

How to Replace timing belt on Fiat Doblo (223) 1.9 JTD 2002-2005

Replacement Interval Guide

- Fiat recommend:
- →2005:
- Check every 36,000 miles.
- Replacement every 72,000 miles or 5 years under normal conditions.
- Replacement every 72,000 miles or 3 years under adverse conditions.
- 2005→:
- Check every 36,000 miles.
- Replacement every 72,000 miles or 5 years under normal conditions.
- Replacement every 72,000 miles or 4 years under adverse conditions.
- The previous use and service history of the vehicle must always be taken into account.

Check For Engine Damage

CAUTION: This engine has been identified as an INTERFERENCE engine in which the possibility of valve-to-piston damage in the event of a timing belt failure is MOST LIKELY to occur. A compression check of all cylinders should be performed before removing the cylinder head.

Repair Times – hrs

Remove & install	2,20
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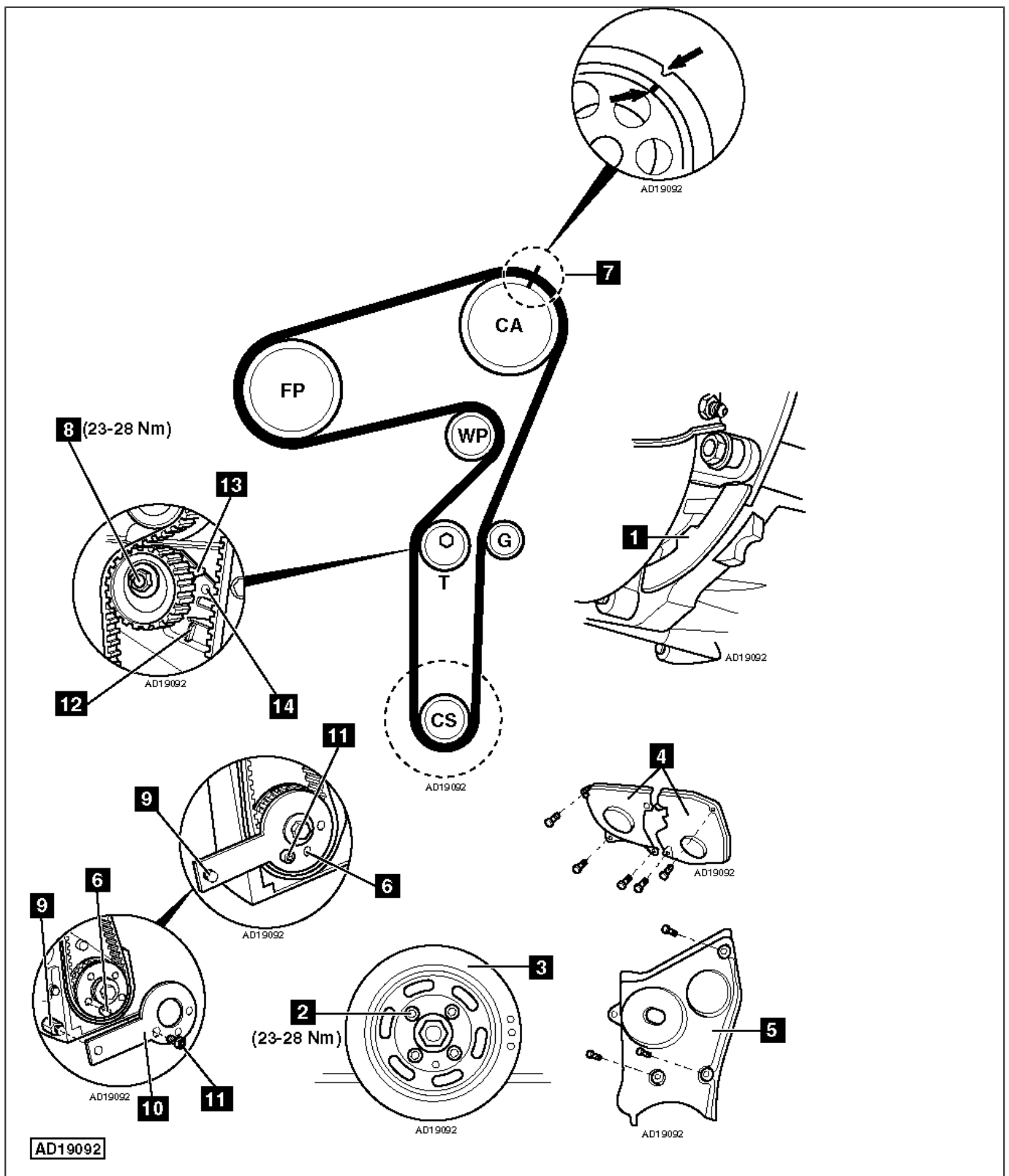
Special Tools

- Flywheel locking tool – No.1.860.898.000.

- Crankshaft timing tool – No.1.860.905.000.
- Crankshaft timing tool bolt – No.1.860.905.010.

Special Precautions

- Disconnect battery earth lead.
- DO NOT turn crankshaft or camshaft when timing belt removed.
- Remove glow plugs to ease turning engine.
- Turn engine in normal direction of rotation (unless otherwise stated).
- DO NOT turn engine via camshaft or other sprockets.
- Observe all tightening torques.



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Removal

NOTE: The high-pressure fuel pump does not require timing.

1. Drain coolant (if necessary).
2. Raise and support front of vehicle.

3. Remove:

- Engine top cover.
- Engine undershield.
- RH front wheel.
- Auxiliary drive belt splash shield.
- RH wheel arch liner.
- Auxiliary drive belt.
- Auxiliary drive belt tensioner pulley (if necessary).
- Flywheel housing lower cover.

4. Fit flywheel locking tool [1] . Tool No.1.860.898.000.

5. Remove:

- Crankshaft pulley bolts [2] .
- Crankshaft pulley [3] .
- Flywheel locking tool [1] .
- PAS reservoir. DO NOT disconnect hoses.

6. Disconnect hoses from coolant expansion tank.

7. Remove coolant expansion tank.

8. Support engine.

9. Remove:

- RH engine mounting.
- Timing belt covers [4] & [5] .

10. Turn crankshaft clockwise to TDC on No.1 cylinder.

11. Ensure pin on crankshaft sprocket at 6 o'clock position [6] .

12. Ensure camshaft sprocket timing marks aligned [7] .

13. If camshaft sprocket timing marks not aligned: Turn crankshaft one turn clockwise.

14. Slacken tensioner sprocket nut [8] .

15. Move tensioner sprocket away from belt. Lightly tighten nut.

16. Remove timing belt.

Installation

1. Ensure pin on crankshaft sprocket at 6 o'clock position [6] .
2. Remove oil pump bolt. Insert stud of crankshaft timing tool [9] . Tool No.1.860.905.000.
3. Fit timing belt to crankshaft sprocket.
4. Fit timing tool to crankshaft sprocket [10] . Tool No.1.860.905.000. Ensure pin on crankshaft sprocket located correctly in tool [6] . Secure with bolt [11] . Tool No.1.860.905.010.
5. Ensure camshaft sprocket timing marks aligned [7] .
6. Fit timing belt in following order:
 - Guide pulley.
 - Camshaft sprocket.
 - High-pressure fuel pump sprocket.
 - Water pump pulley.
 - Tensioner sprocket.

NOTE: Ensure belt is taut between sprockets on non-tensioned side.

7. Slacken tensioner sprocket nut [8] .
8. Lever tensioner sprocket bracket at position [12] until pointer [13] and mark [14] aligned.
9. Tighten tensioner sprocket nut [8] . Tightening torque: 23-28 Nm.
10. Remove timing tool [10] .
11. Fit oil pump bolt.
12. Turn crankshaft two turns clockwise.
13. Ensure tensioner sprocket pointer and mark aligned [13] & [14] .
14. Install components in reverse order of removal.
15. Fit flywheel locking tool [1] . Tool No.1.860.898.000.
16. Tighten crankshaft pulley bolts [2] . Tightening torque: 23-28 Nm.
17. Remove flywheel locking tool [1] .
18. Refill cooling system (if necessary).