

MAGNETI MARELLI

**Complete Set For Crankshaft Timing On New 1.2 -1.4-1.6-
1.9-2.0 Tdi Vw-Audi Engines**

User's manual

007935060800



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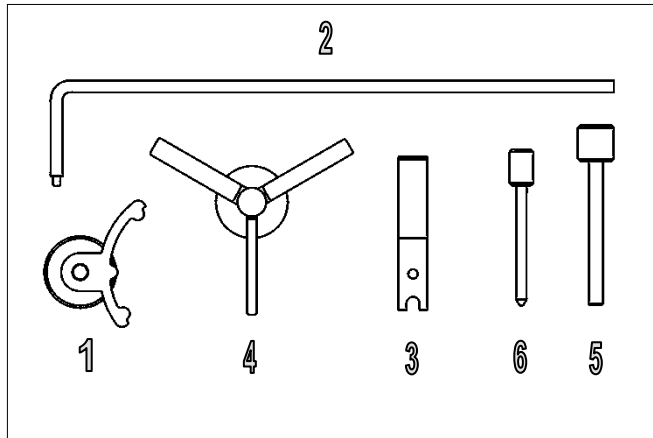
**Complete set of tools for
crankshaft timing on new**

VW – Audi – Seat

Engines:

**AJM, AMF, ANU, ANY, ASZ,
ATD, ATJ, AUY, AVB, AVF,
AWX, AXR, AYZ**

Application:



Volkswagen	
Lupo	3L 1.2 TDI, 1.4 TDI
Polo	1.4 TDI
Golf, Bora, Passat, Beetle, Sharan	1.9 TDI

Audi	
A2	1.2 TDI, 1.4 TDI
A3, A4, A6	1.9 TDI

Seat	
Alhambra	1.9 TDI

Components

1. Locker for crankshaft pulley
2. Belt tensioner
3. Belt tensioner locker
4. Pins for pulleys locking
5. Pin for camshaft locking
6. Pin for belt tensioner locker of auxiliary systems

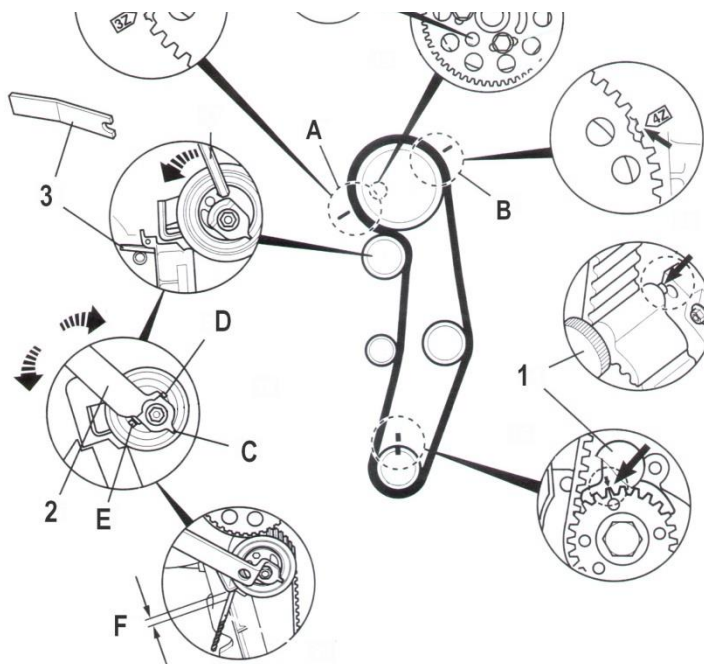
Disassembling:

- Unlock the camshaft bolts and rotate completely the pulley clockwise in the grooves. Fix the bolts manually.
- Take the tool (re.2) and rotate slowly the timing belt pulley clockwise until the tongue reach the retainer.
- Install the belt following this sequence: camshaft, timing belt pulley, crankshaft sprocket, water pump sprocket.
- Install the automatic belt tensioner
- Rotate the timing belt pulley slowly anticlockwise, place the tongue (re. C) in the direction of the retainer (re. D).
- Remove the locker (re. 3).
- Rotate the timing belt pulley clockwise, the tongue moves towards the retainer (re. F) until the value (re. F – except ANY-AYZ) is equal to 4 ± 1 mm. Use a drill. For ANY-AYZ engines the value has to be equal to 7 ± 1 mm. **Beware – the engine should be cold.**
- Lock the belt tensioner bolt with a couple of 20 Nm +45°
- Fix the bolts of the camshaft sprocket at 25 Nm.
- Remove all the pins and lockers.
- Turn slowly the crankshaft clockwise twice till the TDC of the 1° cylinder.
- Ascertain that the value (re. F – except ANY-AYZ) is equal to 4 ± 1 mm. Use a drill. For ANY-AYZ engines the value has to be equal to 7 ± 1 mm.

ENGINE 1.2 TDI, 1.4 TDI, 1.9 TDI

Assembling:

- Rotate the crankshaft clockwise till reaching the TDC "ignition" at 1" cylinder.
- The timing notch has to be aligned with the one on the hub on the camshaft pulley: ANY-AMF 3 Z (re. A) except ANY-AMF = 4 Z (re. B).
- Fix the crankshaft pulley (re. 1) and control that all the timing notches are aligned.
- Lock the camshaft with the pin (re.5)
- Insert completely the socket wrench in the pulley of the belt tensioner and rotate slowly anti-clockwise until the locker (re. 3) can be inserted.
- Unlock the bet tensioner bolt and remove the automatic belt tensioner and the timing belt.



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