

# Fiesta 1.4 16V FXJA Engine Timing Belt Guide

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 a detailed installation guide. With a step-by-step explanation of the correct change procedure.

**D**isconnect 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.

Follow all the tightening torques specified by the vehicle manufacturer.

Removal: front right wheel, ancillary unit belt, spark plugs, cylinder head cover, crankshaft belt pulley, drive pulley for coolant pump, power steering fluid reservoir and coolant expansion reservoir, alternator, front engine mounts with bracket (support engine using vehicle jack), upper and lower timing belt guards.

## Removal of Camshaft Belt

1. Set valve timings to just before TDC mark of cylinder 1.

2. Unscrew screw plug at left above oil pan and insert locking tool for crankshaft OE (303-748), Tool Box V04/16 (Fig. 1). Keep turning crankshaft slowly against locking tool stop.

3. Insert alignment tool for camshaft OE (303-376B), Tool Box V04/21, into camshaft grooves at rear (Fig. 2).

4. Unscrew tensioning pulley bolts and remove timing belt.

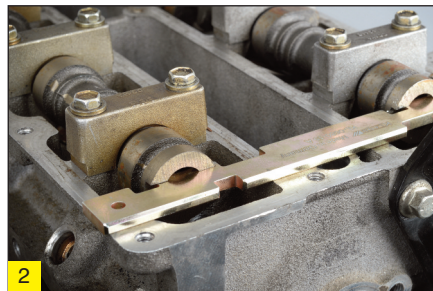
## Installation of Camshaft Belt

1. Fit new components from timing belt kit. Check remaining components such as

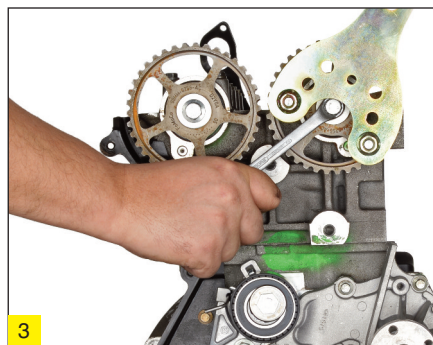


camshaft sprocket and crankshaft sprocket for damage.

2. Remove locking and alignment tools and loosen camshaft sprockets using counterhold OE (205-072), Uni Tool Box/3 (Fig. 3). Change both bolts (new bolts are contained in kit).



3. Insert locking and alignment tools again.



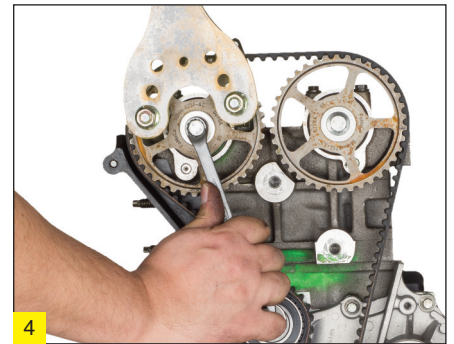
4. Hand-tighten camshaft sprocket bolts so that camshaft sprockets can just be turned.

5. Fit timing belt counterclockwise, starting at crankshaft sprocket. Take care to ensure that timing belt is not kinked during fitting! The timing belt must be tight between sprockets on tight side.

6. Fit crankshaft belt pulley and lower guard using supplied new bolt and remove tensioning pulley locking pin. Tension is automatically set by tensioning pulley. No further settings at the tensioning pulley is necessary. Tighten the tensioning pulley bracket plate to 20 Nm.

7. Remove locking and adjustment tools from crankshaft and camshaft.

8. Tighten camshaft sprockets to 60 Nm using counterhold OE (205-072), Uni Tool Box/3 (Fig. 4).



9. Turn engine through 2 revolutions in direction of engine rotation.

10. Set valve timings to TDC mark of cylinder 1 and check. Setting as for items 1 and 4 of removal above. If locking and adjustment tools cannot be inserted into crankshaft and camshaft, the timing must be reset. The Engine can be damaged if the timing is not set correctly!

11. Remove locking and adjustment tools from crankshaft and camshaft.

12. Assembly in reverse order to removal.

13. Carry out a test drive.

## Tightening torques

- Belt pulley bolts for coolant pump 24 Nm
- M12 crankshaft centre bolt, 40 Nm + 90°
- Timing belt guard 9 Nm
- Engine block screw plug 20 Nm
- Engine mount to body 48 Nm (use new nuts)
- Engine mount to engine support 48 Nm (use new nuts)
- Engine mount locking bolts 55 Nm
- Spark plugs 15 Nm

