## (i) Tech Tips

## Timing belt guide Citroën Saxo 1.4 - KFX KFW

Significant errors are frequently committed when changing the timing belt. To ensure that the belt change operation goes smoothly, ContiTech provides a detailed installation guide for mechanics changing this timing belt. The labor time for this application is 1.6 hours.

Tdentify 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 column.

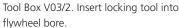
Comply with all the tightening torques specified by the vehicle manufacturer. Remove the Ancillary unit belt, upper and lower timing belt guards and the crankshaft belt pulley.

## Camshaft Belt Removal

- 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. 1) such that locking tool OE (4507-T.B), Tool Box V03/7, can be inserted into the bore (Fig. 2).
- 3. Check position of the crankshaft. To do so, lock the flywheel though bore above oil filter at gearbox flange connection (Figs. 3 and 4) using locking tool for flywheel OE (4507-T.A),



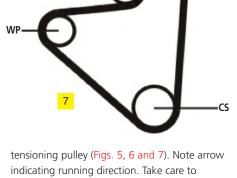




- 4. Loosen the tensioning pulley nut and release tension on the timing belt.
- 5. The timing belt can now be removed.

## **Camshaft Belt Installation**

- 1. Fit new components from timing belt kit. Check the remaining components such as the camshaft and crankshaft sprockets for damage.
- 2. Fit timing belt, starting at the crankshaft sprocket, and then place the belt over the camshaft sprocket, coolant pump and



measurement

tensioning pulley (Figs. 5, 6 and 7). Note arrow indicating running direction. Take care to ensure that the timing belt is not kinked during fitting. The timing belt must be tight between sprockets on tight side.

- 3. Pretension the timing belt slightly via tensioning pulley. To do so, insert a square key wrench into the tensioning pulley and turn tensioning pulley counterclockwise. Tighten tensioning pulley nut.
- 4. Remove the locking tools from flywheel and
- 5. Use BTT Hz tension tester as an aid when tensioning timing belt. Determine the appropriate setting and correct set position

















using BTT Hz data booklet. Loosen the tensioning pulley nut, insert square key wrench into tensioning pulley, and position the measurement head of BTT Hz at correct position approx. 1-2 cm above timing belt.

Measure above timing belt using just one of the measurement head's microphones (Fig. 8) – not both. Using both microphones reading will result in no measurements being made (Fig. 9). Make the timing belt oscillate near measurement head by plucking or flicking it and check hertz reading on BTT Hz display (Fig. 10). A reading of 61-66 Hz must be set for this model (Fig. 11). If reading is not correct, turn the tensioning pulley counterclockwise until the correct reading is set on display.

- 6. Once the correct tension reading is set, tighten the tensioning pulley nut and turn engine through 4 revolutions in the 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 the flywheel though bore above oil filter at gearbox flange connection (Figs. 3 and 4) using locking tool for flywheel OE (4507-T.A), Tool Box V03/2. Insert the locking tool into flywheel bore.

- 8. Check the timing belt tension reading again. A reading of 61-66 Hz must be set (Fig. 11). Please refer to setting procedure in point 5 if not correct.
- 9. Tighten the tensioning pulley nut.
- 10. Refit in reverse order of removal.
- 11. Record the changing of original ContiTech timing belt on sticker supplied and stick this in the engine compartment.
- 12. Carry out a test drive.

