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VKMA 03250  
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Citroën / Fiat / Lancia / Peugeot

VKMA 03250



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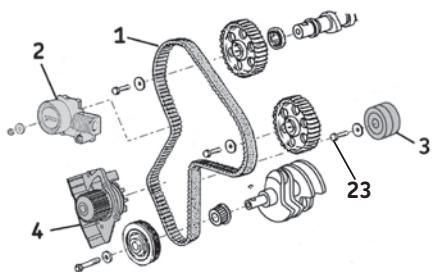
VKMC 03251



A



- (13): Pin (CIT ref. 7014TJ / PEU. ref. 01 53N) (FIAT. ref. 1860863000).
- (14): Pin (CIT. ref. 7017TR).
- (15): Pin (M8x70).
- (16): Pin (M8x125x40).
- (17): Pin (M8x125x35).
  - Crankshaft turning spanner (ref. 01 17EZ).
  - Flywheel locking tool (CIT. ref. 6012T) (FIAT. ref. 1867030000).
  - Flywheel locking tool (CIT. ref. 9044T).

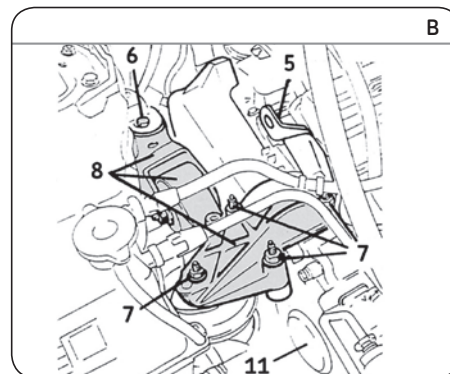


- (6) = 60 Nm
- (7) = 45 Nm
- (12) = 40 Nm
- (18)/(19) = 10 Nm

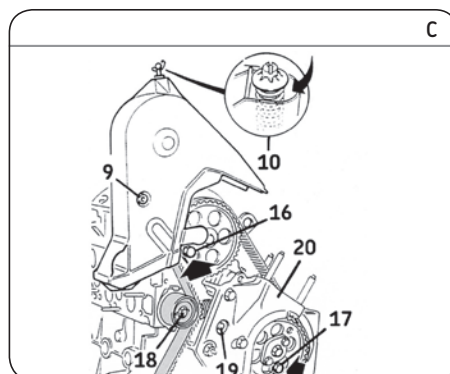
Removal

- 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) Remove the upper engine bracket (Citroen Evasion et Xantia - Fiat Ulysse - Peugeot 406 and 806).
- 4) Undo the lower torque rod connecting pin (Citroen Evasion and Xantia Fiat Ulysse - Peugeot 806).
- 5) Remove the bolt (6), the nuts (7) and remove the engine bracket flange (8) (Fig. B) (Citroen XM et Peugeot 605).
- 6) Remove the bleeding attachment on the upper timing cover (except Citroen Evasion, Xantia - Fiat Ulysse - Peugeot 406 and 806).
- 7) Remove the upper timing cover after having removed the bolt (9) and having turned the upper attachment (10) through a quarter turn (Fig. B).
- 8) Remove the injection pump cover (11) (Fig. B).
- 9) Turn cylinder No. 1 to TDC by tuning the crankshaft by means of the crankshaft pulley bolt (12) (Fig. D), or using the crankshaft key (ref. 0117EZ) (Citroen Evasion - Fiat Ulysse - Peugeot 806).
- 10) Position pin (13), pin (14) for Citroen Xantia, pin (15) for Peugeot 406, in the flywheel between the starter and the solenoid (Fig. E).
- 11) Insert pin (16) through the camshaft sprocket and pin (17) through the injection pump sprocket (Fig. C) and tighten by hand.
- 12) Remove the lower clutch housing cover.
- 13) Lock the flywheel with the locking tool (CIT ref 6012T or Fiat ref. 1867030000) for Citroen Evasion - Fiat Ulysse - Peugeot 806, locking tool (CIT ref. 9044T) for Citroen Xantia.
- 14) Remove the bolt (12) and the crankshaft pulley (Fig. D) (handbrake applied and fourth gear engaged for Citroen XM et Peugeot 605).
- 15) Remove the lower timing system casing
- 16) Remove the flywheel locking tool (CIT ref. 6012T or Fiat ref. 1867030000) from the flywheel (Citroen Evasion - Fiat Ulysse - Peugeot 806), locking tool (CIT ref. 9044T) (Citroen Xantia).
- 17) Loosen the washer (18) of the tensioner roller (2) (Fig. C).
- 18) Loosen the bolt (19) of the tensioner roller (2) (Fig. F), passing a 5 mm hexagon socket wrench, through the engine bracket (20) (Fig. C).

B



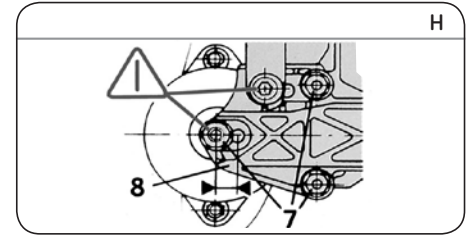
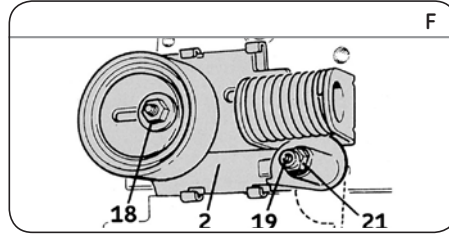
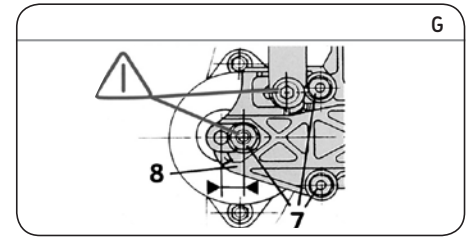
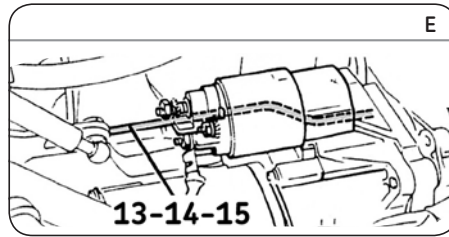
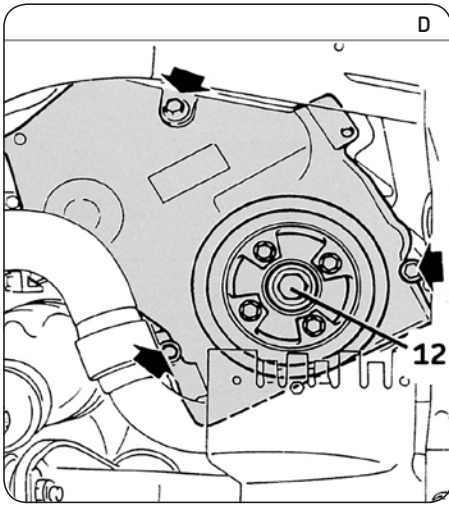
C



- 19) Slacken the tensioner roller (2), by turning the eccentric shaft (21) (Fig. F) clockwise using a 10 mm socket wrench through the bracket (20) (Fig. C)
- 20) Remove timing belt (1), tensioner roller (2) and idler roller (3).
- 21) **Removing the water pump (VKMC 03251):** firstly bleed the cooling circuit, check it is clean, and clean if required; secondly fully loosen the water pump (4) fastening bolts and remove the pump (Fig. A).

Install Confidence





## Refitting

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

- 22) **Refitting the water pump:** firstly fit the new water pump (4), apply the torque **10 Nm** to the waterpump bolts; then check that the water pump pulley runs properly, and has no hard or locking spots.
- 23) Check that the flywheel, the injection pump sprocket and cam shaft sprocket are blocked.
- 24) Refit the new tensioner roller (3) and its new bolt (23).
- 25) Refit the new tensioner roller (2) in the slackened position by blocking the nut (18) (Fig. F).
- 26) Fit the new timing belt (1) in tension, in the following order: crankshaft sprocket, idler roller, injection pump sprocket, camshaft sprocket, water pump sprocket and tensioner roller.
- 27) Turn the eccentric shaft (21) anti-clockwise of the tensioner roller (2) (Fig. F)
- 28) Loosen the nut (18) (Fig. F); the belt will tighten automatically.
- 29) Remove the timing pins.
- 30) Turn the crankshaft by two turns in the engine rotation direction up to TDC.
- 31) Retighten the nut (18) (Fig. F) to **10 Nm**.
- 32) Turn the crankshaft through two more rotations up to TDC.
- 33) Loosen the nut (18) one turn to let the spring react.
- 34) Tighten the nut (18) and the bolt (19) to **10 Nm** (Fig. F).
- 35) Check the adjustment of the timing with the timing pins.
- 36) In the event that one of the pins cannot be refitted, restart the timing belt fitting operations from the beginning.
- 37) To refit the elements removed, apply the reverse sequence of removal.
- 38) **Citroen XM and Peugeot 605**
  - Coat the crankshaft pulley attachment bolt (12) (Fig. D) with thread lock and tighten to **40 Nm**.
  - Refit the complete flange (8) of the engine bracket in the position shown in (Fig. G) for turbo engines and in the position shown in (Fig. H) for normally-aspirated engines.
  - Refit and tighten the four nuts (7) to **45 Nm** (Fig. B).
  - Refit and tighten the screw (6) to **60 Nm** (Peugeot) or **45 Nm** (Citroen) (Fig. B).
  - Refit and tighten the glow plugs to **23 Nm**.
- 39) Fill the cooling circuit with the permanent fluid recommended.
- 40) 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).

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