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VAT Registration No.:

Important note

NOTE: Timing belt check and replacement intervals are subject to change at any time. To ensure that you are using the most up-to-date and accurate information available connect to Autodata Online. Contact your distributor about connecting to Autodata Online.

Important Note

All service items are vital to the smooth running and reliability of a vehicle, none more so than the timing belt and its associated components. For this reason we have highlighted important information from the manufacturers' service schedules covering the intervals for checks and replacements. Be sure that you make the vehicle owner aware of this information. Industry best practice is to ensure that the vehicle owner is made aware of the importance of replacing the timing belt and its associated components according to the manufacturers' specification. The service history and the use of the vehicle must be considered when deciding the correct course of action. If there is any doubt to the serviceability of the belt and its components, they should be replaced.

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

Audi recommend:

Manufacturer: Audi	Model: A6 (97-05) 2,4	© Autodata Limited 2010
Engine code: ALF	Output: 121 (165) 6000	Valid forever. 04.04.2016
Tuned for: B-Cat	Year: 1997-05	V8 500- /Autodata

A4 2,4/2,8 ➔ 2002MY:

Replacement every 120,000 kilometres (74,564 miles) - (tensioner pulley must also be replaced).

A4 2,4/2,8 - except BDV

2002MY-03MY: Replacement every 80,000 miles - (tensioner pulley must also be replaced).

A4 2,4 - BDV:

➔ 2003MY: No manufacturer's recommended replacement interval.

A6 2,4 ➔ 2000MY:

Replacement every 80,000 miles or 5 years - (tensioner pulley must also be replaced).

A6/allroad 2,7 ➔ 2000MY:

Replacement every 80,000 miles or 5 years - (tensioner pulley, guide pulley and tensioner lever must also be replaced).

A6/A8 2,8 ➔ 2000MY:

Replacement every 80,000 miles or 5 years - (tensioner pulley must also be replaced).

A6 2,4 - except BDV

2001MY-03MY: Replacement every 80,000 miles or 8 years - (tensioner pulley must also be replaced).

A6 2,4 - BDV

2001MY-03MY: Replacement every 115,000 miles.

A6/allroad 2,7

2001MY-03MY: Replacement every 80,000 miles or 8 years - (tensioner pulley, guide pulley and tensioner lever must also be replaced).

A6/A8 2,8

2001MY-03MY: Replacement every 80,000 miles or 8 years - (tensioner pulley must also be replaced).

RS4 2,7:

➔ 2003MY: Replacement every 60,000 kilometres (37,282 miles) - (tensioner pulley, guide pulley and tensioner lever must also be replaced).

S4 2,7:

➔ 2003MY: Replacement every 120,000 kilometres (74,564 miles) - (tensioner pulley, guide pulley and tensioner lever must also be replaced).

NOTE: Audi UK recommend the timing belt is replaced every 5 years.

All models 2004MY ➔ :

Replacement every 75,000 miles or 5 years.

2,7 engine - tensioner pulley, guide pulley and tensioner lever must also be replaced.

Except 2,7 engine - tensioner pulley must also be replaced.

NOTE: For some models the vehicle manufacturer publishes this information in kilometres. The conversion to miles is included for reference purposes only.

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(s).

[Repair Times - hrs](#)

[Repair Times - hrs](#)

All other transmissions	
Remove and install	3,50
01J gearbox	
Remove and install	3,50

Special Tools

Special Tools

- Crankshaft locking pin - No.3242.
- Camshaft sprocket puller - No.T40001.
- Camshaft sprocket holding tool - No.3036.
- Camshaft locking tool - No.3391.
- Viscous fan holder - No.3212.
- Viscous fan spanner - No.3312.
- Support guides - No.3369.
- Auxiliary drive belt tensioner locking pin - No.3204.

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

- Remove:
 - Engine cover.
 - Engine undershield.
 - Intercooler hoses (Turbo).
- A4/A6/S4: Remove:
 - Front bumper.
 - Air intake pipe between radiator support panel and air filter.
 - Radiator support panel bolt [1].
- A4/A6/S4: Install support guides No.3369 through holes in support panel [2].
- A4/A6/S4: Remove radiator support panel bolts [3] & [4].
- A4/A6/S4: Move radiator support panel into service position.
- Disconnect secondary air injection hose (if fitted).
- Remove:
 - Viscous fan (LH thread). Use tool Nos.3212 & 3312.
 - Auxiliary drive belt. Use tool No.3204.

NOTE: Mark direction of rotation on belt with chalk if belt is to be reused.

8. Remove:
 - Auxiliary drive belt tensioner.
 - Timing belt covers [5] , [6] & [7].
9. Turn crankshaft clockwise until crankshaft pulley timing marks aligned [8].
10. Ensure large holes in locking plates of camshaft sprockets face in towards each other [9].
11. If large holes face outwards: Turn crankshaft one turn clockwise.
12. Remove blanking plug from cylinder block. Fit locking pin No.3242 [10].
NOTE: TDC hole in crankshaft web must be aligned with blanking plug hole.
13. Remove:
 - Crankshaft pulley bolts [11].
 - Crankshaft pulley [12].
 - Viscous fan mounting bracket.

NOTE: Two bolts of mounting bracket accessed through hole in pulley.

- Timing belt lower cover [13].
14. Hold camshaft sprockets. Use tool No.3036.
 15. Slacken bolt of each camshaft sprocket approximately five turns [14].
 16. Remove camshaft sprocket holding tool. Tool No.3036.
 17. Loosen camshaft sprockets from taper. Use tool No.T40001 [15].
 18. Turn tensioner pulley slowly clockwise until holes in pushrod and tensioner body aligned. Use Allen key [16].
 19. Lock tensioner pushrod in position with a 2 mm diameter pin [17].
 20. Remove timing belt.

NOTE: Mark direction of rotation on belt with chalk if belt is to be reused.

Installation

Installation

NOTE: Replace tensioner pulley (2,7/2,8 engines).

1. Ensure crankshaft locking pin located correctly [10].
2. Lightly tighten bolt of each camshaft sprocket [14].
3. Ensure camshaft sprockets can turn freely but not tilt.
4. Ensure large holes in locking plates of camshaft sprockets face in towards each other [9].
5. Fit timing belt in anti-clockwise direction, starting at crankshaft sprocket.
6. Ensure belt is taut between sprockets on non-tensioned side.
NOTE: If reusing old belt: Observe direction of rotation marks.
7. Temporarily install camshaft locking tool No.3391 to camshaft sprockets [18].
8. Turn tensioner pulley clockwise as far as possible. Use Allen key [16].
9. Remove pin from tensioner body [17] to release pushrod.
10. Remove Allen key. Install torque wrench to tensioner pulley [19].
11. Apply anti-clockwise torque of 15 Nm to tensioner pulley [20].
12. Remove torque wrench.
13. Tighten bolt of each camshaft sprocket. Tightening torque: (A) 30 Nm [14].
14. Remove camshaft locking tool [18]. Tool No.3391.
15. Hold camshaft sprockets. Use tool No.3036.
16. Tighten bolt of each camshaft sprocket. Tightening torque: (B) 55 Nm [14].
17. Fit timing belt lower cover [13].
18. Install crankshaft pulley ensuring notches on pulley and hub are aligned [21].
19. Remove crankshaft locking pin [10].
20. Fit blanking plug to cylinder block.
21. Install components in reverse order of removal.

22. Tighten crankshaft pulley bolts to 20-22 Nm [11].

