

ContiTech: Expert Tips for Changing Timing Belts

- Detailed instructions for CT 607 WP1 timing belt kit in a Citroën Saxo (S0, S1) 1.4-liter VTS with engine code KFX, KFW (TU3JP)
- ContiTech shows how to avoid errors when changing belts

Significant errors are frequently committed when changing the timing belt. To ensure that the belt change operation goes smoothly, the ContiTech Power Transmission Group provides fitters with a detailed installation guide. In this, ContiTech experts provide a step-by-step explanation of the correct change procedure.

The manufacturer recommends changing the timing belt every 120,000km/10 years (up to organization no. 10489).

The labor time is 1.6 hours.

Tip: The multi V-belt ought to be changed at the same time as the timing belt. To avoid later failures with unnecessary costs, it is recommended that you do not re-install the belt once it has been removed.

Fitters need the following special tools for the procedure:

You will also find the tools in the ContiTech Tool Box V03.

1. Locking tool for flywheel OE (4507-T.A.), Tool Box V04/2
2. Locking pin for camshaft OE (4507-T.B.), Tool Box V04/7
3. Square key wrench
4. ContiTech BTT Hz belt tension tester

Preparatory work:

Identify the vehicle using the engine code.

Disconnect the vehicle battery. Do not turn the crankshaft and camshaft once the timing belt has been removed. Turn the engine in the normal direction of rotation (clockwise) unless otherwise specified.

Turn the engine only at the crankshaft sprocket and not at other sprockets. Only carry out checks and adjustments when the engine is cold. Avoid contact between the belt and harmful substances, such as engine oil or coolant.

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Comply with all the tightening torques specified by the vehicle manufacturer.

Removal: Ancillary unit belt, upper and lower timing belt guards, crankshaft belt pulley (Fig. 1).

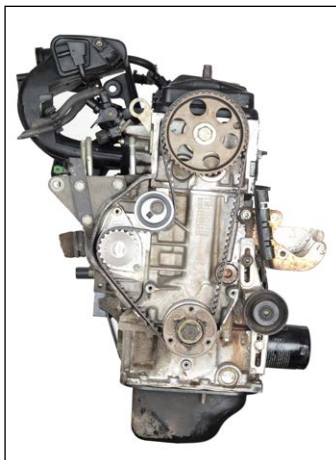


Fig. 1

Removal – camshaft belt:

1. Set valve timings to TDC mark of cylinder 1.
2. Camshaft sprocket bore (at approx. 2 o'clock position) must be aligned with bore in cylinder head (Fig. 2) such that locking tool OE (4507-T.B), Tool Box V03/7, can be inserted into bore (Fig. 3).



Fig. 2

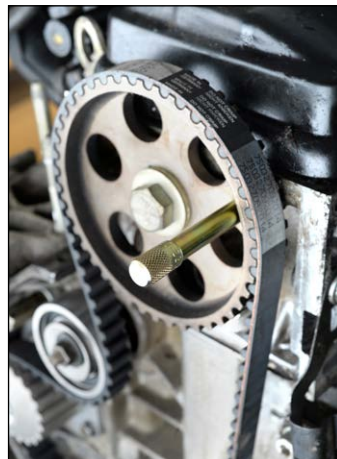


Fig. 3

3. Check position of crankshaft. To do so, lock flywheel through bore above oil filter at gearbox flange connection (Figs. 4 and 5) using locking tool for flywheel OE (4507-T.A), Tool Box V03/2. Insert locking tool into flywheel bore.

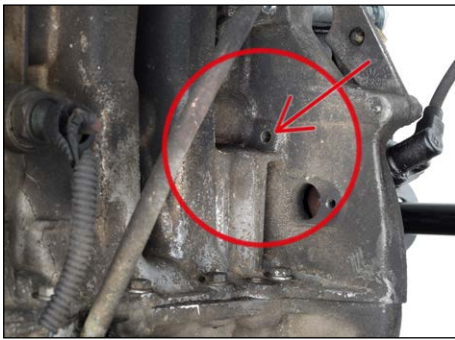


Fig. 4

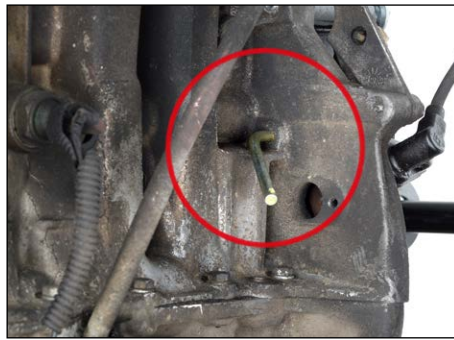


Fig. 5

4. Loosen tensioning pulley nut and release tension on timing belt.
5. Timing belt can now be removed.

Installation – camshaft belt:

1. Fit new components from timing belt kit. Check remaining components such as camshaft sprocket and crankshaft sprocket for damage.
2. Fit timing belt, starting at crankshaft sprocket and then place belt over camshaft sprocket, coolant pump and tensioning pulley (Figs. 6 and 7). **Note arrow indicating running direction. Take care to ensure that timing belt is not kinked during fitting. Timing belt must be tight between sprockets on tight side.**

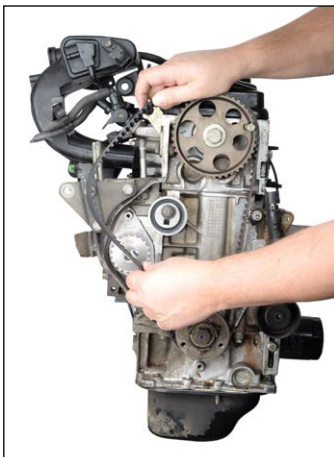


Fig. 6



Fig. 7

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3. Pretension timing belt slightly via tensioning pulley. To do so, insert square key wrench into tensioning pulley and turn tensioning pulley counterclockwise. Tighten tensioning pulley nut.
4. Remove locking tools from flywheel and camshaft.
5. Use BTT Hz tension tester as an aid when tensioning timing belt. Determine appropriate setting and correct set position using BTT Hz data booklet (Fig. 8). Loosen tensioning pulley nut, insert square key wrench into tensioning pulley, and position measurement head of BTT Hz at correct position approx. 1-2 cm above timing belt.

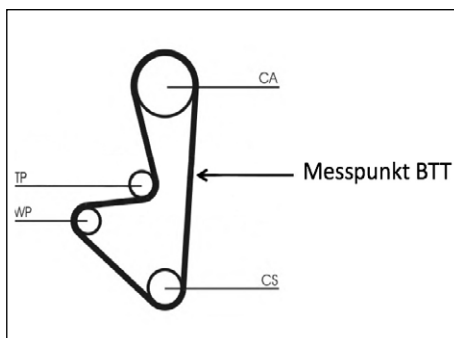


Fig. 8

Measure above timing belt using just one of measurement head's microphones – not both, otherwise no reading will be achieved (Fig. 10). Make timing belt oscillate near measurement head by plucking or flicking it and check hertz reading on BTT Hz display (Fig. 11). A reading of 61-66 Hz must be set for this model (Fig. 12). If reading is not correct, turn tensioning pulley counterclockwise until reading is set on display.



Fig. 9

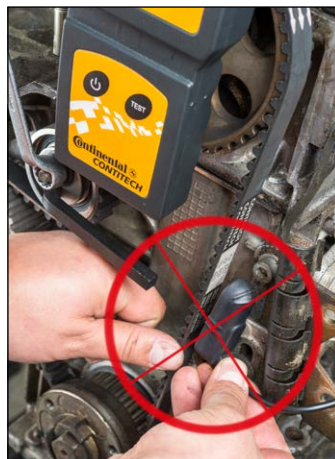


Fig. 10



Fig. 11



Fig. 12

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6. Once correct tension reading is set, tighten tensioning pulley nut and turn engine through 4 revolutions in direction of engine rotation.
7. Set valve timings to TDC mark of cylinder 1.

Setting as per points 2 and 3 of Removal procedure above. Camshaft sprocket bore (at approx. 2 o'clock position) must be aligned with bore in cylinder head (Fig. 2) such that locking tool OE (4507-T.B), Tool Box V03/7, can be inserted into bore (Fig. 3).

Check position of crankshaft. To do so, lock flywheel through bore above oil filter at gearbox flange connection (Figs. 4 and 5) using locking tool for flywheel OE (4507-T.A), Tool Box V03/2. Insert locking tool into flywheel bore.

8. Check timing belt tension reading again. Reading of 61-66 Hz must be set (Fig. 12). Please refer to setting procedure in point 5.
9. Tighten tensioning pulley nut.
10. Assembly and finalization in reverse order to removal.
11. Record changing of original ContiTech timing belt on sticker supplied and stick this in engine compartment (Fig. 13).



Fig. 13

Then carry out a test run or test drive.