### Telephone: Fax: VAT Registration No.:

Name:		Manufacturer:	Toyota
Address:		Model:	LandCruiser 4.2TD
		Year:	1996
		Registration:	
Tel - Private:		Mileage:	
Tel - Business:		Job number:	

### 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. <u>http://www.autodata-cd.com</u>

# **Timing belt replacement intervals**

The information relating to timing belt replacement intervals is additional to the main purpose of this CD, but is included to provide guidance to garages and for customer advice.

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 later in this 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.

# **Replacement Interval Guide**

**Replacement Interval Guide** 

Toyota recommend: ➡ 1993: Replacement every 60,000 miles or 5 years, whichever occurs first. 1994 → : Replacement every 63,000 miles or 5 years, whichever occurs first. 1996 → : Replacement every 60.000 miles or 5 years, whichever occurs first (Colorado 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.

### **Repair Times - hrs**

### **Repair Times - hrs**

Landcruiser (HDJ80) VX 4,2TD 1990-03		
Remove and install	1,10	

# Special Tools

### **Special Tools**

• None required.

# **Special Precautions**

### 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

### Removal

- 1. Remove timing belt cover [1].
- 2. Turn crankshaft clockwise until timing marks aligned [2].
- 3. Ensure timing marks aligned:
  - 0 1KZ-T/TE: [3].

Manufacturer: Toyota Engine code: 1HD-FT nod for:

Model: Landcruiser 4,2D Turbo Output: 124 (168) 3600 Vear: 1005-08

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- 4. Evenly slacken and remove automatic tensioner unit bolts [5].
- 5. Remove:
  - O Automatic tensioner unit [6].
  - Tensioner pulley bolt [7].
  - O Tensioner pulley [8].
  - O Timing belt.

# Installation

### Installation

- 1. Check tensioner pulley for smooth operation [8]. Replace if necessary.
- 2. Remove dust cover. Check tensioner body for leakage or damage [6]. Check pushrod protrusion is 9,0-9,8 mm [9].
- 3. Check pushrod does not move when pushed against a firm surface. If pushrod moves: Replace automatic tensioner unit.
- 4. Slowly compress pushrod into tensioner body until holes aligned. Use press.
- 5. Retain pushrod with 1,5 mm Allen key through hole in tensioner body [10]. Fit dust cover.
- 6. Ensure timing marks aligned [2].
- 7. Ensure timing marks aligned:
  - 0 1KZ-T/TE: [3].
  - 0 1HD-FT/1HD-FTE: [4].
- 8. Fit timing belt in anti-clockwise direction, starting at lower sprocket. Ensure belt is taut between sprockets.
- 9. Fit tensioner pulley [8]. Tighten bolt to 34 Nm [7].
- 10. Push tensioner pulley against belt. Install automatic tensioner unit [6]. Tighten bolts evenly to 13 Nm [5].
- 11. Remove Allen key from tensioner body to release pushrod.
- 12. Turn crankshaft two turns clockwise. Ensure timing marks aligned [2] & [3] or [4].
- 13. If not: Repeat installation and tensioning procedures.
- 14. Install components in reverse order of removal.
- 15. Reset timing belt replacement warning lamp as follows:
- 16. -Runner/Landcruiser:
  - o Remove grommet in speedometer housing. Depress switch using a thin screwdriver [11].
- 17. Colorado:
  - o Remove speedometer housing. Remove screw indicated and insert in alternative location [12].
- 18. Amazon:
  - o Lamp illuminates at 90,000 miles. Return vehicle to dealer.



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