KD465.06 & KDP465.060– GB/01 – 03/2025

# GE365.09 _ ASSEMBLY RECOMMENDATION

| VOLVO | ENGINE 1969 cc | OE REFERENCE |
|---|---|---|
| **S60 II** (Y20, 134) | **2.0 D4** (09.2013 - 12.2015) 181 hp | **31375959** |
| **S60 II Cross Country** (134) | **2.0 D2** (02.2015 - ...) 120 hp | |
| **S80 II** (AS, 124) | **2.0 D3** (04.2015 - ...) 150 hp | |
| **S90 II** (234) | **2.0 D4** (09.2013 - 12.2015) 181 hp | |
| **V40** (525, 526) | **2.0 D4** (09.2013 - ...) 190 hp | |
| **V40 Cross Country** (526) | **D4** (03.2015 - ...) 190 hp | |
| **V60 I** (155, 157) | **D4 AWD** (03.2017 - ...) 190 hp | |
| **V60 I Cross Country** (157) | **D3** (03.2015 - 09.2021) 150 hp | |
| **V60 II** (225, 227) | **D3 AWD** (09.2018 - 09.2021) 150 hp | |
| **V60 II Cross Country** (227) | **D4 Polestar AWD** (01.2019 - ...) 200 hp | |
| **V70 III** (BW, 135) | **D4 Drive-E Polestar** (03.2015 - ...) 200 hp | |
| **V90 II Estate** (235, 236) | **D5** (03.2015 - 05.2018) 224 hp | |
| **V90 II Cross Country** (236) | **D5 Drive-E Polestar** (03.2015 - ...) 232 hp | |
| **XC40** (536) | | |
| **XC60 I** (156) | | |
| **XC60 II** (246) | | |
| **XC70 II Break** (P24, 136) | | |
| **XC90 II** (256) | | |

## KITS COMPONENTS ASPECT


## SNR GE365.09


## Loctite 243

# Thread locking adhesive

## Operation:

1. Hold the stud so that the M10 thread remains visible.
2. Rotate the stud at a constant speed while applying Loctite 243.
3. Squeeze the Loctite 243 bottle gently to ensure a consistent flow.
4. Evenly distribute Loctite 243 between 2nd and 5th threads for optimal adhesion.

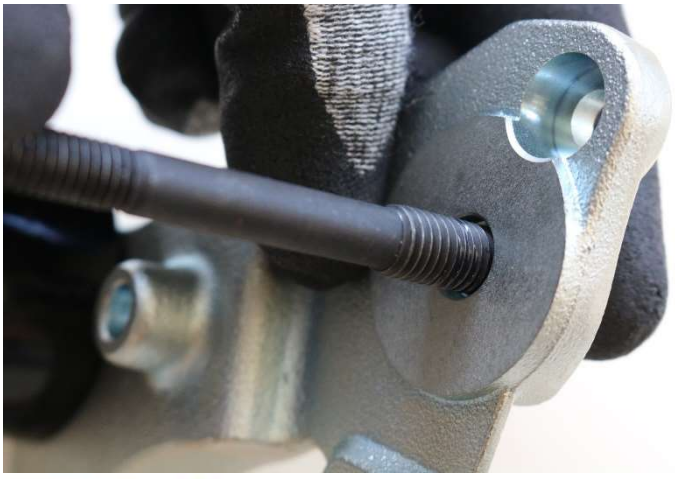
## Technical requirement:

1. Apply Loctite adhesive 243 evenly between the 2nd to 5th threads, ensuring complete coverage of the selected threads

# Mounting bolt

## Operation:

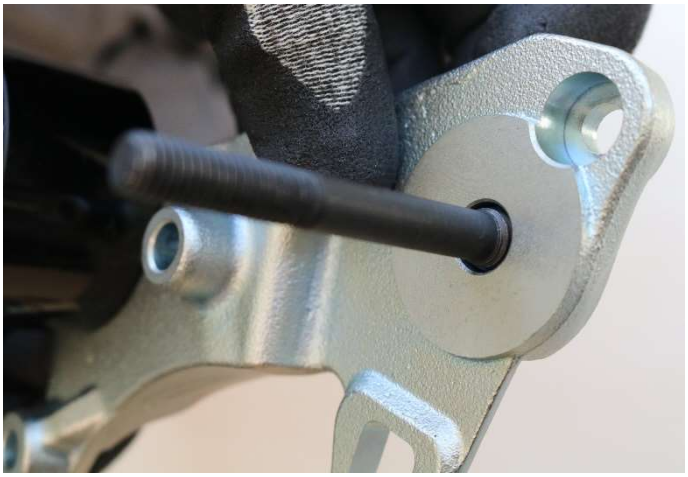
1. Take the GE365.09 idler in hand and align the threaded part of the glued stud with the assembly. Install the stud in the direction shown on the diagram.
2. While screwing in the stud in, use a finger over the end of the threaded hole on the back side of the GE365.09 plate to make sure the stud is aligned with the assembly.
3. After completing the stud assembly, verify that the stud is properly installed on to the GE365.09 plate.



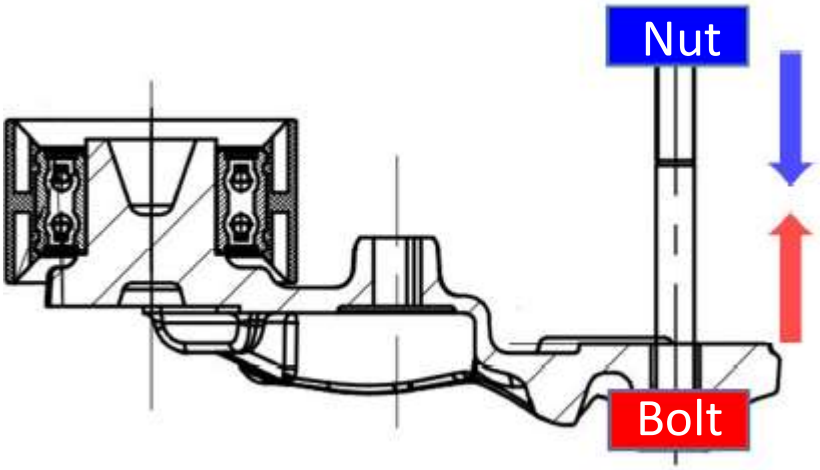
# Mounting bolt

## Technical requirement:

1. Verify that the stud coating meets the specified requirements before assembly.
2. Ensure the stud is installed correctly, making sure that the end does not protrude from the back side of the GE365.09 plate.
3. After installation, check that there are no adessive deposit on the surface of the GE365.09 plate.
4. Place the assembled GE365.09 on a flat surface and allow at least 20 minutes for the locking adessive to dry before installing it on the engine.



## Bolt tightening mechanism




When tightening the nut,
the force is applied downward
(nut side)

When tightening the nut,
the force is applied upward
(bolt side)

When tightening a nut, force is applied downward to the nut and upward to the bolt, so normal tightening is achieved

## PROBLEMS

Different design of the idler **SNR GE365.09** (unmounted stud)

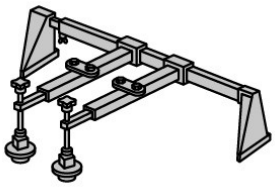
**Following numerous requests, we would like to remind you that these kits are compliant.**
**We ensure interchangeability, so the SNR GE365.09 idler can be installed without issue by following the instructions below.**

# Repair instructions
# Timing belt removal/installation
# KD465.06

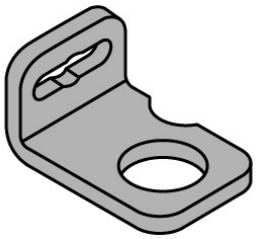
WARNING
Electric radiator fan can start even with the engine cut!
Rotating components can result in cuts and squashing!
Disconnect plug connection on electric radiator fan.

NOTE
Rotate engine in the direction of rotation only by the crankshaft pulley.
When turning the camshaft, the crankshaft must not be at TDC.
Crankshaft pulley and camshaft pulley must not be rotated completely with the timing belt removed.
The timing belt must not come into contact with oil or coolant!
Adjustment work on the timing belt must only be carried out with a cold engine.
It is advisable not to reuse the accessory drive belt after removal but always replace it.

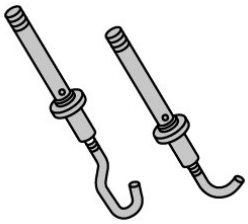
## Required special tools



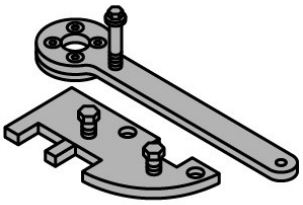
Engine bridge
OE 9995716



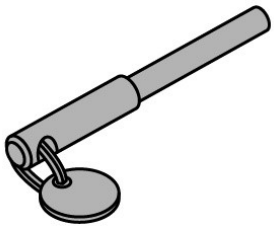
Lifting lug
OE 9997503



Engine bridge adapter
OE 9995460



Counter support
OE 9997495



Blocking pin
OE 9997233

| Tightening torques | | |
|---|---|---|
| Engine bracket screws (1) | **(see figure 4)** | on engine mounting, M12 80 Nm<br>at the cylinder head, M12<br>01 stage 90 Nm<br>02 stage 120°<br>at the cylinder head, M10 60 Nm |
| Engine mount screws (3) | **(see figure 4)** | on chassis 90 Nm |
| Crankshaft central screw (2) | **(see figure 5)** | 01 stage 110 Nm<br>02 stage 90° |
| Bolts, high-pressure pump impeller(2) | **(see figure 7)** | Central nut 85 Nm<br>Screws 10 Nm |
| Tensioner **GT365.13** screw (1) | **(see figure 10)** | 01 stage 20 Nm<br>02 stage 45° |
| Coolant pump screws | | M7 17 Nm |
| Idler **GE365.09** screws | | Top 65 Nm<br>M8 x 30, Bottom 30 Nm<br>M8 x 20, Bottom 24 Nm |
| Vibration damper screws | | 01 stage 25 Nm<br>02 stage 90° |
| Timing belt guard screws | | 10 Nm |
| Wheels | | 140 Nm |

## Remove

Remove engine covers.
Disconnect fuel hoses from timing belt guard.
Remove fuel lines from valve cover.
Do not disconnect the fuel hoses.
Unscrew the front right engine bearing ground strap.

## Remove the accessory belt.

| | |
|---|---|
| **A** | **Alternator** |
| **AC** | Air conditioning compressor |
| **CRS** | Crankshaft |
| **T** | Tensioner |

Turn the steering wheel to the right up to the stop.
Remove the engine cover.
Remove underride guard.
Remove the right front wheel.
Remove wheel arch liner at front right.
Turn tensioning roller clockwise. (1)
Retain the tensioning roller. (2)
Remove alternator accessory drive belt. (3)
**(see figure 2)**

Install engine bridge. (1)
Attach lifting lug. (2)

Required special tools
Engine bridge **OE (9995716)**
Lifting lug **OE (9997503)**
Engine bridge adapter **OE (9995460)**
**(see figure 3)**

**Figure 1**

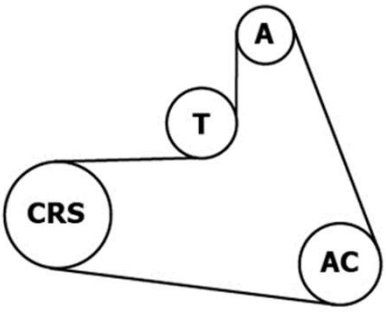
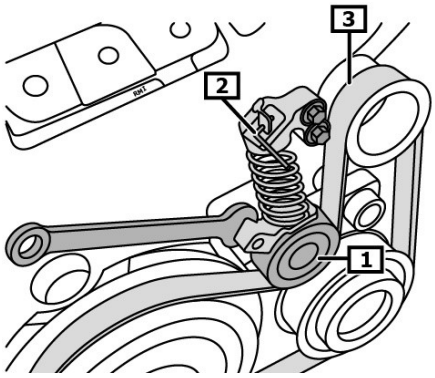
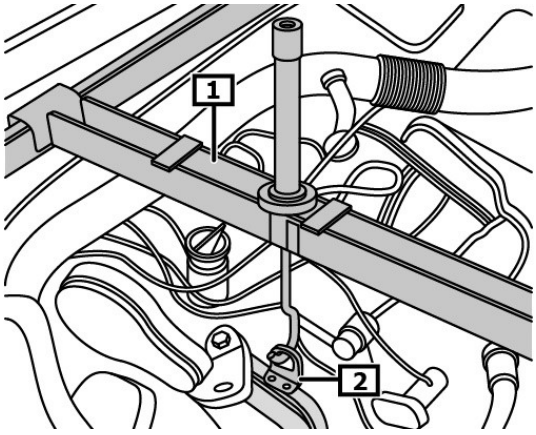



**Figure 2**




1 Tensioning roller 2 Tensioning roller lock
3 Accessory drive belt

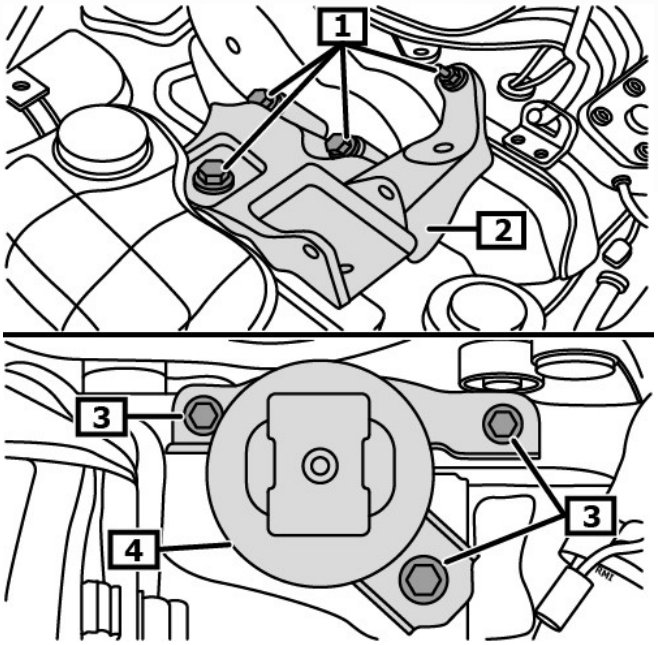
**Figure 3**




1 Engine bridge 2 Lifting lug

Unscrew engine bracket screws. (1)
Remove engine bracket. (2)
Unscrew engine mounting bolts. (3)
Remove engine mounting. (4)
**(see figure 4)**

**Figure 4**




1 engine bracket screws 2 engine bracket

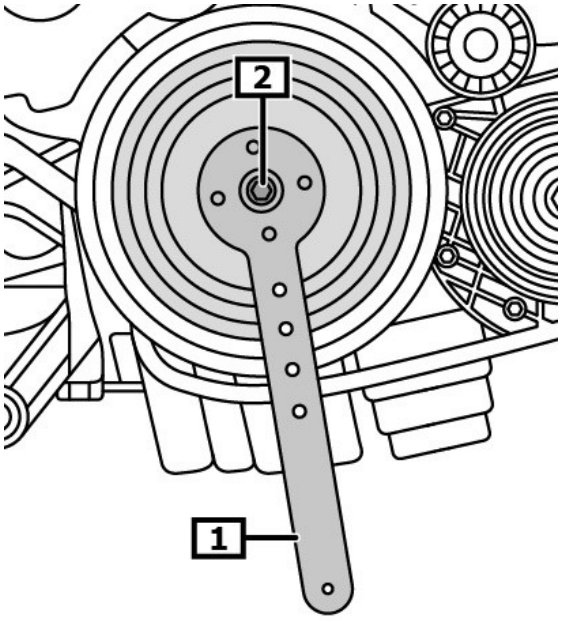
3 engine mounting bolts 4 engine mounting

Use holder. (1)
Unscrew the central crankshaft screw. (2)
Unscrew vibration damper screws.

Required special tools
Counter support **OE (9997495)**
**(see figure 5)**

Remove timing belt guard.

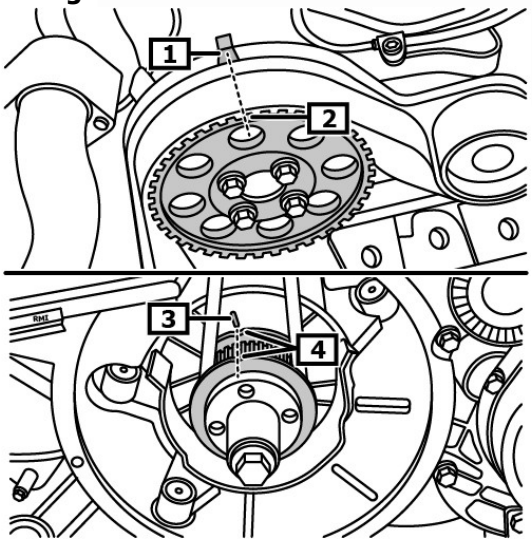
**Figure 5**




1 Counter support 2 Central crankshaft screw

Set engine to TDC mark of first cylinder.
The marking on the camshaft timing gear wheel must align with the reference mark on the timing belt guard. (1)(2)
Crankshaft TDC marking must flush with the reference mark. (3)(4)
**(see figure 6)**

**Figure 6**




1 Reference marking on timing belt protection

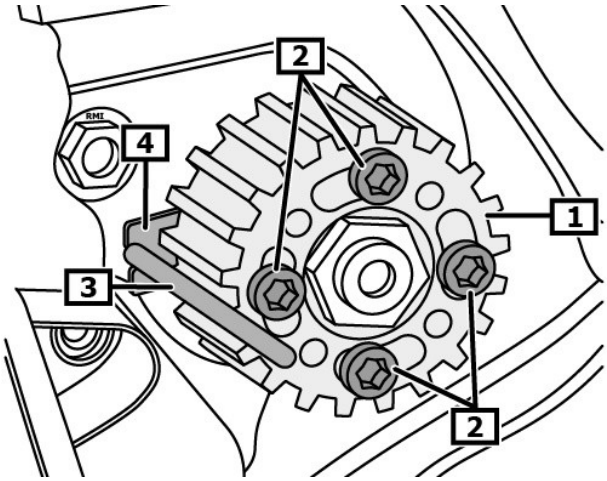
2 TDC - camshaft gear marking

3 Reference mark

4 TDC - crankshaft gear marking

Loosen bolts from high-pressure pump impeller. (2)
**(see figure 7)**

**Figure 7**




1 High-pressure pump pulley

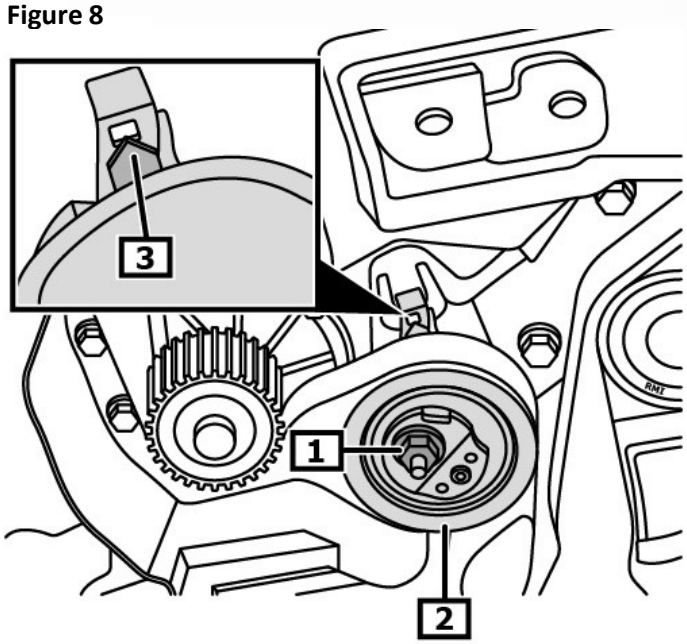
2 Screws - high-pressure pump

3 High-pressure pump pulley blocking pin

4 High-pressure pump impeller locking device

Slacken tensioning roller nut(s) by one turn. (1)
Turn tensioning roller clockwise. (2)
Take off timing belt.
Remove the timing belt tensioning roller. (2)
**(see figure 8)**

**Figure 8**




1 Tensioning roller nut

2 Timing belt tensioning roller

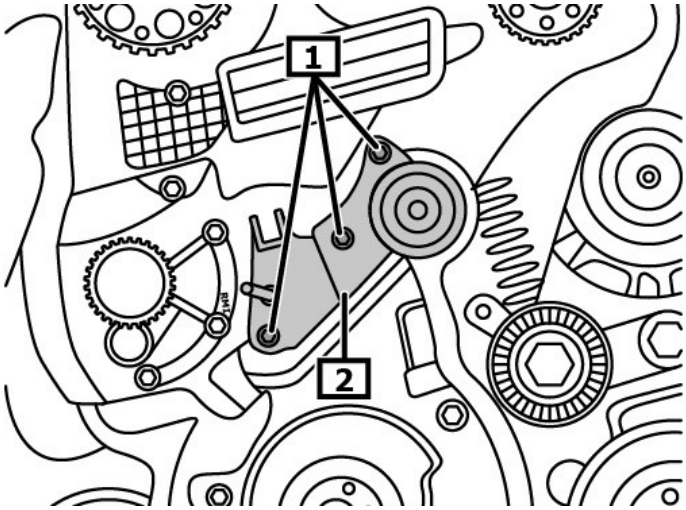
3 Pointer

Unscrew and remove bracket screw(s). (1)

Remove Tension roller and deflection pulley holder. (2)
**(see figure 9)**

Remove camshaft drive deflection pulley.

**Figure 9**




2 Tension roller and deflection pulley holder

1 Holder screws

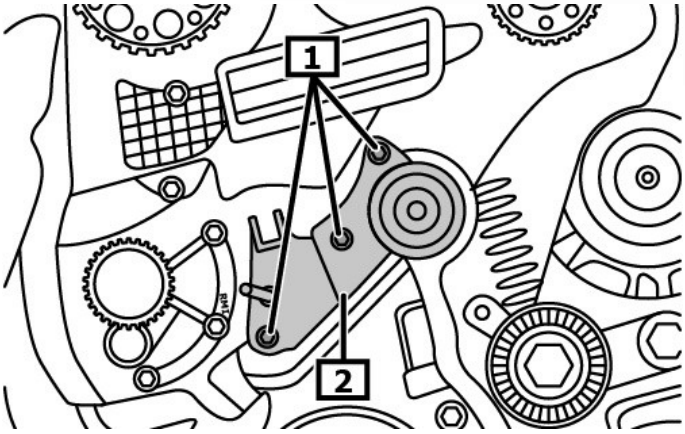
## Install

Insert high-pressure pump pulley blocking pin. (3)(4)

Required special tools
Blocking pin **OE (9997233)**
**(see figure 7)**

Install the **GE365.09** toothed belt idler pulley (follow the previous methodology if the stud is not installed)
Attach holder. (2)
Tighten holder screws. (1)
**(see figure 10)**

**Figure 10**



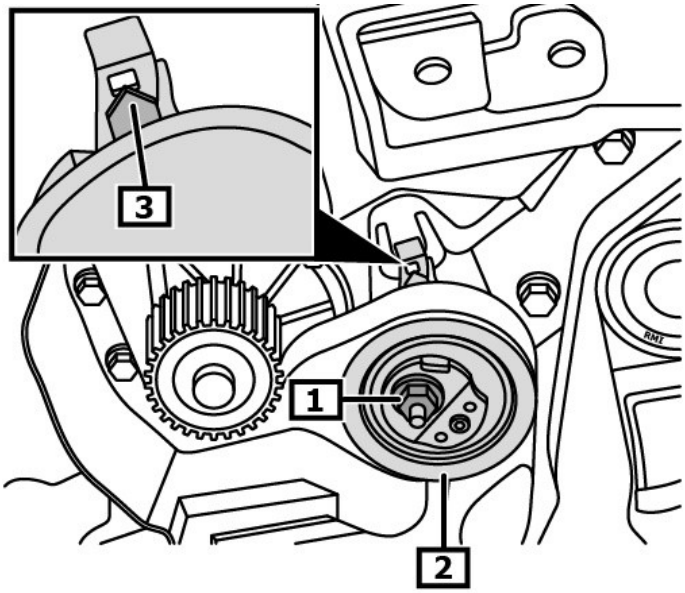

2 **GE365.09** 1 **GE365.09** screws

Install the tensioning roller **GT365.13**. (2)
Screw down tensioning roller nut hand-tight. (1)
Look out for correct seat of the tension roller.
Fit the timing belt to the tensioning roller starting anticlockwise.
Using an Allen wrench, turn eccentric of tension roller anticlockwise until pointer is centrically located in the recess. (3)
Tighten tension pulley nut. (1)
**(see figure 11)**

Tighten high-pressure pump impeller screws. (2)
Remove high-pressure pump pulley blocking pin. (3)
**(see figure 7)**

Rotate engine two revolutions in the engine rotating direction.
Check the control times. (1) - (4)
**(see figure 6)**

**Figure 11**




1 Tensioning roller nut

2 Timing belt tensioning roller

3 Pointer

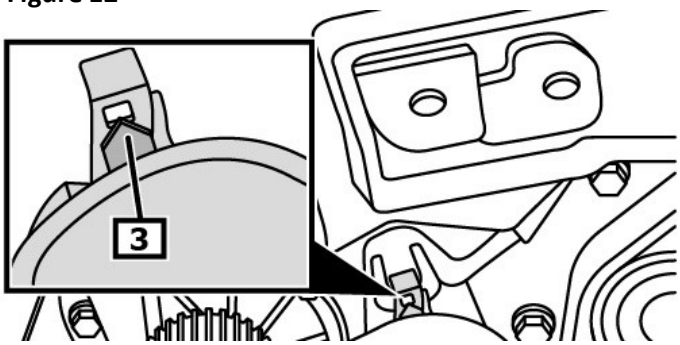
Check timing belt tension. (3)
**(see figure 12)**

If it is not possible to insert the blocking tools, adjust the valve timing.

Continue assembly in reverse order of removal.

Carry out a test drive.
Document timing belt change.

**Figure 12**




3 Pointer

## Recommendations

Observe the manufacturers' assembly procedures and the torques indicated.
Consult the vehicle applications in our online catalogue: **eshop.ntn-snr.com**

**Flash this QR Code to find our technical information.**

**COMPLY WITH THE VEHICLE MANUFACTURER'S RECOMMENDATIONS!**