

# Spring Bumper Knocking Noise

**Service Category** Suspension

**Section** Front Suspension

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2009 – 2011	Avalon	Body Type(s): 4Dr. Sedan Drive Type(s): 2WD Plant Code(s): U VDS(s): BK36B, BK3DB WMI(s): 4T1
2009 – 2011	Camry HV	Body Type(s): 4Dr. Sedan Drive Type(s): 2WD Plant Code(s): U VDS(s): BB3EK, BB46K WMI(s): 4T1
2009 – 2011	Camry	Body Type(s): 4Dr. Sedan Drive Type(s): 2WD Plant Code(s): U VDS(s): BF3EK, BK3EK WMI(s): 4T1
2009 – 2010	Venza	Body Type(s): Wagon Drive Type(s): 4WD, 2WD Plant Code(s): U VDS(s): BA3BB, BE11A, BK11A, BK3BB, ZA3BB, ZE11A, ZK11A, ZK3BB WMI(s): 4T1

## Introduction

Some North American Produced (NAP) 2009 – 2011 model year Avalon, Camry, Camry HV, and 2009 – 2010 model year Venza vehicles may exhibit an abnormal noise from the front or rear of vehicle while driving over bumps. This condition may be caused by the incorrect orientation of the spring bumper(s). Please use the following repair procedure to address this condition.

## Spring Bumper Knocking Noise

### Production Change Information

This TSB applies to the following vehicles:

- 2009 – 2011 model year Avalon, Camry, and Camry HV vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	DRIVETRAIN	ENGINE	PRODUCTION CHANGE EFFECTIVE VIN
Avalon	2WD	2GR-FE	4T1BK3DB#BU391974
Camry		2AR-FE	4T1BF3EK#BU179266
			4T1BF3EK#BU642909
		2GR-FE	4T1BK3EK#BU124981
Camry HV		2AZ-FEX	4T1BK3EK#BU618992
	4T1BB3EK#BU138146		

- 2009 – 2010 model year Venza vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	DRIVETRAIN	ENGINE	PRODUCTION CHANGE EFFECTIVE VIN
Venza	2WD	1AR-FE	4T3ZA3BB#AU035913
		2GR-FE	4T3ZK3BB#AU032585
	4WD	1AR-FE	4T3BA3BB#AU017965
		2GR-FE	4T3BK3BB#AU043107

### Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Coil Spring Compressor	<a href="#">09727-30021</a> (or equivalent)	1

**NOTE**

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

## Spring Bumper Knocking Noise

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### Parts Information

MODEL	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Avalon	48331-AA010	Same	Bumper, Front Spring RH/LH	–
	48341-AA010	Same	Bumper, Rear Spring RH/LH	–
Camry / Camry HV	48331-06040	Same	Bumper, Front Spring RH/LH	–
	48341-AA010	Same	Bumper, Rear Spring RH/LH	–
Venza	48331-0T010	Same	Bumper, Front Spring RH/LH	–
	48341-48050 48341-0E030	48341-0E030	Bumper, Rear Spring RH/LH	–

**NOTE**

Part numbers are for reference only. Only replace spring bumper if damage is identified upon inspection.

## Spring Bumper Knocking Noise

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
<b>Avalon:</b>					
431101	Front Coil Spring (One Side)	1.2	48331-AA010	91	57
Combo A	Opposite Side	0.8			
Combo B	Toe-In	0.1			
Combo C	Camber	0.5			
482151	Rear Coil Spring (One Side)	1.2	48341-AA010	91	57
Combo A	Opposite Side	0.6			
Combo D	Toe-In	0.2			
<b>Camry / Camry HV:</b>					
431101	Front Coil Spring (One Side)	0.9	48331-06040	91	57
Combo A	Opposite Side	0.2			
Combo B	Toe-In	0.1			
Combo C	Camber	0.5			
482151	Rear Coil Spring (One Side)	1.1	48341-AA010	91	57
Combo A	Opposite Side	0.3			
Combo D	Toe-In	0.2			
<b>Venza:</b>					
431101	Front Coil Spring (One Side)	1.7	48331-0T010	91	57
Combo A	Opposite Side	0.5			
Combo B	Toe-In	0.1			
Combo C	Camber	0.5			
482151	Rear Coil Spring (One Side)	1.3	48341-48050	91	57
Combo A	Opposite Side	0.6			
Combo D	Toe-In	0.2			

#### 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.

# Spring Bumper Knocking Noise

## Repair Procedure

1. Conduct a road test to verify the abnormal noise condition.
2. If condition is verified, confirm condition of spring bumpers.

Conduct a visual inspection of the spring bumper(s) at the suspected location of noise.

Are the spring bumpers installed incorrectly? (refer to Figures 1 and 2).

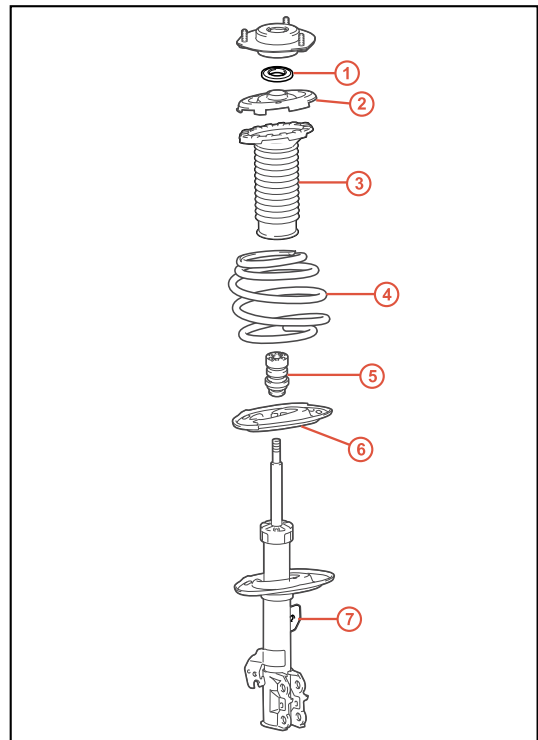
- **YES** — This TSB DOES apply. Go to step 3.
- **NO** — This TSB does **NOT** apply. Refer to the applicable Repair Manual for diagnosis.

Figure 1.



<b>1</b>	<b>This End Up</b>
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Figure 2.



<b>1</b>	<b>Front Suspension Support Bearing (Non-reusable Part)</b>
<b>2</b>	<b>Front Coil Spring Upper Seat</b>
<b>3</b>	<b>Front Coil Spring Upper Insulator</b>
<b>4</b>	<b>Front Coil Spring</b>
<b>5</b>	<b>Front Spring Bumper</b>
<b>6</b>	<b>Front Coil Spring Lower Insulator</b>
<b>7</b>	<b>Front Shock Absorber</b>

## Spring Bumper Knocking Noise

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### Repair Procedure (Continued)

3. Remove the affected strut assembly.

**Front:**

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

Avalon:

- 2009 Avalon:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber With Coil Spring: [Removal / Disassembly](#)”*
- 2010 Avalon:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*
- 2011 Avalon:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*

Camry:

- 2009 Camry:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*
- 2010 Camry:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*
- 2011 Camry:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*

Camry HV:

- 2009 Camry HV:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*
- 2010 Camry HV:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*
- 2011 Camry HV:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal / Disassembly](#)”*

## Spring Bumper Knocking Noise

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### Repair Procedure (Continued)

Venza:

- 2009 Venza:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal](#)”*
- 2010 Venza:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Removal](#)”*

### Rear:

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

Avalon:

- 2009 Avalon:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber With Coil Spring: [Removal](#) / [Disassembly](#)”*
- 2010 Avalon:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber With Coil Spring: [Removal](#) / [Disassembly](#)”*
- 2011 Avalon:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber With Coil Spring: [Removal](#) / [Disassembly](#)”*

Camry:

- 2009 Camry:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#) / [Disassembly](#)”*
- 2010 Camry:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#) / [Disassembly](#)”*
- 2011 Camry:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#) / [Disassembly](#)”*

Camry HV:

- 2009 Camry HV:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#) / [Disassembly](#)”*
- 2010 Camry HV:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#) / [Disassembly](#)”*

## Spring Bumper Knocking Noise

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### Repair Procedure (Continued)

- 2011 Camry HV:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#) / [Disassembly](#)”*

Venza:

- 2009 Venza:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#)”*
- 2010 Venza:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Removal](#)”*

4. Remove and inspect the spring bumper for damage, if NO damage is present, then reassemble the spring assembly with the spring bumper in the correct orientation.
5. Install the assembled strut assembly into the vehicle.

### Front:

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

Avalon:

- 2009 Avalon:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber With Coil Spring: [Reassembly](#) / [Installation](#)”*
- 2010 Avalon:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2011 Avalon:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*

Camry:

- 2009 Camry:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2010 Camry:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2011 Camry:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*



## Spring Bumper Knocking Noise

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### Repair Procedure (Continued)

#### Camry HV:

- 2009 Camry HV:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2010 Camry HV:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2011 Camry HV:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Reassembly](#) / [Installation](#)”*

#### Venza:

- 2009 Venza:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Installation](#)”*
- 2010 Venza:  
*Suspension – Front Suspension – “Suspension: Front Shock Absorber: [Installation](#)”*

#### Rear:

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

#### Avalon:

- 2009 Avalon:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber With Coil Spring: [Reassembly](#) / [Installation](#)”*
- 2010 Avalon:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber With Coil Spring: [Reassembly](#) / [Installation](#)”*
- 2011 Avalon:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber With Coil Spring: [Reassembly](#) / [Installation](#)”*

#### Camry:

- 2009 Camry:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2010 Camry:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Reassembly](#) / [Installation](#)”*

## Spring Bumper Knocking Noise

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### Repair Procedure (Continued)

- 2011 Camry:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Reassembly](#) / [Installation](#)”*

#### Camry HV:

- 2009 Camry HV:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2010 Camry HV:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Reassembly](#) / [Installation](#)”*
- 2011 Camry HV:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Reassembly](#) / [Installation](#)”*

#### Venza:

- 2009 Venza:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Installation](#)”*
- 2010 Venza:  
*Suspension – Rear Suspension – “Suspension: Rear Shock Absorber: [Installation](#)”*

6. Inspect and adjust the wheel alignment.
7. Road test the vehicle to verify no abnormal noise is present.