

TECHINFO DIRECTION TECHNIQUE ET MARKETING





KD469.22/GB-07/2022

KD469.22

Assembly/disassembly recommendations

TOYOTA: Avensis, Avensis verso, Corolla, Corolla verso, Picnic, Previa,	ENGINES	OE REFERENCE
RAV4	2.0 D4-D	See below

TIMING KINEMATICS OF THE KIT KD469.22



FEATURES OF THIS BELT

The roller tensioner GT359.26 is actuated by the hydraulic tensioner GT369.40.

The pulley GE369.19, wound on 2/3 of its surface, is particularly used. It is therefore important to check the correct positioning of the belt on the roller to avoid any slippage, as a bad load distribution can lead to a malfunction of the roller.

The timing belt is characterized by a white Teflon coating which gives good rigidity and high resistance to wear.

COMMON PROBLEMS

1) BAD BELT POSITIONING

Probable causes

Tension adjustment

- Misalignment of timing components or component wear
- Non-standard belt tension
- Roller tensioner GT369.26 not attached correctly

Consequences

Belt slippage

Improper positioning of the belt may result in a misalignment of the load leading to abnormal bearing running. This anomaly affects other components of the timing system and can lead to in the short-term a seizure of bearings with balls being ejected.

2) MALFUNCTION OF HYDRAULIC TENSIONER

Probable causes

Loss of oil in the damper rod.

Air infiltration in the oil that can lead to a lack of damping and therefore jumps or destruction of teeth.

Damage to the hydraulic tensioner body.

Consequences

The hydraulic tensioner no longer ensures belt tension, nor its course.

It is imperative to change the hydraulic tensioner as it plays a fundamental role.

In effect it controls the dynamics of the belt, it maintains its constant tension and compensates for changes in length due to temperature changes.













REPLACEMENT

Special tools

- Retaining tool for the crankshaft pulley Toyota No. 09213-54015
- Extractor Toyota No. 09950-50013

Tightening torque

- Screw for tensioner GT369.26: 40 Nm
- Bolts for hydraulic tensioner GT369.40: 21 Nm
- Screw for pulley GE369.19: 46 Nm
- · Bolt for the crankshaft pulley: 180 Nm

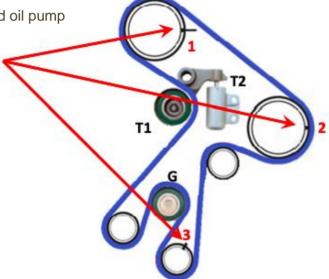


Adhere to the tightening torques specified by the manufacturer

1) Replace and tighten roller tensioners and tensioner.

The tensioner should move freely.

- 2) Check the condition of sprockets for the water pump and oil pump
- 3) Make sure the timing marks are aligned (1, 2 and 3)
- 4) Fit the timing belt, with a cold engine, in the following order:
- Camshaft sprocket
- High pressure pump sprocket
- Water pump sprocket
- Crankshaft sprocket
- Pulley -> G (GE369.19)
- · Oil pump sprocket
- Roller tensioner -> T1 (GT369.26)





Make sure the belt is tensioned on the side where there is no roller tensioner

5) Install the hydraulic tensioner T2 (GT369.40)

- Insert the lower bolt of the tensioner and tighten by hand.
- Turn the tensioner clockwise
- Insert the upper bolt of the tensioner and tighten by hand.
- Tighten the 2 bolts evenly to 21 Nm
- Remove the locking pin from the body of the hydraulic tensioner



Be sure to not remove the locking pin before completing the installation.

6) Turn the crankshaft two full turns clockwise to bring it to TDC of the first cylinder.

7) Make sure the timing marks are aligned

If they are not, start the installation and tension adjustment over again.







- 8) Remove the crankshaft pulley bolt
- 9) Reinstall the remaining parts in the reverse order of removal. Tighten the crankshaft pulley bolt to 180 Nm.



In case of early unpinning: How to reposition the locking pin ydraulic tensioner?

Slowly compress the piston into the body of the hydraulic tensioner using a press until the holes are aligned.

This operation must be carried out in a vertical position.



Do not exceed a force of 1000 kg.

• Hold the piston in place by inserting the correct locking pin through the hole in the body of the hydraulic tensioner.



Recommendations



During replacement, all components, roller tensioners and tensioners, should be replaced and not just the belt.

Do not store belts in the sun. Never bend, turn or twist a belt and do not force the belt on the **Pulleys**

Follow the manufacturers' assembly procedures as well as their indicated tightening torques.

Consult vehicle applications in our online catalogue: eshop



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