

# Steering Intermediate Shaft Knocking Noise

**Service Category** Steering

**Section** Steering Gear/Linkage

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2009 – 2010	Corolla, Matrix	

## Introduction

Some 2009 – 2010 Corolla and Matrix vehicles may exhibit a clunk, pop, or knocking noise when turning the steering wheel to the left or right. A new intermediate shaft has been developed to address this condition. Use the following repair procedure to remove and replace the steering intermediate shaft.

## Production Change Information

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

MODEL	ENGINE TYPE		PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Corolla	2AZ-FE		NUMMI	1NXBE4EE#AZ171406
			TMMC	2T1BE4EE#AC031001
	2ZR-FE		NUMMI	1NXBU4EE#AZ169743
			TMMC	2T1BU4EE#AC197503
			Takaoka	JTDBU40E#9J054516
			Kanto	JTDBL40E#99093141
Matrix	2AZ-FE	XRS	TMMC	2T1ME4EE#AC005811
		S		2T1KE4EE#AC030974
		AWD		2T1LE4EE#AC012021
	2ZR-FE			

## Steering Intermediate Shaft Knocking Noise

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
ST9009	R & R No. 2 Steering Intermediate Shaft Assembly	1.0	45260-#####	91	55

#### 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.

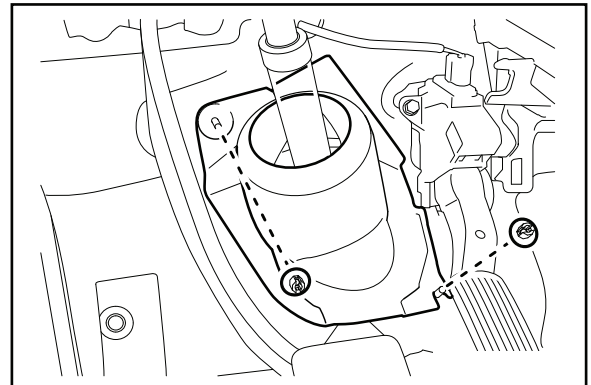
### Parts Information

MODEL	PRODUCTION	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla, Matrix	NAP	45260-02110	Same	Shaft Assembly, Steering Intermediate, No. 2	1
Matrix (AWD)		45260-02120	Same		1
Corolla	Japan	45260-12620	Same		1

### Repair Procedure

1. Install a steering wheel lock to ensure the wheels are straight and the steering wheel is centered before removing the steering intermediate shaft. Make sure the steering wheel and front wheels remain stationary. Once the intermediate shaft is removed, do NOT allow the steering wheel to spin freely.
2. Remove the column hole silencer sheet.

**Figure 1.**

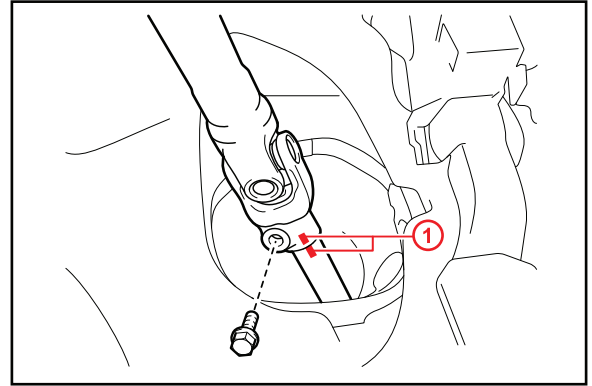


## Steering Intermediate Shaft Knocking Noise

### Repair Procedure (Continued)

- Place a matchmark on the No. 2 steering intermediate shaft that will later be copied onto the new part, and remove the bolt.

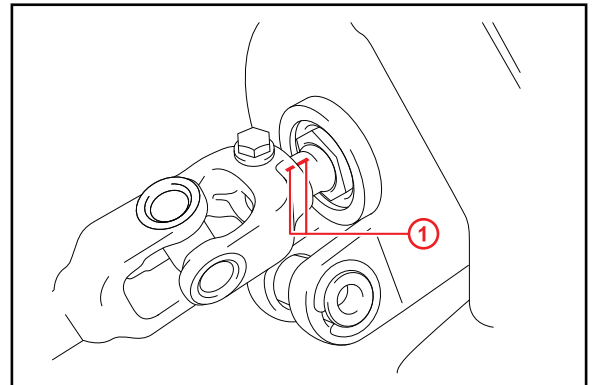
**Figure 2.**



<b>1</b>	<b>Matchmark</b>
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- Place a matchmark on the upper portion of the No. 2 steering intermediate shaft.

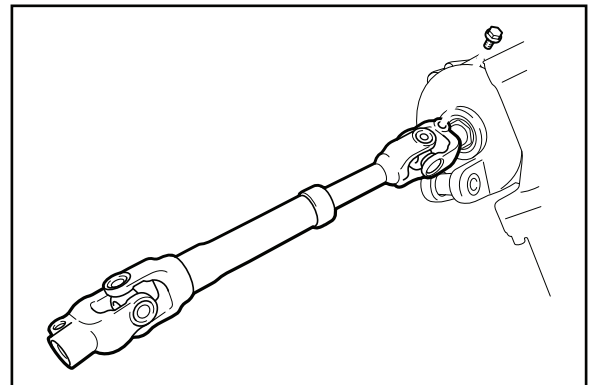
**Figure 3.**



<b>1</b>	<b>Matchmark</b>
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- Remove the bolt and the No. 2 steering intermediate shaft assembly from the steering column assembly.

**Figure 4.**

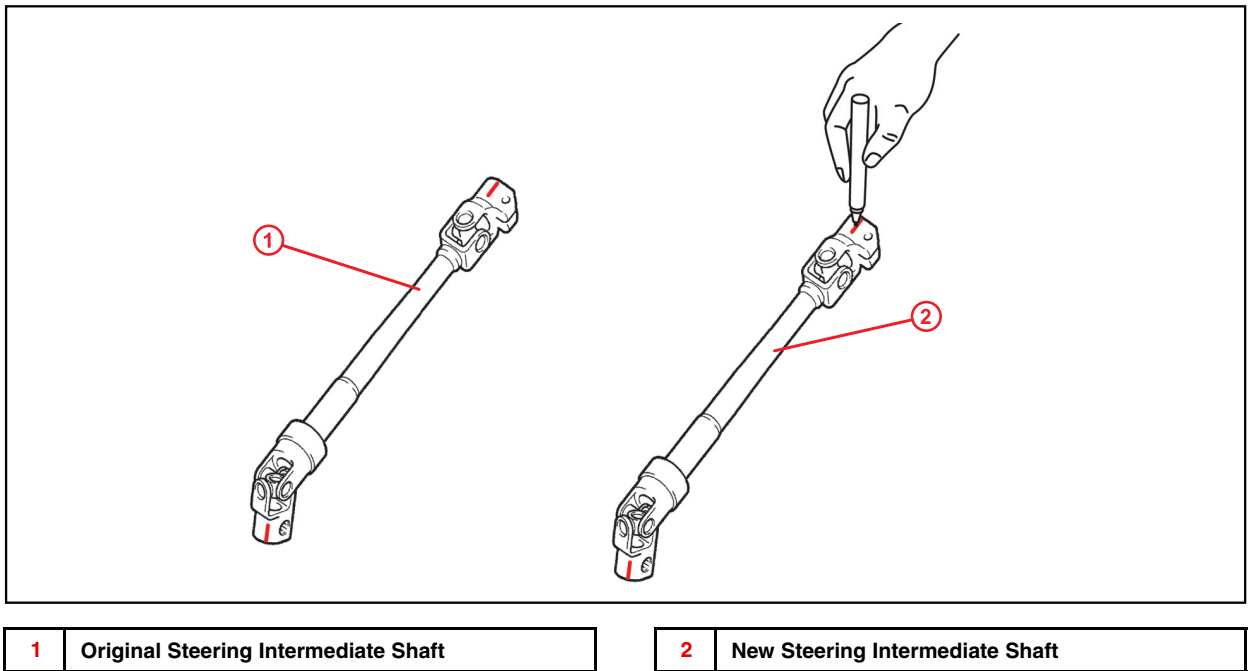


## Steering Intermediate Shaft Knocking Noise

### Repair Procedure (Continued)

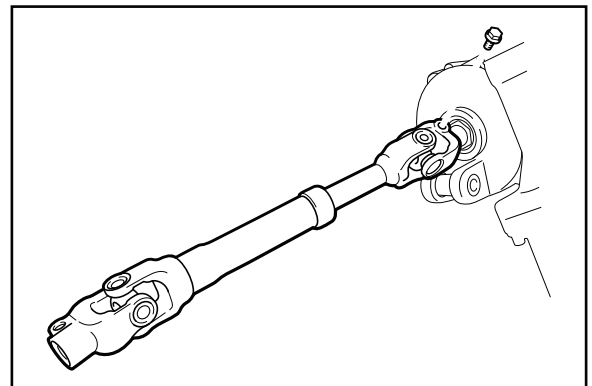
6. Place the matchmarks on the NEW steering intermediate shaft sub-assembly.
  - A. Place the NEW steering intermediate shaft next to the original steering intermediate shaft assembly (removed in the previous step).
  - B. Transfer the matchmarks on the original steering intermediate shaft to the same locations on the NEW steering intermediate shaft.

**Figure 5.**



7. Install the NEW No. 2 intermediate shaft and line up the matchmarks and tighten the bolt.  
**Torque: 35 N\*m (360 kgf\*cm, 26 ft\*lbf)**

**Figure 6.**



## Steering Intermediate Shaft Knocking Noise

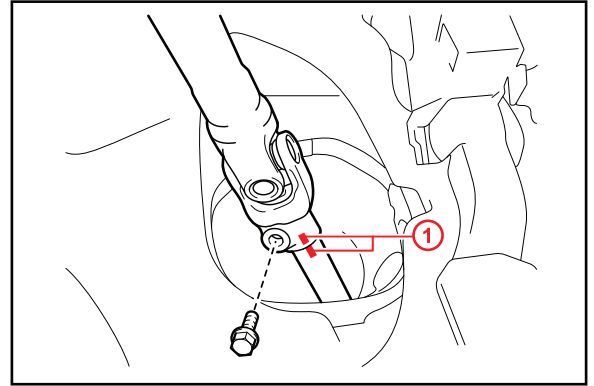
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### Repair Procedure (Continued)

8. Install the No. 2 intermediate shaft onto the No. 1 intermediate shaft and line up the matchmarks, and tighten the bolt.

**Torque: 35 N\*m (360 kgf\*cm, 26 ft\*lbf)**

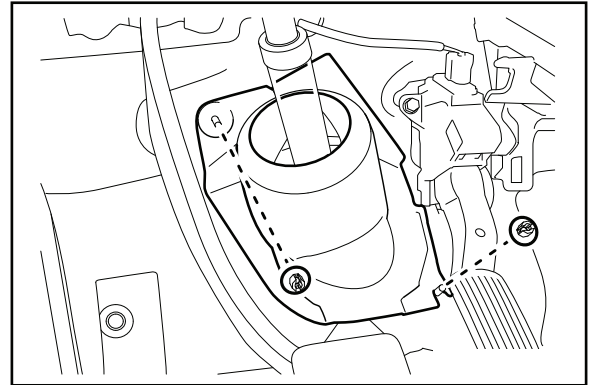
**Figure 7.**



<b>1</b>	<b>Matchmark</b>
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9. Reinstall the column hole silencer sheet.

**Figure 8.**



10. Road test the vehicle to verify the repair and confirm that the steering wheel is centered.