

Model: Transporter 2,4D  
Year: 2/95-01  
Engine Code: AAB, AJA

## Replacement Interval Guide

Volkswagen recommend check & adjust every 40,000 miles (replace if necessary) and replacement every 80,000 miles.  
The previous use and service history of the vehicle must always be taken into account.  
Refer to Timing Belt Replacement Intervals at the front of this manual.

## 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 3,70

## Special Tools

- Injection pump sprocket locking pin - No.2064.
- Camshaft setting bar - No.2065A.
- Crankshaft damper holding tool - No.T10025.
- Sprocket holding tool - No.3036
- Tension gauge - No.210.
- Tensioner pulley spanner - No.3355.

## 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.
- Check diesel injection pump timing after belt replacement.

## Removal

1. Remove:
  - Engine undershield.
  - Auxiliary drive belt.
  - Radiator grille.
2. Remove bonnet lock platform bolts and hinge platform and radiator forward.
3. Remove:
  - Auxiliary drive belt.
  - Injection pump belt cover.
  - Cylinder head cover.
  - Timing belt upper cover 1.
4. Turn crankshaft clockwise to TDC on No.1 cylinder.

5. Ensure timing marks aligned 4. Ensure injection pump sprocket timing mark aligned 3.
6. Lock injection pump sprocket. Use tool No.2064 5.
7. Hold camshaft rear sprocket. Use tool No.3036. Remove bolt 12.
8. Remove camshaft rear sprocket and injection pump belt.
9. Lock crankshaft damper. Use tool No.T10025 7.
10. Remove crankshaft damper centre bolt 8.
11. Ensure crankshaft at TDC on No.1 cylinder 4.
12. Remove:
  - Crankshaft damper bolts (4 bolts) 9.
  - Crankshaft damper 10.
  - Timing belt lower cover 2.
13. Fit setting bar No.2065A to rear of camshaft 11. Centralise camshaft using feeler gauges.
14. Slacken tensioner bolt 13. Turn tensioner away from belt. Use tool No.3355 12. Lightly tighten bolt.
15. Remove timing belt.

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

## Installation

1. Ensure crankshaft at TDC on No.1 cylinder 4.
2. Ensure camshaft setting bar fitted correctly 11.
3. Slacken camshaft sprocket bolt 1/2 turn 13. Tap sprocket from behind to loosen it from taper.  
**NOTE:** Sprocket should turn freely on taper but not tilt.
4. Fit timing belt in anti-clockwise direction, starting at crankshaft sprocket. Ensure belt is taut between sprockets.
5. Slacken tensioner bolt 12.
6. Turn tensioner pulley slowly clockwise until right edge of pointers aligned 13 & 14. Use tool No.3355 12.
7. If tensioner pulley turned too far: Turn fully anti-clockwise and repeat tensioning procedure.  
**NOTE:** To prevent tensioner damage, right edge of pointer 13 should not go past right edge of pointer 14 during adjustment.
8. Tighten tensioner bolt to 20 Nm 12.
9. Ensure timing marks aligned 4.
10. Hold camshaft front sprocket. Use tool No.3036. Tighten bolt to specified torque 12.  
**NOTE:** Check marking on camshaft sprocket bolt head for correct torque setting. 8.8 - 85 Nm. 10.9 - 100 Nm.

