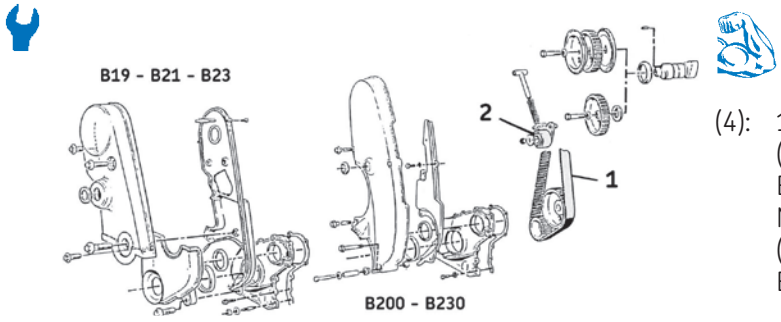
# NT 06003
# VKMA 06300
# VKMA 06301

Volvo

VKMA 06300 VKMA 06301

A

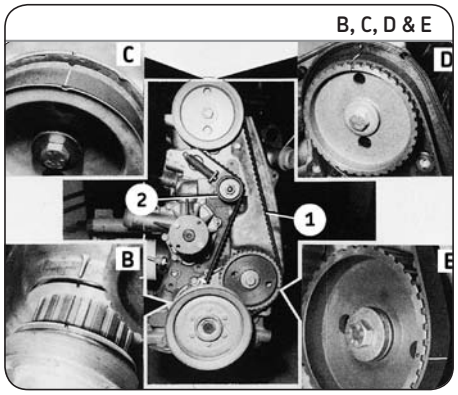


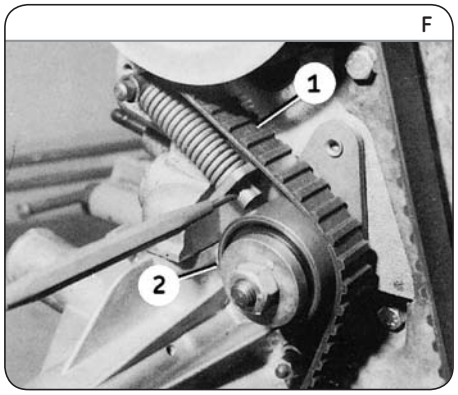

(4): 165 Nm (B19/B21/B23) / 60 Nm + 60° (B200/B230)

**Removal**

**1)** Disconnect the battery according to the vehicle manufacturing guidelines.
**2)** Prepare the vehicle for the timing replacement according to the vehicle manufacturing guidelines.
**3)** Clamp flywheel, then remove crankshaft pulley.
**4)** Remove timing covers.
**5)** Bring engine to timing position (cylinder N° 1 at TDC) and check that:
– Mark on crankshaft sprocket is aligned with mark on engine (**Fig. B**),
– Mark on camshaft sprocket is aligned with mark on cylinder head as shown in **Fig. C** (for motor types B19, B21, and B23) or in **Fig. D** (for motor types B200 and B230).
**6)** Loosen tensioning pulley nut.
**7)** Compress spring of tensioning pulley by pulling on belt run opposite tensioning pulley. With spring thus compressed, jam tensioning pulley using a 3 mm rod (**Fig. F**) or retighten tensioning pulley nut.
**8)** Remove timing belt (**1**).
**9)** Remove tensioning pulley (**2**).

## Install Confidence




**Refitting**
**Caution!** First carefully clean thoroughly the bearing surfaces of the rollers and of the tensioning device.

**10)** Fit new tensioning pulley (**2**) in disengaged position.
**11)** Check direction of arrow on new timing belt (**1**), then fit belt by passing it first around crankshaft and intermediate shaft sprockets and then around camshaft sprocket and tensioning pulley.
**12)** Check alignment of timing marks on belt (**1**) with those on sprockets (**Fig. B, C, D** and **E**).
**13)** Release nut of tensioning pulley (**2**), so pulley automatically tensions timing belt, then retighten nut.
**14)** Turn crankshaft clockwise through **2 turns**
**15)** Check again that timing marks on belt (**1**) are aligned with those on sprockets (**Fig. B**, **C**, **D** and **E**).
**16)** Release nut of tensioning pulley nut, then retighten.
**17)** Check the tension of the belt (**1**).
**18)** Refit timing covers.
**19)** Clamp flywheel and refit crankshaft pulley. Tighten pulley bolt (**4**) to **165 Nm** for motor types B19, B21 and B23 or to **60 Nm + 60°** for motor types B200 and B230.
**20)** Refit the removed elements in reverse order to removal :
**21)** Fill the cooling circuit with the permanent fluid recommended.
**22)** Check the circuit's leak-tightness when the engine reaches its running temperature and secure the level of coolant when the engine is at ambient temperature (20 °C).



**PUB 80/I1 15062 EN** · November 2014