Steering Intermediate Shaft Rattle Noise

Service Category: Steering
Section: Steering Column
Market: USA

Applicability

<table>
<thead>
<tr>
<th>YEAR(S)</th>
<th>MODEL(S)</th>
<th>ADDITIONAL INFORMATION</th>
</tr>
</thead>
</table>
| 2005 – 2012 | Tacoma | Body Type(s): Access Cab, Double Cab, Regular Cab, Double Cab Long Bed  
Drive Type(s): 2WD, 4WD  
VDS(s): JU4GN, JU62N, KU4HN, KU72N, LU42N, LU4EN, MU4FN, MU52N, NX4GN, NX62N, PX42N, PX4EN, TU4GN, TU62N, TX4GN, TX62N, UU42N, UU4EN, UX42N, UX4EN  
WMI(s): 3TM, 5TE, 5TF |

SUPERSESSION NOTICE

The information contained in this bulletin supersedes SB No. T-SB-0119-10.

- Applicability has been updated to include 2012 model year Tacoma vehicles.

Service Bulletin No. T-SB-0119-10 is Obsolete and any printed versions should be discarded. Be sure to review the entire content of this bulletin before proceeding.

Introduction

Some 2005 – 2012 model year 4WD Tacoma and 2WD Tacoma PreRunner vehicles may exhibit steering rattle noise when driven over rough road surfaces. A newly designed steering intermediate shaft has been made available to address this condition.

Warranty Information

<table>
<thead>
<tr>
<th>OP CODE</th>
<th>DESCRIPTION</th>
<th>TIME</th>
<th>OFP</th>
<th>T1</th>
<th>T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST1007</td>
<td>R &amp; R Intermediate Shaft</td>
<td>1.2</td>
<td>45220-04010</td>
<td>91</td>
<td>40</td>
</tr>
</tbody>
</table>

APPLICABLE WARRANTY

- This repair is covered under the Toyota Comprehensive Warranty. This warranty is in effect for 36 months or 36,000 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.
**Steering Intermediate Shaft Rattle Noise**

**Parts Information**

<table>
<thead>
<tr>
<th>PREVIOUS PART NUMBER</th>
<th>CURRENT PART NUMBER</th>
<th>PART NAME</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>45220-04010</td>
<td>45220-04020</td>
<td>Shaft Assy, Steering Intermediate</td>
<td>1</td>
</tr>
<tr>
<td>90080-11555</td>
<td>Same</td>
<td>Bolt, w/Washer</td>
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</tbody>
</table>

**Repair Procedure**

**NOTE**

Prior to removing the steering intermediate shaft, make sure the steering wheel and front wheels are straight and remain stationary. Once the intermediate shaft is removed, do NOT allow the steering wheel to spin freely. Use a steering wheel holder to keep the steering wheel from turning.

1. Confirm the noise complaint and confirm that the intermediate shaft is the source of the noise.

2. Install a steering wheel holder.

3. Remove the steering column hole cover by disengaging the 4 clips.

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4. Put matchmarks on the intermediate shaft.

5. Remove the one bolt that attaches the intermediate shaft to the steering column and discard the bolt.
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Repair Procedure (Continued)

6. Access the intermediate shaft from the driver’s side engine cover and remove the 2 clips that hold the engine cover.

![](figure4.png)

7. Put matchmarks on the intermediate shaft as shown.

![](figure5.png)

| 1   | Matchmarks |

8. Remove the upper bolt that attaches the intermediate shaft No. 1 to the intermediate shaft No. 2 and discard the bolt.

Loosen the lower bolt, then slide the shaft up and out.

![](figure6.png)

| 1   | Upper Bolt |
| 2   | Lower Bolt |
| 3   | Slide Intermediate Shaft Up |
| 4   | Slide Intermediate Shaft Out |
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Repair Procedure (Continued)

9. Place matchmarks on the NEW intermediate shaft.

Figure 7.

A. Place the NEW steering intermediate shaft next to the original intermediate shaft.

B. Transfer the matchmarks on the original intermediate shaft to the same locations on the NEW steering intermediate shaft.

10. Install the NEW steering intermediate shaft.

A. Align the matchmarks and install the intermediate shaft to the steering column first.

B. Align the matchmarks and install the intermediate shaft to the lower intermediate shaft.

**NOTICE**
Make sure the intermediate shaft is in the correct position when installing.
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Repair Procedure (Continued)

11. Install the NEW bolt.
   Torque: 35 N*m (357 kgf*cm, 26 ft*lbf)

   Figure 9.

   NOTICE
   • Please ensure that the splined portion of the shaft is completely seated into the U-joint female end.

   • When installing the bolt, make sure the groove in the shaft is aligned properly so that the bolt will prevent the shaft from sliding out of the U-joint.

   Figure 10. INCORRECT: Splines Are Showing – Not Installed Completely
   Figure 11. CORRECT: Splines Are Not Showing
12. Install the NEW upper bolt and reuse the lower bolt.

13. Tighten the 2 intermediate shaft bolts. (See Figure 12.)
   **Torque:** 35 N*m (357 kgf*cm, 26 ft*lbf)

14. Install the engine cover with the 2 clips.
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Repair Procedure (Continued)

15. Install the column hole cover with the 4 clips.

16. Remove the steering wheel holder from the vehicle.

17. Road test the vehicle to verify the repair. Confirm that the steering wheel is centered and no warning lights illuminate during the test drive.

18. If the steering wheel is not centered, follow the Repair Manual steering wheel centering procedure.

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

- 2005 Tacoma:  
  Steering – Steering Column – “Steering System: Repair”

  Steering – Steering Column – “Steering Column: Steering System: Repair”

19. Perform calibration of the yaw rate sensor and steering angle sensor.

**NOTE**
Any time alignment is performed, calibration of the yaw rate and steering angle sensor is necessary.

Refer to TIS, applicable model year Tacoma Repair Manual:

- 2005 Tacoma:  
  Brake – Brake Control/Dynamic Control System – “ABS With EBD & BA & TRAC & VSC System: Calibration”

- 2006 / 2007 / 2008 Tacoma:  
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Repair Procedure (Continued)

- **2009 / 2010 / 2011 / 2012** Tacoma: 

20. Test drive the vehicle to confirm that the noise is gone.