

## 2GR-FE No. 2 Idler Pulley Noise

**Service Category** Engine/Hybrid System

**Section** Engine Mechanical

**Market** USA

Toyota Supports  
 ASE Certification 

### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2005 – 2008	Avalon	
2007 – 2008	Camry	VDS(s): BK46K
2008	Highlander	
2006 – 2008	RAV4	VDS(s): BK31V, BK32V, BK33V, BK34V, BK35V, ZK31V, ZK32V, ZK33V, ZK34V, ZK35V
2007 – 2008	Sienna	

### Introduction

Some 2005 – 2008 model year vehicles equipped with 2GR-FE engines may exhibit a squeaking noise from the engine compartment while the engine is running. Use the following repair procedure to address this concern.

### Production Change Information

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

MODEL	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Avalon	TMMK	4T1BK36B#8U274765
Camry	TMMK 1	4T1BK46K#8U065070
	TMMK 2	4T1BK46K#8U568429
	Tsutsumi	JTNBK46K#83034165
Highlander	Kyushu	JTEDS41A#82021508
		JTEES41A#82032984
RAV4	Shokki	JTMZK3#V#86011038
		JTMBK3#V#86031357
	Tahara	JTMZK3#V#85017215
		JTMBK3#V#85045355
Sienna	TMMI	5TD*K2#C#8S136926

## 2GR-FE No. 2 Idler Pulley Noise

### Warranty Information

OP CODE	DESCRIPTION	MODEL	TIME	OFF	T1	T2
EG8050	R & R No. 2 Idler Pulley	Avalon	0.5	16604-31010	91	99
		Camry	0.5			
		Highlander	0.4			
		RAV4	0.4			
		Sienna	0.5			

#### 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 correction of a problem based upon a customer's specific complaint.

### Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
16604-31010	16604-0P011	Pulley Sub-Assembly, Idler, No. 2	2*
N/A	16649-31020	Plate, Idler Pulley Cover	2*

\* Highlander and RAV4 vehicles are equipped with Electric Power Steering (EPS) and require one pulley and one pulley cover plate ONLY.

### Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST'S)	PART NUMBER	QTY
Torque Wrench Adapter*	<a href="#">09249-63010-01</a>	1

\* Essential SST.

#### NOTE

Additional SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

## 2GR-FE No. 2 Idler Pulley Noise

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### Inspection Procedure

1. Start the engine and confirm the squeaking noise is present.
2. Turn OFF the engine and loosen (but do NOT remove) the accessory drive belt and inspect each No. 2 idler pulley.

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

- [2005](#) Avalon:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Replacement”*
- [2006](#) / [2007](#) / [2008](#) Avalon:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Removal”*
- [2007](#) / [2008](#) Camry:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Removal”*
- [2008](#) Highlander:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Removal”*
- [2006](#) / [2007](#) / [2008](#) RAV4:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Removal”*
- [2007](#) / [2008](#) Sienna:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Removal”*

If NO concerns are noted with either No. 2 idler pulley, this TSB does NOT apply. Refer to the Repair Manual for further diagnosis.

## 2GR-FE No. 2 Idler Pulley Noise

### Repair Procedure

1. Remove the No. 2 idler pulley(s).

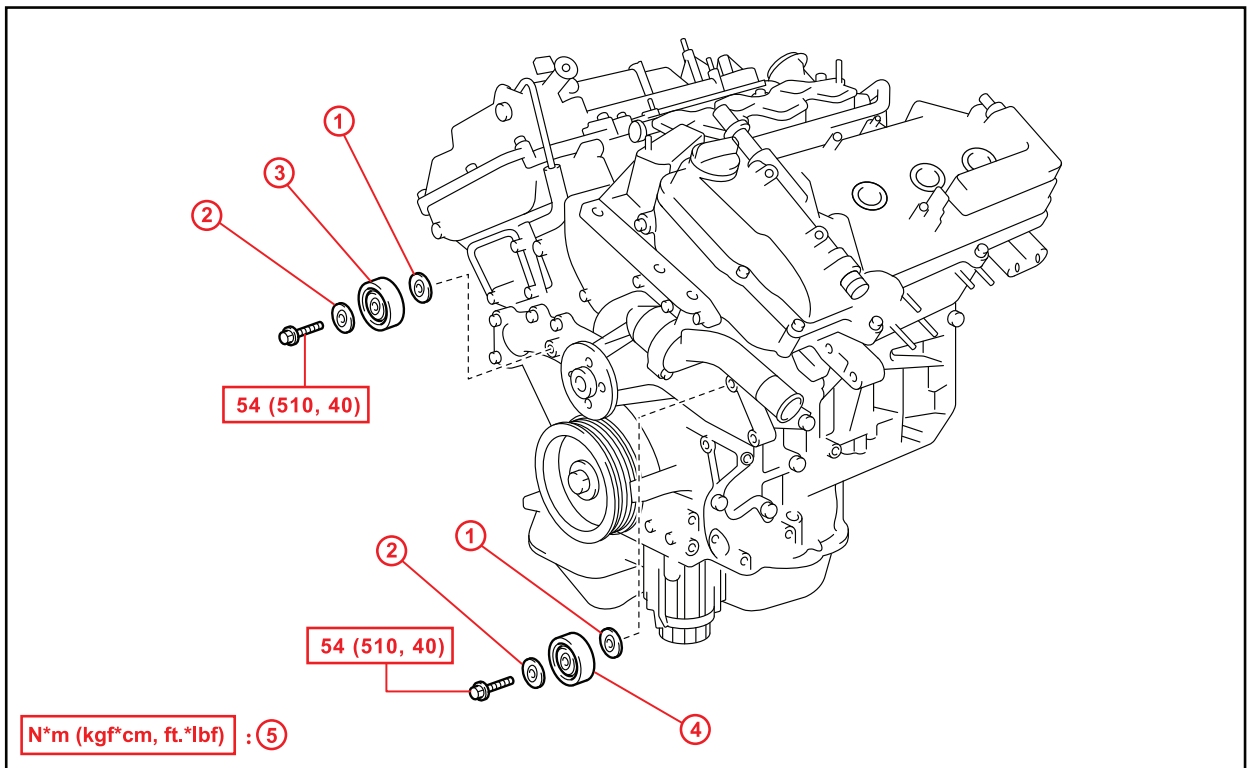
**HINT**

The No. 2 idler pulleys can be accessed through the passenger side wheel well opening.

2. Install the original No. 2 idler pulley cover plate to the front of each NEW No. 2 idler pulley.
3. Install the NEW idler pulley cover plate to the rear of each new pulley and bolt the assemblies onto the engine.

**Torque: 54 N\*m (510 kgf\*cm, 40 ft\*lbf)**

Figure 1.



1	Idler Pulley Cover Plate
2	No. 2 Idler Pulley Cover Plate
3	No. 2 Idler Pulley Sub-assembly (Avalon, Camry, Sienna ONLY)
4	No. 2 Idler Pulley Sub-assembly (Avalon, Camry, Highlander, RAV4, Sienna)
5	Specified Torque

## 2GR-FE No. 2 Idler Pulley Noise

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### Repair Procedure (Continued)

4. Reinstall the accessory drive belt.

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

- [2005](#) Avalon:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Replacement”*
- [2006](#) / [2007](#) / [2008](#) Avalon:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Installation”*
- [2007](#) / [2008](#) Camry:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Installation”*
- [2008](#) Highlander:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Installation”*
- [2006](#) / [2007](#) / [2008](#) RAV4:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Installation”*
- [2007](#) / [2008](#) Sienna:  
*Engine/Hybrid System – Engine Mechanical – “2GR-FE Engine Mechanical: Drive Belt: Installation”*

5. Start the engine and confirm the repair.