## NT 08001 VKMA 08110

VKMA 08110



BMW



## Removal

- **1)** Disconnect the battery according to the vehicle manufacturing guidelines.
- Prepare the vehicle for the timing replacement according to the vehicle manufacturing guidelines.
- 3) Clamp flywheel and remove crankshaft pulley.
- 4) Remove TDC sensor (3) (Fig. B).
- 5) Remove lower timing cover.
- 6) Bring engine to timing position (cylinder N° 1 at TDC) and check timing as follows: align timing mark on crankshaft sprocket with that on crank case, align timing mark on camshaft sprocket with that on cylinder head (Fig. C). Also check distributor timing.
- Loosen tensioning pulley pivot bolt (4) and lower bolt securing tensioning pulley (2) (Fig. C).
- 8) Move tensioning pulley to retracted position, then tighten tensioning pulley pivot bolt (4).
- 9) Remove timing belt (1).
- **10)** Remove tensioning pulley (2)

**Install Confidence** 





## Refitting

**Caution!** First clean the bearing surfaces of the rollers.

- **11)** Fit new tensioning pulley (2) in retracted position.
- **12)** Fit new timing belt (**1**). Run belt first around crankshaft pulley, then auxiliary pulley, camshaft sprocket and tensioning pulley.
- **13)** Loosen tensioning pulley pivot bolt (4). Timing belt is automatically tensioned.
- **14)** To fully tension belt, turn camshaft sprocket so that engine is rotated anticlockwise through one or two full turns.
- **15)** Tighten tensioning pulley pivot bolt and lower bolt securing tensioning pulley (2) to **23 Nm**.



- **16)** Turn crankshaft clockwise through **2 turns** then check alignment of all timing marks (**Fig. C**). Also check distributor timing.
- 17) Check the tension of the belt (1).
- **18)** Refit lower timing cover and TDC sensor.
- **19)** Refit upper timing cover and lifting lug.
- 20) Clamp flywheel and refit crankshaft pulley, paying attention to align pulley timing mark with that on lower timing cover (Fig. B). Tighten all bolts.
- 21) Fit and tension alternator belt.
- **22)** Refit the remainder of the removed elements in the reverse order to removal.

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