09950-60020-01</u>	1
Handle Set*	<u>09950-70010-01</u>	1

^{*}Essential SST.

NOTE

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

REQUIRED TOOLS & MATERIAL	QUANTITY
Measuring Caliper	1
Wire Brush	1

Rear Vibration or Noise While Braking

Repair Procedure

Confirm the condition exists.

Is a vibration or noise present from the rear of the vehicle at low speeds or while braking?

- YES Continue to step 2.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- 2. Inspect the rear drum and brake assembly for ANY signs of defects or wear.

NOTE

Refer to the applicable model year *Toyota Tacoma Warranty and Maintenance Guide* for additional information on warranty coverage.

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

2017 / 2018 / 2019 Tacoma:
 Brake – Brake (rear) – "Brake: Rear Brake: Inspection"

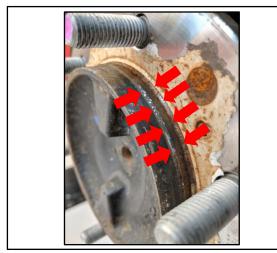
Does the rear drum or brake assembly exhibit ANY signs of defect or wear?

- YES Remedy ANY noticeable defects or wear BEFORE proceeding and retest.
 If the vibration or noise is still present from the rear of the vehicle at low speeds or while braking, continue to step 3.
- NO Continue to step 3.
- Visually inspect the rear axle flange for corrosion/rust buildup.

Does the vehicle exhibit ANY corrosion/rust buildup on the rear axle flange?

- YES Using a wire brush, remove the corrosion/rust buildup, then continue to step 4.
- **NO** Continue to step 4.

Figure 1. Inspection Location



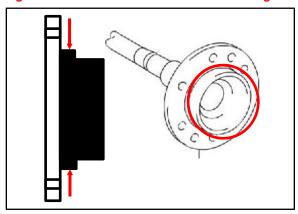
TOYOTA

Rear Vibration or Noise While Braking

Repair Procedure (continued)

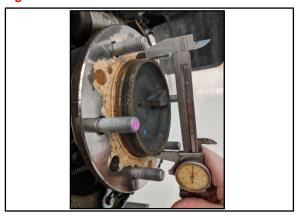
4. Measure the diameter of the axle flange (location shown).

Figure 2. Side View and Location of Axle Flange



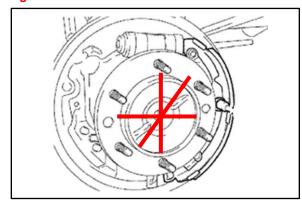
A. Using a digital or dial caliper, measure the axle flange boss diameter as shown.

Figure 3.



B. Take measurements in three locations (as shown) around the flange to verify the diameter.

Figure 4.



Page 6 of 6



Rear Vibration or Noise While Braking

Repair Procedure (continued)

5. Is the axle flange boss diameter out of specification?

Specification: 108.000 mm - 107.946 mm (4.252 in. - 4.250 in.)

- YES Continue to step 6.
- NO This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- Replace the axle.

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

NOTE

During Repair Manual reassembly step 5A (Install rear axle shaft), use SST 09631-12090. Do NOT use SST 09521-25011.

2017 Tacoma:

Drivetrain – Axle/Differential – "Axle: Rear Axle Shaft: Removal / Disassembly / Reassembly / Installation"

2018 Tacoma:

Drivetrain – Axle/Differential – "Axle: Rear Axle Shaft: Removal / Disassembly / Reassembly / Installation"

2019 Tacoma:

Drivetrain – Axle/ Differential – "Axle: Rear Axle Shaft: Removal / Disassembly / Reassembly / Installation"

7. Test-drive the vehicle to confirm the noise or vibration is no longer present.