

Telephone:
Fax:
VAT Registration No.:

Name:		Manufacturer:	Renault
Address:		Model:	
		Year:	1997
		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.

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

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

Renault recommend replacement every 70,000 miles or 5 years.

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

Safrane 2,5 20V 1996-02	
Remove and install	3,60

Special Tools

Special Tools

- Tensioning tool (auxiliary drive belt) - Renault No.Mot.1348.
- Crankshaft TDC timing pin - Renault No.Mot.1340.
- Camshaft setting tool - Renault No.Mot.1337.
- Sprocket holding tool - Renault No.Mot.799.
- Tension gauge - Renault No.Mot.1273 (SEEM C.Tronic 105).
- Inlet camshaft plug fitting tool - Renault No.Mot.1345.

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

1. Raise and support front of vehicle.
2. Remove:
 - RH front wheel.

- RH front wheel arch liner.
 - Engine undershield.
 - RH engine mounting.
3. Turn auxiliary drive belt tensioner away from belt [1]. Use tool No.1348.
 4. Lock auxiliary drive belt tensioner. Use 4 mm pin [2].
 5. Remove:
 - Auxiliary drive belt.
 - Auxiliary drive belt tensioner and bracket.
 - Crankshaft pulley nut and washer [4].
 - Crankshaft pulley bolts (4 bolts) [3].
 - Crankshaft pulley [5].
 - Cylinder head cover and ignition coil bracket.
 - Camshaft position (CMP) sensor and rotor from rear of exhaust camshaft housing [6].
 - Plug from rear of inlet camshaft housing [7].
 6. Turn crankshaft until grooves in camshafts are aligned [8].
 7. Fit setting tool to camshafts [9]. Tool No.Mot.1337.
 8. Turn crankshaft slowly clockwise until setting tool arms meet. Fit bolt and retainer [10].
 9. Slacken bolts of each camshaft sprocket [19].
 10. Remove blanking plug from cylinder block. Ensure TDC timing pin can be inserted [11]. Tool No.Mot.1340. If necessary, turn crankshaft slightly anti-clockwise.
 11. Remove:
 - Timing belt covers [12] & [13].
 - Lower belt shield [14].
 12. Ensure crankshaft timing marks aligned [15].

NOTE: Engines available with either hydraulic or mechanical tensioner.

Hydraulic tensioner:

13. Remove:
 - Automatic tensioner unit bolts [16].
 - Automatic tensioner unit.

Mechanical tensioner:

14. Slacken tensioner pulley bolt [21].
15. Turn tensioner pulley clockwise until pointer on LH stop [22].
16. Lightly tighten tensioner pulley bolt [21].

All tensioners:

17. Remove timing belt.

Installation

Installation

Hydraulic tensioner:

1. Slowly compress pushrod into tensioner body until holes aligned. Use press. Retain pushrod with suitable pin through hole in tensioner body [17].

All tensioners:

2. Ensure setting tool fitted correctly [9] & [10].
3. Ensure TDC timing pin located correctly [11]. Tool No.Mot.1340.
4. Ensure crankshaft sprocket timing marks aligned [15].
5. Hold camshaft sprockets [18]. Use tool No.Mot.799. Slacken bolts [19].
6. Align camshaft sprockets with bolts in centre of slotted holes [20].
7. Fit timing belt in anti-clockwise direction, starting at crankshaft sprocket. Ensure belt is taut between sprockets.

Hydraulic tensioner:

8. Install automatic tensioner unit. Tighten bolts to 25 Nm [16].
9. Remove pin from tensioner body to release pushrod [17].

Mechanical tensioner:

10. Slacken tensioner pulley bolt [21].
11. Turn tensioner pulley anti-clockwise until pointer on RH stop [23].
12. Turn tensioner pulley clockwise until pointer in centre [24].
13. Tighten tensioner pulley bolt [21]. Tightening torque: 20 Nm.

All tensioners:

14. Hold camshaft sprockets [18]. Use tool No.Mot.799. Tighten bolts to 25 Nm [19].
15. Remove:
 - TDC timing pin [11].
 - Setting tool [9] & [10].
16. Turn crankshaft almost two turns clockwise.
17. Fit setting tool to camshafts [9]. Tool No.Mot.1337.
18. Turn crankshaft slowly clockwise until setting tool arms meet. Fit bolt and retainer [10].
19. Ensure TDC timing pin can be inserted [11]. Tool No.Mot.1340.
20. Ensure crankshaft sprocket timing marks aligned [15].

Hydraulic tensioner:

21. Attach tension gauge to belt at . Tool No.Mot.1273. Tension gauge should indicate 36-46 SEEM units.
22. If not: Suspect faulty automatic tensioner unit.

Mechanical tensioner:

23. Ensure pointer in centre [24]. If not: Re-adjust.
24. Push on belt at . Pointer should move. Release pressure from belt. Pointer should return to centre.

All tensioners:

25. Remove:
 - Setting tool [9] & [10]. Tool No.Mot.1337.
 - TDC timing pin [11]. Tool No.Mot.1340.
26. Fit camshaft position (CMP) sensor and rotor [6].
27. Tighten rotor bolt to 17 Nm. Tighten sensor bolts to 20 Nm.
28. Fit new plug to rear of inlet camshaft housing [7]. Use tool No.Mot.1345.
29. Fit lower belt shield [14].
30. Fit crankshaft pulley [5].
31. Tighten crankshaft pulley bolts [3]. Tightening torque: 25 Nm + 30°.
32. Fit crankshaft pulley nut and washer [4]. Tighten nut to 180 Nm.
33. Install components in reverse order of removal.

