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## Important note

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**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

The vehicle manufacturer has not recommended a timing belt replacement interval for this engine.

**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

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Fiesta/Van 1,6 Diesel 1984-89	
Check and adjust	0,70
Remove and install	0,70

Special Tools

Special Tools

- Camshaft setting bar - Ford No.21-105.
- Tension gauge - Ford No.21-113.
- Crankshaft timing pin - Ford No.21-104.

Special Precautions

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- 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

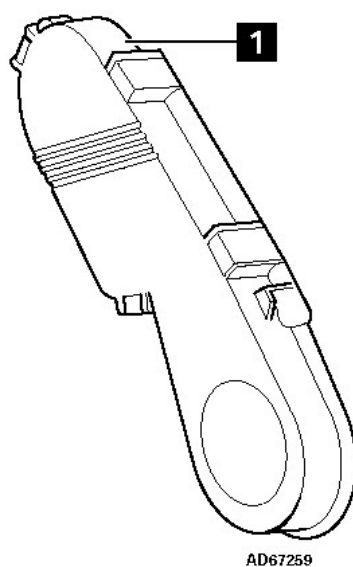
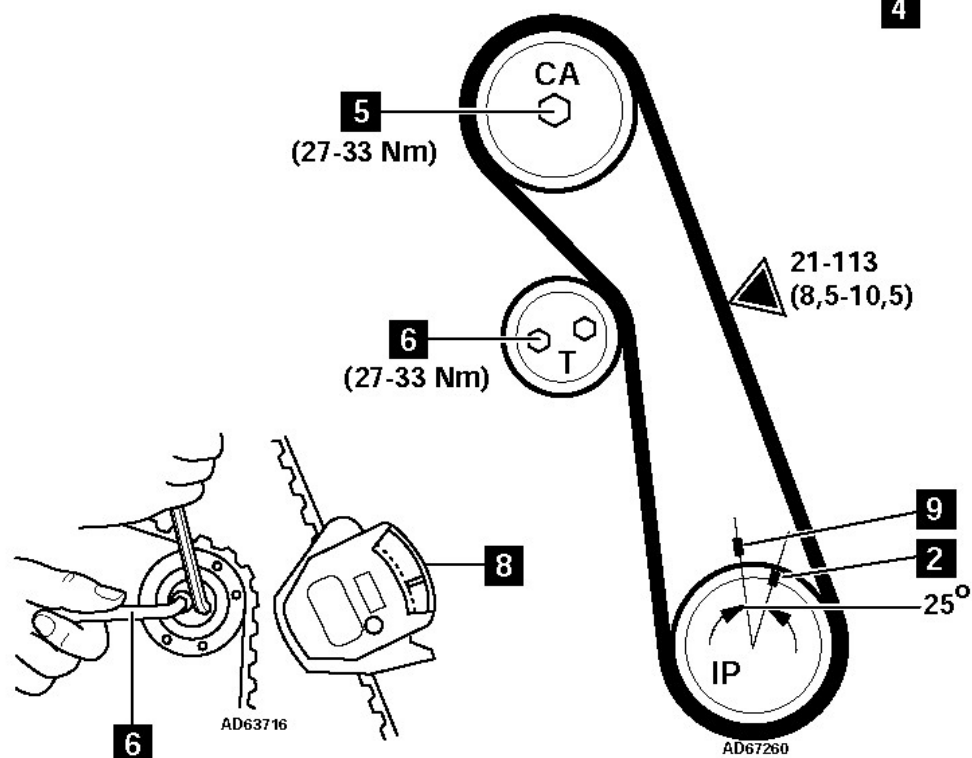
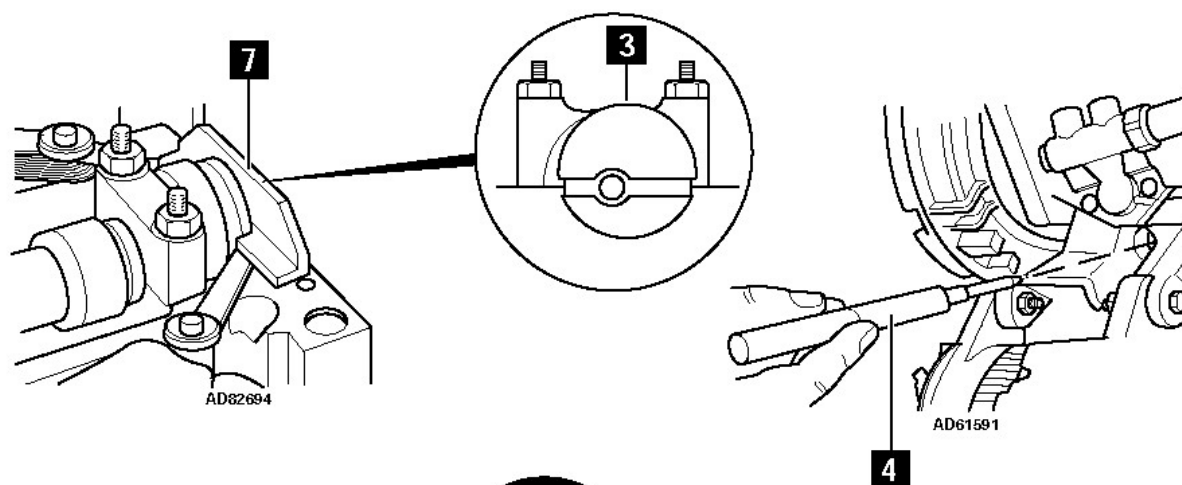
Removal

1. Remove:
  - Cylinder head cover.
  - Timing belt cover [1] .
2. Align injection pump timing marks [9] .
3. Screw timing pin into cylinder block below alternator [4] . Tool No.21-104.
4. Turn crankshaft slowly approximately 50° clockwise until it contacts timing pin.
5. Ensure injection pump sprocket mark [2] is 25° ahead of cast lug [9] on timing belt cover.
6. Ensure camshaft parallel groove aligned with edge of cylinder head [3] .
7. Slacken camshaft sprocket bolt [5] .
8. Slacken tensioner Torx bolt [6] .
9. Remove timing belt.

Installation

## Installation

1. Fit setting bar No.21-105 to rear of camshaft [7] . Centralise camshaft using feeler gauges.
2. Ensure crankshaft web against timing pin [4] .
3. Fit timing belt.
4. Tighten Torx bolt finger tight [6] .
5. Ensure camshaft sprocket can turn on taper.
6. Attach tension gauge to belt at  [8] . Tool No.21-113.
7. Turn tensioner anti-clockwise until tension gauge indicates 8,5-10,5 units (cold). Use Allen key.
8. Tighten Torx bolt.
9. Tighten camshaft sprocket bolt [5] . Tightening torque: 27-33 Nm.
10. Remove:
  - Setting bar [7] .
  - Timing pin [4] .
11. Check and adjust injection pump timing.
12. Install:
  - Timing belt cover.
  - Cylinder head cover.



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