

Idler Pulley Noise

Service Category Engine/Hybrid System

Section Engine Mechanical

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2006 – 2008	RAV4	Drive Type(s): 4WD, 2WD Engine(s): 2AZ Transmission(s): 4AT VDS(s): BD31V, BD32V, BD33V, BD34V, BD35V, ZD31V, ZD32V, ZD33V, ZD34V, ZD35V WMI(s): JTM

Introduction

Some 2006 – 2008 model year RAV4 vehicles with the 2AZ-FE (2.4L) engine may exhibit an abnormal noise from the idler pulley bearing assembly. The idler pulley bearing, bracket, and washers have been revised to address this condition.

Production Change Information

This TSB applies to ALL 2006 – 2008 2AZ-FE RAV4 vehicles. Refer to the Repair Procedure for instructions to determine if BOTH Idler Pulley and Bracket must be replaced (**BEFORE** the VINs below), or ONLY the Idler Pulley (**AFTER** the VINs below).

- Replacement of **BOTH** Idler Pulley and Bracket may be necessary on vehicles produced **BEFORE** the Production Change Effective VINs shown below.
- Replacement of Idler Pulley **ONLY** may be necessary on vehicles produced **AFTER** the Production Change Effective VINs shown below.

MODEL	ENGINE	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
RAV4	2AZ-FE	Tahara	2WD	JTMZD3#V#85084220
			4WD	JTMBD3#V#85139041
		Shokki	2WD	JTMZD3#V#86058407
			4WD	JTMBD3#V#86060308

Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
16603-28020	16603-28050	Pulley Sub-Assembly, Idler	1
16631-28030	16631-28031	Bracket, Idler Pulley	1

Idler Pulley Noise

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EG9055	Replace Idler Pulley and Bracket	1.4	16603-28020	91	19

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.

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Belt Tension Wrench*	09216-42010	1

* Essential SST.

NOTE

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

Repair Procedure

1. Is there an abnormal noise coming from the idler pulley bearing sub-assembly?
 - **YES** — Proceed to step 2.
 - **NO** — STOP and refer to the applicable Repair Manual section for further diagnosis of the customer concern.
2. Remove the drive belt.

Refer to the Technical Information System (TIS), applicable model year RAV4 Repair Manual:

- [2006](#) / [2007](#) / [2008](#) RAV4:
Engine/Hybrid System – Engine Mechanical – “2AZ-FE Engine Mechanical: Drive Belt: Removal”

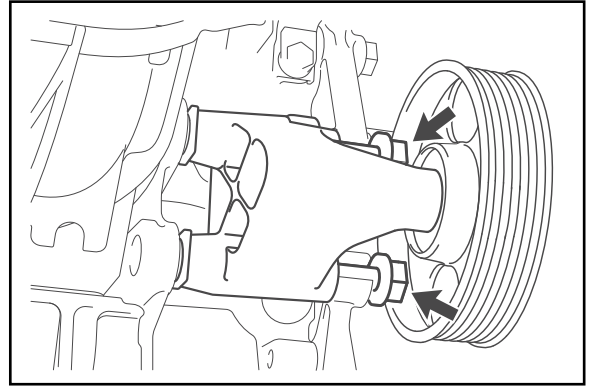
Idler Pulley Noise

Repair Procedure (Continued)

3. Remove the idler pulley bracket and pulley sub-assembly.

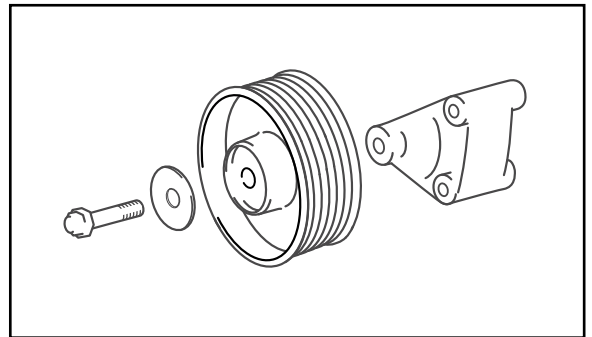
Loosen the 2 bolts and remove the idler pulley bracket and pulley with the 2 bolts.

Figure 1.



4. Separate the idler pulley sub-assembly from the idler pulley bracket. Then remove the idler pulley sub-assembly bolt and pulley.

Figure 2.

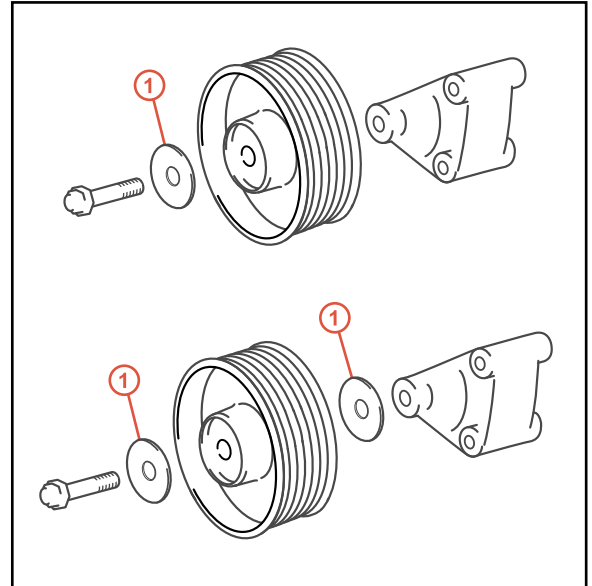


Idler Pulley Noise

Repair Procedure (Continued)

5. Discard the washers on one or both sides of the idler pulley sub-assembly.

Figure 3.



1	Discard Washers
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6. Measure the idler pulley bracket to determine if replacement is necessary.
 - A. Place the idler pulley bracket on a flat surface as shown and measure the height of the bracket.

Old Bracket = 96.4 mm

New Bracket = 94.8 mm
 - B. Does the bracket measure 96.4 mm?
 - **YES** — Replace it with the updated part number 16631-28031.
 - **NO** — Reuse the 94.8 mm bracket.

Figure 4.



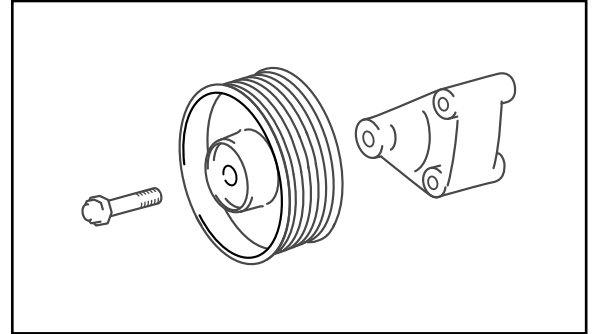
Idler Pulley Noise

Repair Procedure (Continued)

7. Install the NEW idler pulley sub-assembly onto the idler pulley bracket with the bolt.

Torque: 60 N*m (612 kgf*cm, 44 ft*lbf)

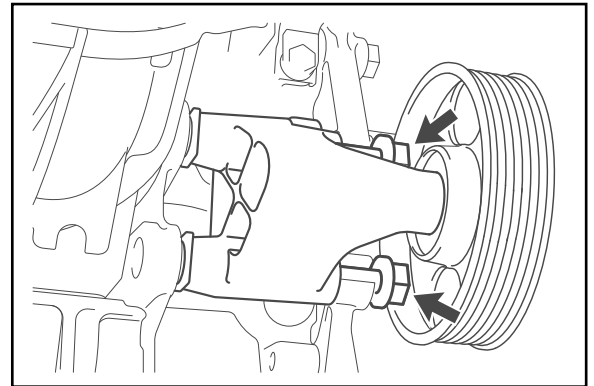
Figure 5.



8. Install the idler pulley bracket and idler pulley with the two bolts.

Torque: 50 N*m (510 kgf*cm, 37 ft*lbf)

Figure 6.



9. Install the drive belt.

Refer to TIS, applicable model year RAV4 Repair Manual:

- [2006](#) / [2007](#) / [2008](#) RAV4:
*Engine/Hybrid System – Engine Mechanical – “2AZ-FE Engine Mechanical:
Drive Belt: Installation”*

10. Confirm the abnormal noise concern is no longer present.