

## 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

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Ford recommend:

➔ 07/98: Replacement every 60,000 miles or 5 years, whichever occurs first.

08/98 ➔ : Replacement every 50,000 miles or 5 years, whichever occurs first.

Non-turbo: Tensioner pulley must be replaced.

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

### Check For Engine Damage

**Manufacturer:** Ford

**Engine code:** 4HB

**Tuned for:**

**Model:** Transit ('95) 2,5D

**Output:** 56 (76) 4000

**Year:** 1995-00

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## 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

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Remove and install	1,40
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## Special Tools

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- Flywheel timing pin - Ford No.23-020.
- Camshaft timing pin - Ford No.21-123.
- Injection pump timing pin - Ford No.23-019/23-029.

## Special Precautions

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- Disconnect battery earth lead.
- DO NOT turn crankshaft or camshaft when timing belt removed.
- 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. Drain coolant.
2. Remove:
  - Engine undershield.
  - Radiator grille.
3. Detach AC condenser from radiator (if fitted).
4. Remove:
  - Radiator.
  - Auxiliary drive belts (mark direction of rotation).
  - Cooling fan.
  - Viscous coupling.
  - Cooling fan pulley.
  - Crankshaft pulley bolt rubber cap [1].
  - Fuel filter (turbo).

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- Starter motor.
  - Crankshaft position (CKP) sensor and spacer (if fitted).
  - Timing belt covers [2] .
5. Turn crankshaft until flywheel timing pin can be inserted [3] . Tool No.23-020.  
**NOTE: Timing pin hole is larger than other holes in flywheel. Ensure correct hole used.**
  6. Insert timing pin in injection pump sprocket [4] . Tool No.23-019/23-029.
  7. Insert timing pin in camshaft sprocket [5] . Tool No.21-123.
  8. Slacken injection pump sprocket bolts [8] .
  9. Slacken tensioner bolt(s) [6] & [7] or [10] .
  10. Move tensioner away from belt.
  11. Turbo: Tighten tensioner bolt [6] .
  12. Remove timing belt.
  13. Remove tensioner pulley. Check tensioner pulley for smooth operation.  
**NOTE: Non-turbo: Replace manual tensioner pulley with automatic tensioner pulley, new bolt and modified timing belt.**
  14. Lightly oil contact face of tensioner bracket and cylinder block.
  15. Install:
    - Turbo: Manual tensioner pulley. Lightly tighten bolts [6] & [7] .
    - Non-turbo: Automatic tensioner pulley with new bolt. Lightly tighten bolt [10] .

**NOTE: Turbo: DO NOT refit used belt. Timing belt must always be renewed once it has been slackened or removed.**

**WARNING: DO NOT fit automatic tensioner pulley or modified timing belt to turbo engines.**

**NOTE: Non-turbo: Original timing belt - DO NOT refit used belt. Timing belt and tensioner pulley must always be renewed once they have been slackened or removed.**

**NOTE: Non-turbo: Modified timing belt with automatic tensioner pulley - only replace at recommended intervals or if damaged.**

## Installation - Non-turbo

## Installation - Non-turbo

1. Ensure all timing pins located correctly [3], [4] & [5] .
2. Fit timing belt in anti-clockwise direction, starting at crankshaft sprocket.
3. Observe direction of rotation marks on belt.
4. If necessary: Turn injection pump sprocket slightly to engage timing belt teeth.
5. Turn tensioner clockwise until centre punch mark on backplate aligned with lower edge of cut-out [9] & [11] . Use Allen key.
6. Tighten tensioner bolt [10] . Tightening torque: 45 Nm.
7. Tighten injection pump sprocket bolts to 25 Nm [8] .
8. Remove all timing pins [3], [4] & [5] .
9. Turn crankshaft one turn then a further 315° clockwise.
10. Check centre punch mark on backplate aligned with lower edge of cut-out [9] & [11] .
11. If not: Repeat tensioning procedure.
12. Tighten tensioner bolt [10] . Tightening torque: 45 Nm.
13. Turn crankshaft 45° clockwise until flywheel timing pin can be inserted [3] .
14. Insert timing pin in camshaft sprocket [5] . Tool No.21-123.
15. Insert timing pin in injection pump sprocket [4] . Tool No.23-019/23-029.
16. If timing pin cannot be inserted in injection pump sprocket: Slacken bolts [8] .
17. Turn sprocket until timing pin can be inserted.
18. Tighten bolts to 25 Nm [8] .
19. Remove all timing pins [3], [4] & [5] .
20. Install components in reverse order of removal.

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**Model:** Transit ('95) 2,5D

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21. Observe direction of rotation mark on auxiliary drive belts.
22. Refill cooling system.

## Installation - Turbo

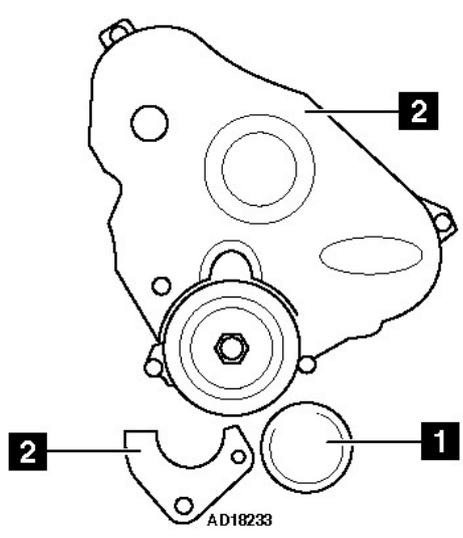
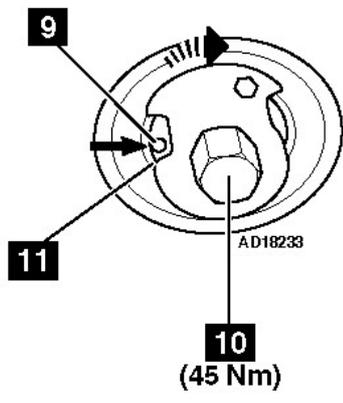
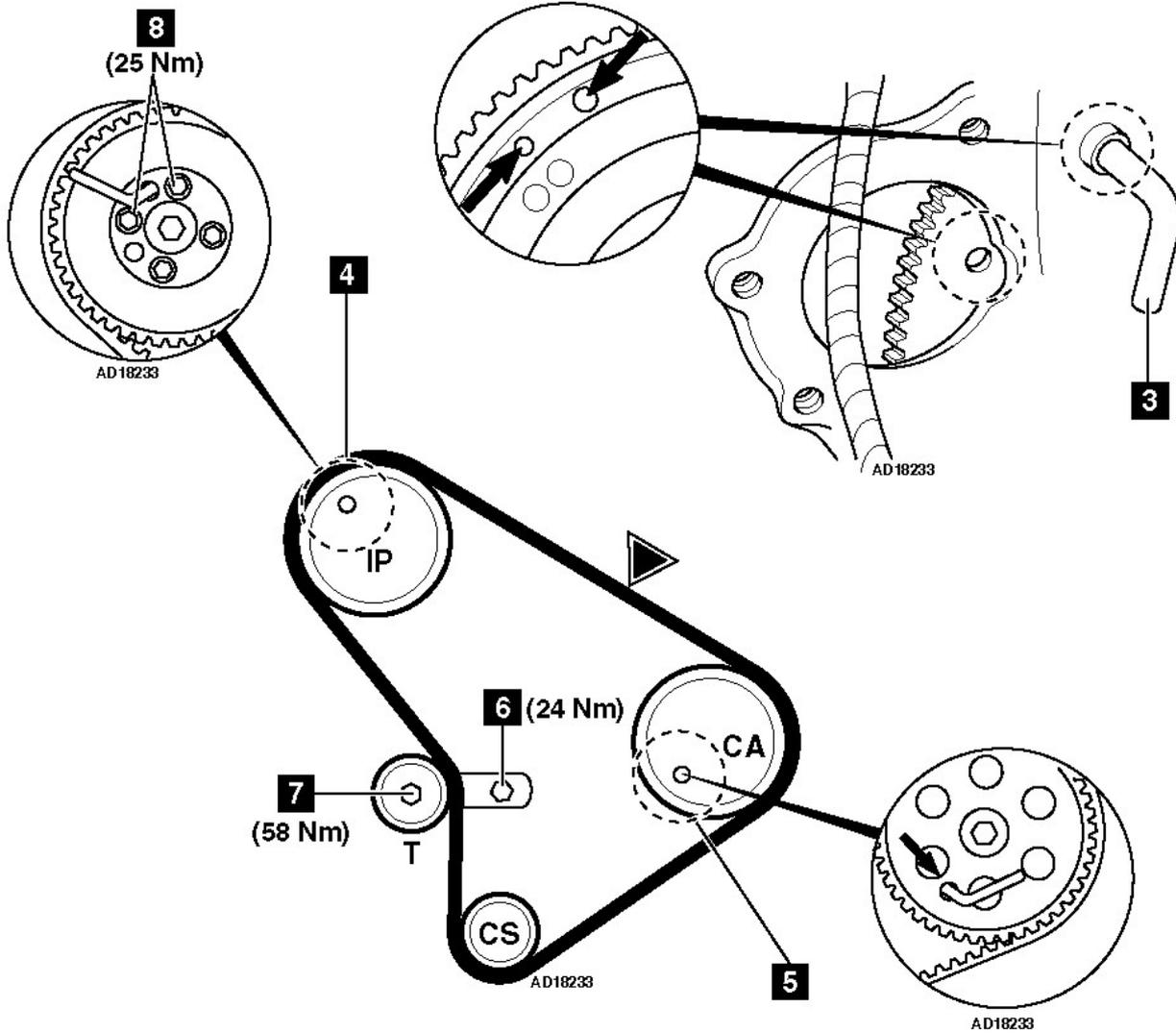
## Installation - Turbo

1. Ensure all timing pins located correctly [3], [4] & [5] .
2. Fit timing belt in anti-clockwise direction, starting at crankshaft sprocket.
3. Observe direction of rotation marks on belt.
4. If necessary: Turn injection pump sprocket slightly to engage timing belt teeth.
5. Slacken tensioner bolt [6] .
6. Allow tensioner to operate.
7. Tighten tensioner bolts [6] & [7] .
8. Tighten injection pump sprocket bolts to 25 Nm [8] .
9. Remove all timing pins [3], [4] & [5] .
10. Turn crankshaft one turn then a further 315° clockwise.
11. Slacken tensioner bolts [6] & [7] .
12. Apply thumb pressure to belt at  .
13. Allow tensioner to operate.
14. Release thumb pressure from belt.
15. Tighten tensioner bolt [6] . Tightening torque: 24 Nm.
16. Tighten tensioner bolt [7] . Tightening torque: 58 Nm.
17. Turn crankshaft 45° clockwise until flywheel timing pin can be inserted [3] .
18. Insert timing pin in camshaft sprocket [5] . Tool No.21-123.
19. Insert timing pin in injection pump sprocket [4] . Tool No.23-019/23-029.
20. If timing pin cannot be inserted in injection pump sprocket: Slacken bolts [8] .
21. Turn sprocket until timing pin can be inserted.
22. Tighten bolts to 25 Nm [8] .
23. Remove all timing pins [3], [4] & [5] .
24. Install components in reverse order of removal.
25. Observe direction of rotation mark on auxiliary drive belts.
26. Refill cooling system.

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 Engine code: 4HB  
 Tuned for:

Model: Transit ('95) 2,5D  
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