



# GA354.12

## Assembly/disassembly recommendations

<b>AUDI :</b>	A4 series 1, A4 series 1 FL, A4 series 2 A6 series 2, A6 series 2 FL	<b>ENGINES</b>	<b>OE reference</b>
<b>SKODA :</b>	Superb	1.9 TDi, 2.0 TDi	038145278, 038145299A
<b>VOLKSWAGEN :</b>	Bora, Golf IV, New Beetle (I and I FL), Passat (V and V FL)		

### IDENTIFICATION OF BELT TENSIONER ROLLER GA354.12



Traceability

## COMMON PROBLEMS

### PROBLEMS WITH RUNNING NOISE

#### Probable cause

##### A worn overrunning alternator pulley (OAP).

If the overrunning alternator pulley is worn or damaged it may no longer disengage correctly so will not free wheel when needed, this in turn causes highly irregular movements along the belt causing it to bounce up and down on the pulley.

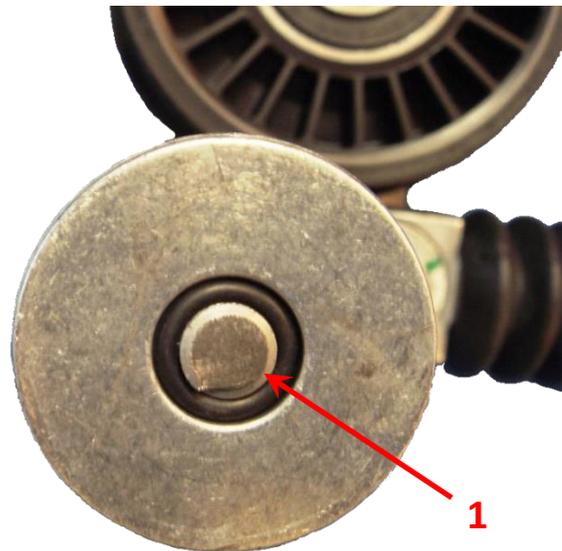
GA354.12 is not designed to absorb the violent shocks caused by the belt bouncing and snatching. When the belt bounces up and down the belt becomes incorrectly tensioned and starts to slip on the rollers, the belt then becomes misaligned and comes into contact with different parts of the engine such as the timing belt covers, this causes noise when the engine is running and can lead to damage to other components in the auxiliary system.

### BROKEN MOUNTING BOLT

#### Probable cause

The pivot bolt can snap if it has not been tightened sufficiently (**Fig1**). Fatigue will have been caused in the bolt by the back-and-forth motion of the roller due to it no longer being held firmly against the engine. This means the bolt will have been subjected to shear loading instead of tensile loading.

Specified tightening torque: **25 N.m**





Failures with GA354.12 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.

## Tests to verify the condition of the overrunning alternator pulley

- Engine idling: look to see if the tensioner shows any abnormal movements such as a bouncing up and down movement which makes the belt move up and down
- Engine stopped, belt removed: Lock the alternator rotor turning (use a non-metal object to block it). 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 should be changed

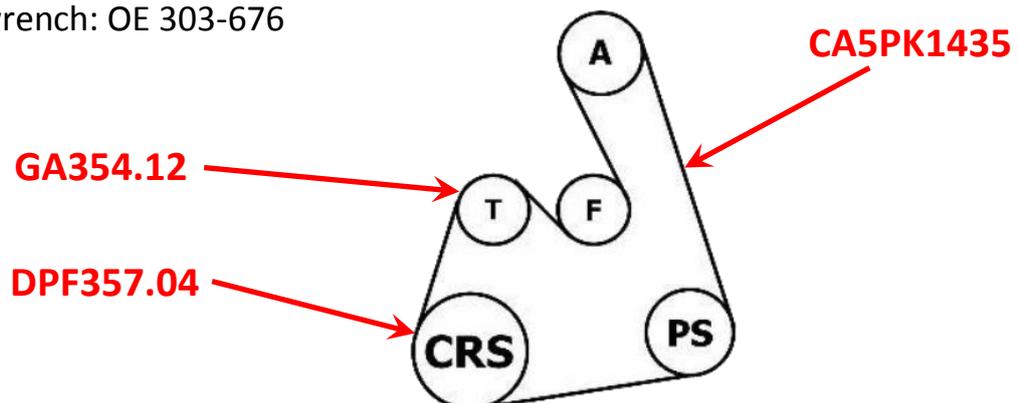
## REPLACEMENT

### Note

Belts should not be re-used after being removed, a new belt should always be fitted when the tensioner pulley is replaced.

### Special tools

Tensioner roller wrench: OE 303-676



## REMOVAL

- 1) Loosen the pulley by turning it anticlockwise using an appropriate tool (Fig 1 and 2)
- 2) Remove the belt (Fig 3)

3) Remove the tensioner roller bolts

4) Remove the tensioner roller

## RE-INSTALLATION

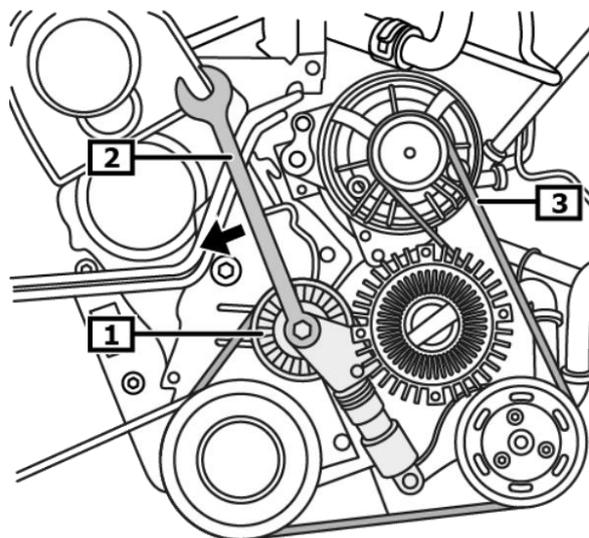
1) Install the new tensioner roller

2) Install the tensioner roller bolts

3) Install the new belt

4) Place the locking bracket in the in-service position

5) Start the engine and check tracking of the belt



### Recommendations

The overrunning alternator pulley is a wearable component; regular checks should be made to verify that it is operating correctly.

It is strongly recommended that the overrunning alternator pulley should be replaced at 75000 mile intervals or whenever the belt tensioner is replaced.

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

Refer to the vehicle applications in our online catalogue: [eshop.ntn-snr.com](http://eshop.ntn-snr.com)



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**FOLLOW THE RECOMMENDATIONS  
OF THE VEHICLE MANUFACTURER.**

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