Telephone:
Fax:
VAT Registration No.:

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.

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

Camshaft drive belt/chain - C & A	0,30
Camshaft drive belt/chain - R & I	2,20

Special Tools

- None required.

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

NOTE: Normal direction of crankshaft rotation is anti-clockwise.

1. Remove:
   - LH inner wing panel.
   - Auxiliary drive belts.
   - LH top engine mounting.
   - Crankshaft pulley [1] .
   - Cylinder head cover.
   - Timing belt upper cover [2] .
   - Timing belt lower cover [3] .
2. Temporarily fit crankshaft pulley [1] .
3. Turn crankshaft anti-clockwise to TDC on No.1 cylinder [4] or [9] . Ensure camshaft sprocket timing marks aligned with cylinder head face [5] .
   NOTE: B20A3/4 - Align flywheel timing marks [10] . D16A/D16Z - Align camshaft sprocket timing marks [8] .
4. Remove crankshaft pulley [1] .
5. Ensure crankshaft sprocket timing marks aligned [9] .
6. Slacken tensioner bolt [6] . Move tensioner away from belt and lightly tighten bolt.
7. Remove timing belt.

Installation

1. Ensure timing marks aligned [9] & [5] or [8] .
2. Fit timing belt.
3. Slacken and tighten tensioner bolt [6] .
4. Turn crankshaft six turns anti-clockwise. Ensure timing marks aligned [9] & [5] or [8] .
5. Slacken tensioner bolt [6] .
6. Turn crankshaft anti-clockwise for 3 teeth on camshaft sprocket.

7. Tighten tensioner bolt [6] . Tightening torque: 45 Nm.
8. Turn crankshaft nearly two turns anti-clockwise to TDC. Ensure timing marks aligned [9] & [5] or [8] .
9. Install components in reverse order of removal.
   NOTE: Ensure un-chamfered edge of crankshaft pulley bolt washer faces pulley.
10. Tighten crankshaft pulley bolt to 115 Nm [7] . Concerto: 165 Nm.
    NOTE: 1,5/1,6 1991 ➡ : Tighten bolt to 185 Nm.