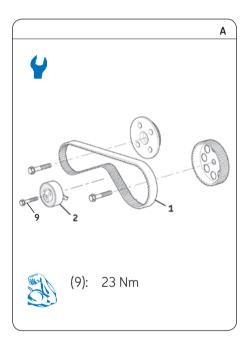
Audi / Volkswagen

VKMA 01332



VKMA 01334





## Removal

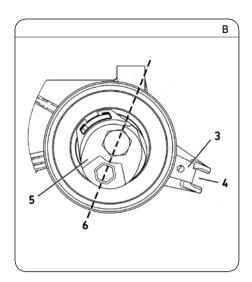
## Important note!

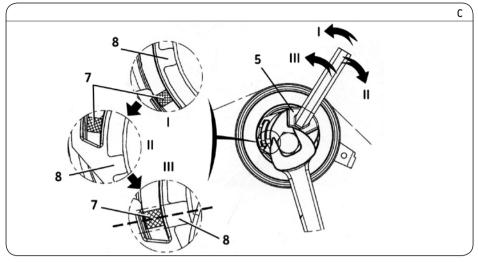
The following operations MUST be carried out in accordance with the manufacturers' instructions (Audi and VW):

- Timing system is driven by timing chain
- Gaining access to the components to be replaced (injector pump drive belt and tensioner roller).
- Timing adjustment (setting crankshaft and cam shafts to TDC).
- 1) Disconnect the battery according to the vehicle manufacturing guidelines.
- Prepare the vehicle for the timing replacement according to the vehicle manufacturing guidelines.
- 3) Remove the injection pump belt cover.
- Loosen the fastening bolt (9) of the tensioner roller (2) and remove the injection pump belt (1) (Fig. A).
- 5) Remove the tensioner roller (2).

**Install Confidence** 







## Refitting

Caution! Clean the bearing surfaces of the rollers.

- 6) Refit the new tension roller (2): Fit the positioning pin (3) in slot (4) on the engine block (Fig. B). Turn the adjustment dial (5) with an Allen wrench until the wrench reaches the "7 o'clock" position (6) (Fig. B) then slightly tighten the tensioner roller fastening bolt (9) by hand.
- Refit the injection pump belt (1).
- 8) Tighten the injection pump belt (1): turn the adjustment dial (5) on the tensioner roller (2) anti-clockwise with an Allen wrench, while holding the roller fastening bolt (9) in position with an open-end wrench (Fig. C). The tensioner roller moves and pushes against the belt:
- Continue turning the adjustment dial (5)
   anticlockwise until the moving pointer (7)
   goes beyond the notch (8) as far as it will go
   (position (I) Fig. C).
- -Then turn the adjustment dial (5) clockwise until the moving pointer (7) moves beyond the notch (8) (position (II) Fig. C).
- Finally, turn the setting plate (5) anti-clockwise until the moving pointer (7) is aligned with the notch (8) (position (II) Fig. C).
   Tighten the tensioner roller fastening bolt (9) to 23 Nm.
- Remove the Allen wrench and the hex. nut wrench.
- **10)** Rotate the crankshaft two turns in the engine rotation direction up to TDC.

- 11) Check the setting of the moving pointer (7) (position (III) Fig. C) (the moving pointer (7) must be aligned with the notch (8)).
- 12) If the marks on the tensioner roller are not aligned, proceed as follows: hold the tensioner roller (2) in position with an Allen wrench while slightly loosening the tensioner roller fastening bolt (9). Then turn the adjustment dial (5) (Fig. B) so as to bring the moving index back to its initial position (position before refitting the roller on the engine), then remove the injection pump belt. Then, restart the tension setting operation from step 7).
- **13)** Refit the elements removed beforehand in the reverse sequence of removal.

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