Telephone:
Fax:
MomsnrIVAT SE:

Important note

Important note

The intervals and procedures given are subject to alteration by the manufacturer at any time. Check the regularly updated Timing Belts section on our website to ensure that you are kept informed of any changes that may occur between issues of the Autodata CD.
http://www.autodata-cd.com

Timing belt replacement intervals

Where possible the recommended intervals have been compiled from vehicle manufacturers' information. In a few instances no recommendation has been made by the manufacturer and the decision to replace the belt must be made from the evidence of a thorough examination of the condition of the existing belt.

Apart from the visible condition of the belt, which is explained fully in the General Instructions/Toothed Timing Belts section, there are several other factors which must be considered when checking a timing belt:

1. Is the belt an original or a replacement.
2. When was the belt last replaced and was it at the correct mileage.
3. Is the service history of the vehicle known.
4. Has the vehicle been operated under arduous conditions which might warrant a shorter replacement interval.
5. Is the general condition of other components in the camshaft drive, such as the tensioner, pulleys, and other ancillary components driven by the timing belt, typically the water pump, sound enough to ensure that the life of the replacement belt will not be affected.
6. If the condition of the existing belt appears good, can you be satisfied that the belt will not fail before the next check or service is due.
7. If the belt does fail, have you considered the consequences. If the engine is an INTERFERENCE type then considerable expensive damage may well be the result.
8. The cost of replacing a belt as part of a routine service could be as little as 5 to 10% of the repair cost following a belt failure. Make sure your customer is aware of the consequences.
9. If in doubt about the condition of the belt - RENEW it.
10. Refer to the Toothed Timing Belts/Service Replacement section for further information relating to arduous or adverse operating conditions, inspection and service replacement.

Replacement Interval Guide

Replacement Interval Guide

Fiat recommend:
➡ 2000: Replacement every 72,000 miles or 6 years.
2000 ➡ :
Check every 36,000 miles or 3 years.
Replacement every 72,000 miles or 5 years under normal conditions.
Replacement every 72,000 miles or 3 years under adverse conditions.

The previous use and service history of the vehicle must always be taken into account.

Check For Engine Damage

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

Repair Times - hrs

Brava Bravo 1,8 1995-02	
Remove and install	1,75
Remove and install - AC	1,95

Special Tools

Special Tools

- Dial gauge and adaptor - Fiat No.1895879000.
- Camshaft locking tools - Fiat No.1860875000.
- Flywheel locking tool - Fiat No.1860898000.
- Sprocket holding tool - Fiat No.1860831000.
- Tensioning tool - Fiat No.1860845000.

Special Precautions

Special Precautions

- Disconnect battery earth lead.
- DO NOT turn crankshaft or camshaft when timing belt removed.
- Remove spark 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.

Removal

Removal

1. Raise and support front of vehicle.
2. Remove:
    - RH front wheel.
    - RH inner wing panel.

3. Turn auxiliary drive belt tensioner anti-clockwise to release tension on belt. Remove auxiliary drive belt.
4. Remove:
    - Auxiliary drive belt guide pulley.
    - Timing belt cover.

- Engine top cover.
- Disconnect ignition coil multi-plugs and breather hose.
- Cylinder head cover.
- Ignition coils.
- Spark plugs.
- Bell housing lower cover.

5. Fit dial gauge and adaptor to No.1 cylinder [1] . Tool No.1895879000.
6. Turn crankshaft to TDC on No.1 cylinder. Use dial gauge and flywheel timing marks [2] .
7. Ensure both camshafts at TDC on No.1 cylinder. If not: Turn crankshaft one turn clockwise.
8. Remove third bearing cap from each camshaft [3] & [4] .
   NOTE: Mark bearing caps before removal for identification.
9. Fit locking tools in place of bearing caps. Tool No.1860875000.
   NOTE: Ensure locking tools aligned with respective cam profiles to prevent damage.
10. Fit flywheel locking tool. Tool No.1860898000.
11. Remove:
    - Crankshaft pulley bolts [7] .
    - Crankshaft pulley [6] .

12. Ensure pin in crankshaft aligned centrally with crankcase at 6 o'clock [8] .
13. Slacken tensioner sprocket nut [9] . Release tension on belt.
14. Remove timing belt.

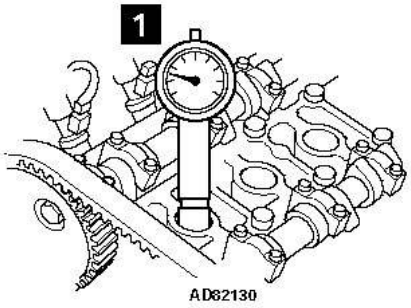
Installation

Installation

1. Ensure crankshaft at TDC on No.1 cylinder [1] & [2] .
2. Ensure flywheel locking tool located correctly.
3. Ensure locking tools located correctly in camshafts.
4. Hold camshaft sprockets [10] . Use tool No.1860831000. Slacken bolts.
5. Fit timing belt in following order:
   - Crankshaft sprocket.
   - Guide pulley.
   - Exhaust camshaft sprocket.
   - Inlet camshaft sprocket.
   - Water pump pulley.
   - Tensioner sprocket.

6. Fit tensioning tool into hole adjacent to tensioner sprocket [11] . Tool No.1860845000.
7. Turn tensioning tool to tension belt to maximum. Tighten tensioner sprocket nut [9] .
8. Hold camshaft sprockets. Use tool No.1860831000. Tighten each bolt to 118 Nm.
9. Remove locking tools from camshafts.
10. Fit bearing caps in correct locations. Tighten bolts to 15 Nm [3] & [4] .
11. Remove:
    - Flywheel locking tool.
    - Dial gauge and adaptor [1] .

12. Turn crankshaft two turns clockwise to TDC on No.1 cylinder. Ensure flywheel timing marks aligned [2] .
13. Fit tensioning tool [11] . Tool No.1860845000. Slacken tensioner sprocket nut [9] . Align pointer with mark on casing [5] .
14. Tighten tensioner sprocket nut to 25 Nm [9] .
15. Install components in reverse order of removal.
16. Tighten crankshaft pulley bolts to 28 Nm [7] .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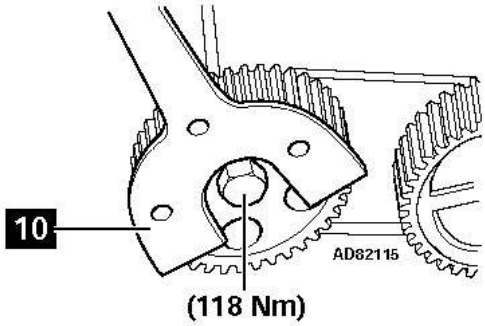
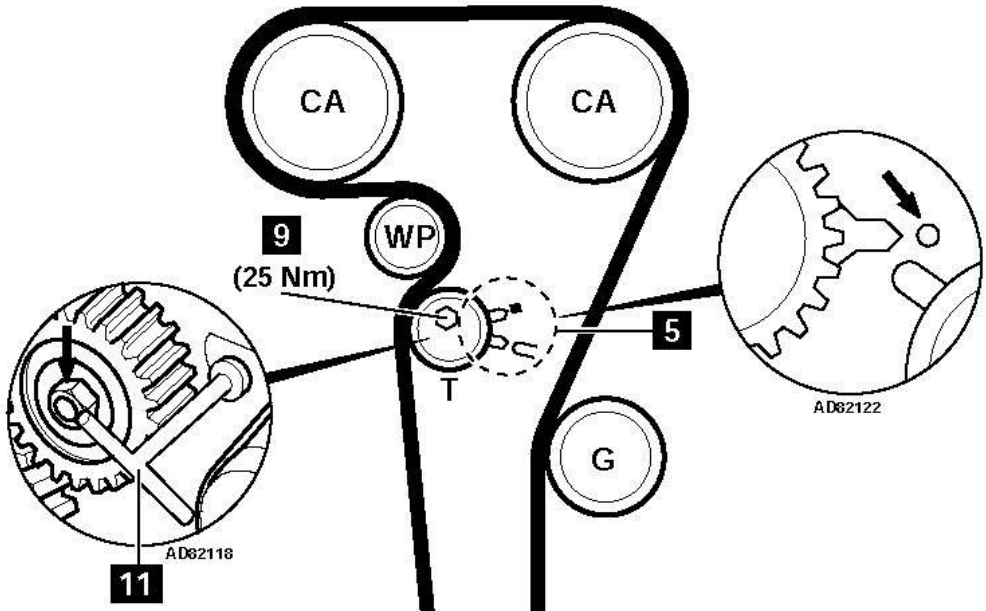

10
AD82115
(118 Nm)


CA
CA
9
(25 Nm)
WP
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5
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11
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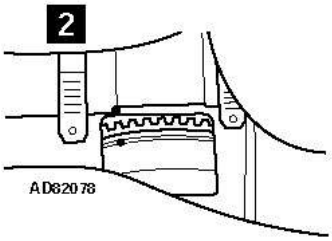
AD82122
8
CS
AD82112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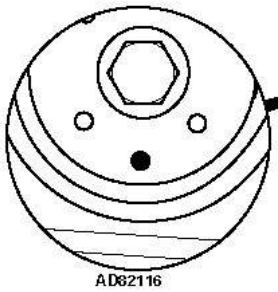
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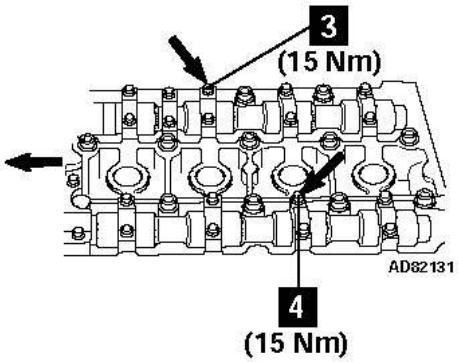
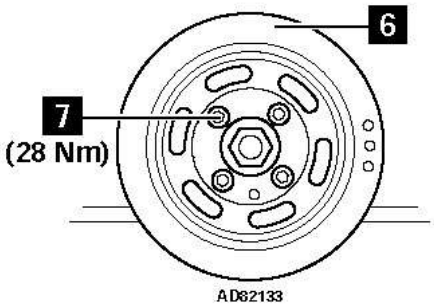

3
(15 Nm)
AD82131
4
(15 Nm)


6
7
(28 Nm)
AD82133

AD11325