



GA357.24/GB/07/2022

GA357.24

Disassembly/assembly recommendations

<p>AUDI : SEAT : SKODA : VOLKSWAGEN</p>	<p>A3 série 2, A4 & A6 série 3 Cordoba IV, Ibiza III, Leon II, Altea, Altea XL Octavia I, fabia II Passat, Jetta III, Golf V plus, Polo IV</p>	<p>ENGINES 1.9TDI, 2.0TDi</p>	<p>OE REFERENCE <u>038903315AH</u></p>
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IDENTIFICATION OF ACCESSORY BELT TENSIONER ROLLER GA357.24



Traceability

COMMON CAUSE OF FAILURE

A worn or seized overrunning alternator pulley (OAP)

The overrunning alternator pulley (OAP) allows the alternator to free wheel when its not needed. If the OAP is worn or seized it may not disengage, meaning the alternator can not freewheel when needed. This causes the belt to bounce up and down and snatch at the tensioner.

COMMON PROBLEMS

Pulley diameter erosion:

If the belt becomes incorrectly tensioned and moves on the pulley roller, and becomes misaligned. When this happens the polyamide part of the pulley becomes marked and damaged, in some cases the edge of the pulley wears. This wear may allow the belt to slide of the pulley in some situations.



Marks on the pulley

Damaged or worn GA357.24

Tensioner GA357.04 is not designed to absorb the violent shocks caused by the bouncing and snatching of the belt. This bouncing and snatching motion prematurely wears the internal elements of the tensioner.

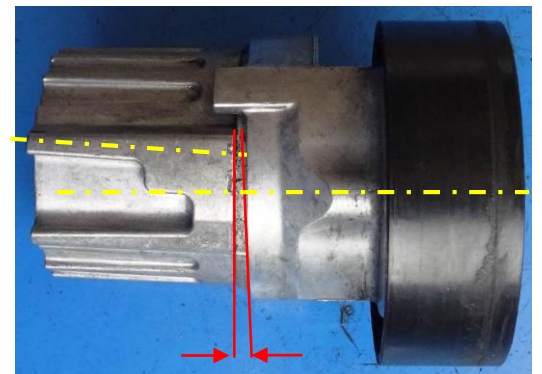
Marks on the stops show us the tensioner arm has been bouncing back and forth off the tensioner stops. When the tensioner is working correctly, the tensioner arm operates in between the two stops but never touches them.



Marks on the stop

Worn central axis

A worn axis caused by belt misalignment, means the tensioner bends in the middle causing further belt misalignment.





Failures with GA357.24 are often caused by a faulty overrunning alternator pulley. Overrunning alternator pulleys should be checked or replaced at the same time as the tensioner roller assembly is replaced.

Failure of the accessory drive system can cause the vehicle to stop running , in severe cases the accessory belt enters the timing system causing major damage.

RECOMMENDATION

- It is recommended that the overrunning alternator pulley is checked or replaced at the same time as the tensioner roller assembly is replaced , to avoid any premature failure.
To find the correct part number for your vehicle , refer to the NTN Europe Auxiliary catalogue online.
- It is recommended that the correct tools are used to fit the tensioner, OAP and belt to the manufacturer's specifications.
- The condition of the pulleys and belts should be checked a regular intervals.

Tests to verify the condition of the overrunning alternator pulley.

- With the engine idling, look at the tensioner and check for abnormal movements, such as the belt bouncing up and down on the rollers , it should run smooth with little movement. If movement can be seen it is advised that the overrunning alternator pulley is checked and replaced if necessary.
- To check the overrunning alternator pulley : Remove the belt and stop the alternator rotor from turning (use a none metallic object such as pen to block the rotor) Rotate the pulley by hand, it should only turn in one direction. If it moves in both directions or will not turn in either direction the overrunning alternator pulley is faulty and should be replaced.

TIP: An overrunning alternator pulley can not be replaced with a standard fixed pulley, some new alternators are supplied with a pulley that looks like an OAP, but are in fact a standard fixed pulley.

Removal and fitment instructions for GA357.24

REMOVAL OF THE BELT & TENSIONER - STEP BY STEP

- 1- Remove the plastic engine covers where necessary
- 2- Use a spanner on the tensioner pulley roller nut to rotate the tensioner roller clockwise to release the belt tension.
- 3- Remove the auxiliary belt



4- Remove the retaining bolt that hold the GA357.24 to the engine block.

RE-INSTALLATION OF THE BELT & ROLLER - STEP BY STEP

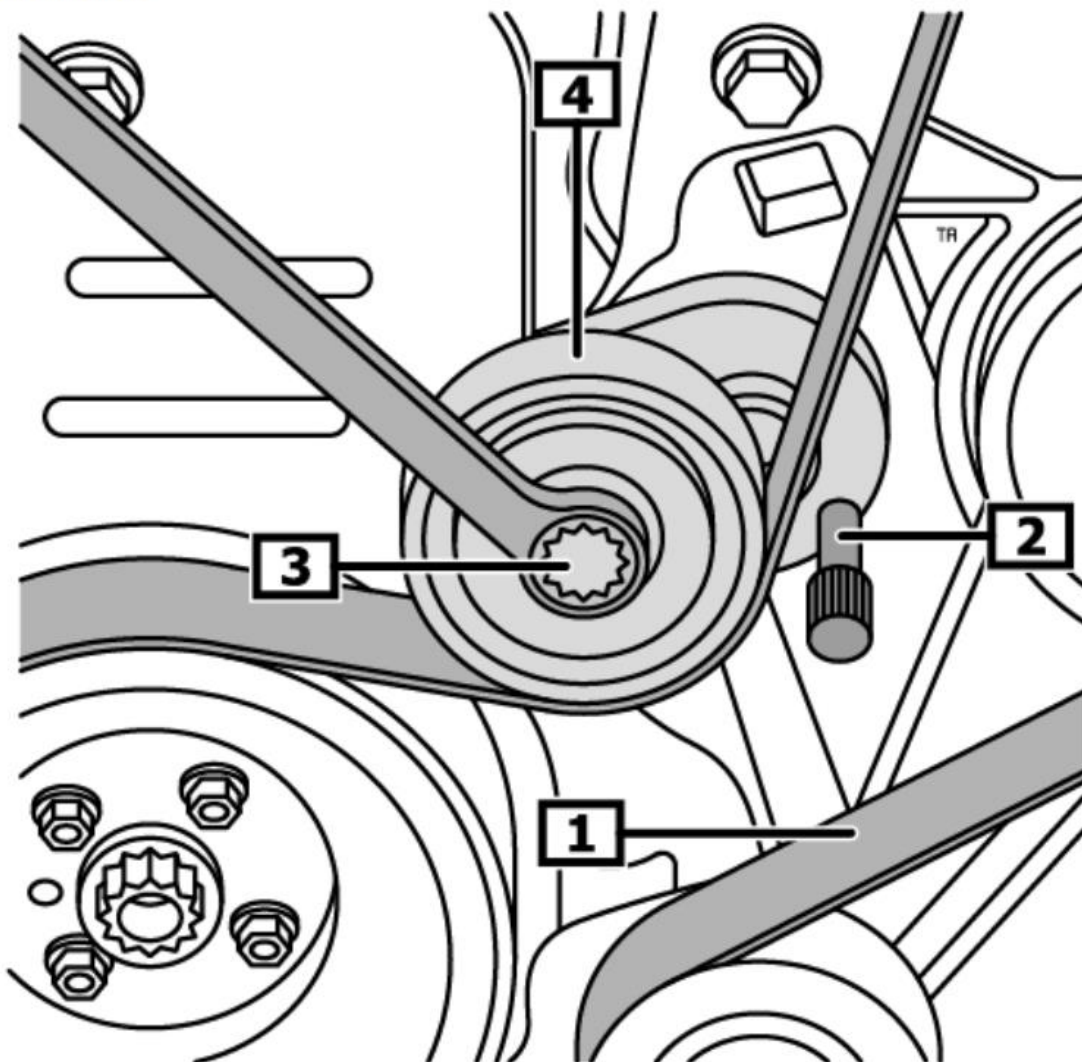
1- Install the new GA357.24 making sure it is correctly located and torque according to the vehicle specification.

2- Refit a new belt (CA6PK1072) checking it is located on the pulleys correctly , never use an old belt.

3- With a spanner on the roller nut , rotate the tensioner fully clockwise.

4- Remove the locking pin and gently let the tensioner return to the rest position

Illustration 2



1 Auxiliary belt

2 Locking pin

3 Pulley nut

4 Tensioner pulley





Recommendations

The overrunning alternator pulley is a wearable item, regular checks should be made to verify that it is functioning correctly.

Manufacturers recommend replacing tensioner rollers and pulleys along with the accessory belt at 75000 mile intervals.

It is strongly recommended that the overrunning alternator pulley is tested or replaced when a new tensioner unit and belt are fitted.

Always follow the vehicle manufacturer's installation procedures and apply the specified tightening torques.

Refer to the vehicle applications in our online catalogue: [e-shop](#)



Scan this QR code to access our online catalogue.

FOLLOW THE RECOMMENDATIONS OF THE VEHICLE MANUFACTURER!

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