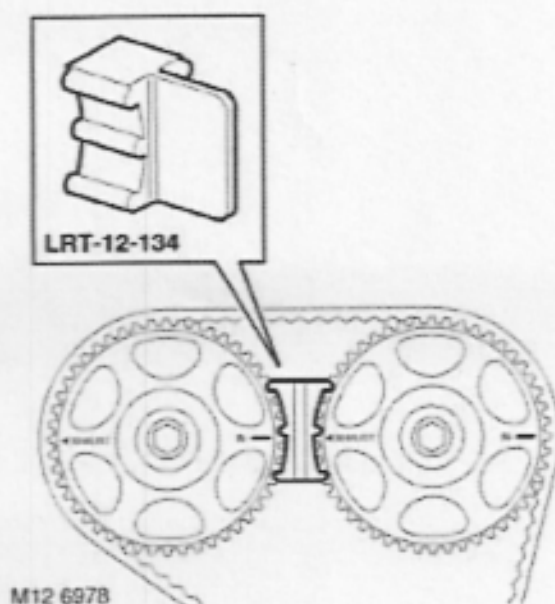


12.65.18 Camshaft timing belt

Remove

1. Disconnect battery earth lead.
2. Remove hydramount.
***** 12.45.12 Hydramount - engine - RH *****
3. Remove camshaft timing belt upper cover.
***** 12.65.41 Cover - timing gear - upper *****
4. Remove camshaft timing belt lower cover.
***** 12.65.43 Cover - timing belt - front lower - without A C *****
5. Temporarily assemble pulley to crankshaft, fit and lightly tighten bolt.
6. Remove bolts securing flywheel locking tool, LRT-12-145 to starter motor aperture and remove locking tool.

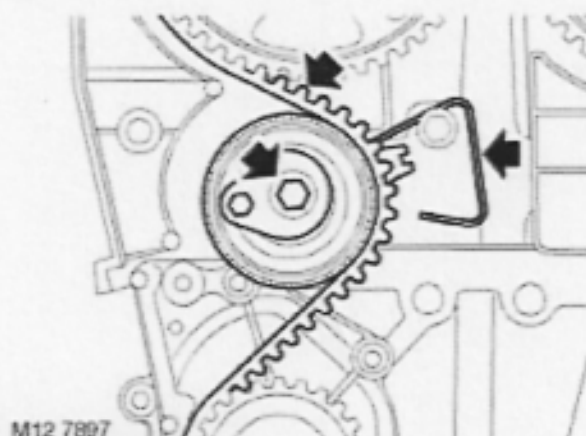


7. Rotate crankshaft clockwise to align camshaft gear timing marks.



CAUTION: Never use the camshaft gear, the camshaft gear retaining bolts or the timing belt to rotate the crankshaft.

8. Fit camshaft gear alignment tool LRT-12-134.
9. Remove crankshaft pulley.



10. Remove and discard timing belt tensioner bolt.
11. Disengage index wire from its fitted position whilst at the same time removing timing belt tensioner.
12. If camshaft timing belt is to be refitted, mark direction of rotation on timing belt.
13. Remove camshaft timing belt.



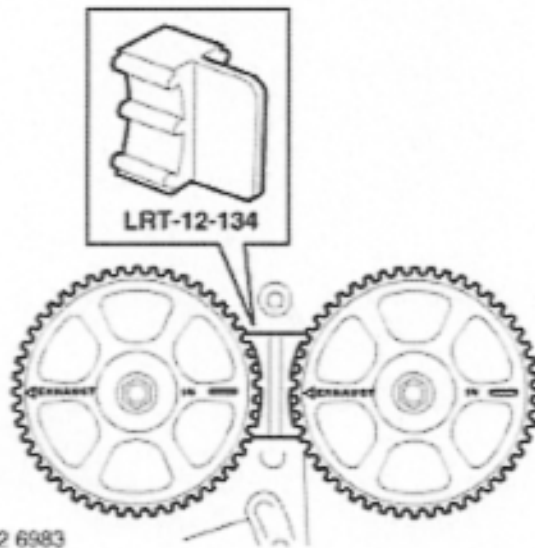
CAUTION: Ease the timing belt off the gears using fingers only. Metal levers may damage the belt and gears. Do not rotate crankshaft or camshafts with timing belt removed and cylinder head fitted. Timing belt must be replaced if cylinder head is to be removed or new drive gears, tensioner or coolant pump are to be fitted. Timing belts must be stored and handled with care. Always store a timing belt on its edge with a bend radius greater than 50 mm (2.0 in). Do not use a timing belt that has been twisted or bent double as this will damage the reinforcing fibres. Do not use a timing belt if debris other than belt dust is found in timing belt covers. Do not use a timing belt if mileage exceeds 72,000 km (45,000 miles). Do not use an oil or coolant contaminated timing belt, cause of contamination must be rectified.

Refit

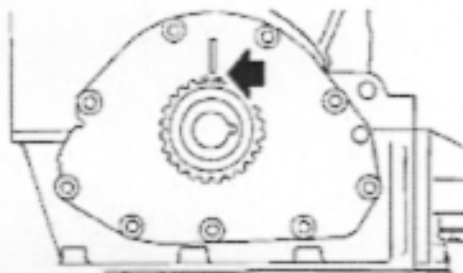
1. Clean crankshaft timing gear, camshaft timing gears, coolant pump timing gear and tensioner pulley.



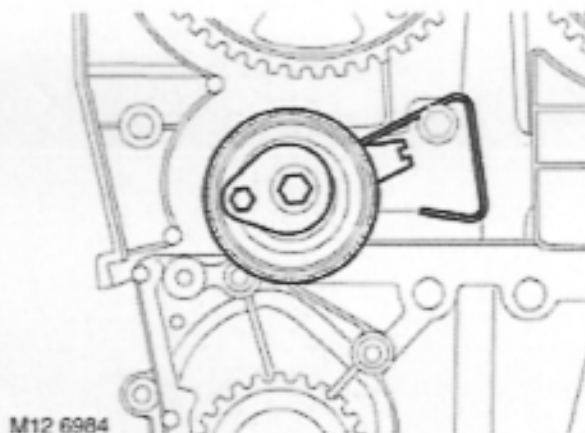
CAUTION: If sintered gears have been subjected to prolonged oil contamination, they must be soaked in solvent and then thoroughly washed in clean solvent before refitting. Because of the porous construction of sintered material, oil impregnated in the gear will emerge and contaminate the belt.



2. Check correct alignment of camshaft timing marks and that tool LRT-12-134 is locking camshaft gears.



3. Check correct alignment of dots on crankshaft gear with flange on oil pump - 90° BTDC.



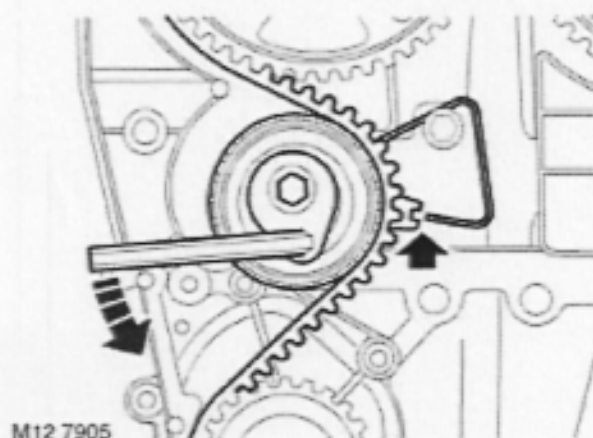
4. Fit timing belt tensioner ensuring that index wire is positioned over pillar bolt and tensioner lever is at 9 o'clock position.
5. Fit a new Patchlok bolt and tighten until it is just possible to move tensioner lever.
6. Using fingers only, fit timing belt. Ensure belt run between the crankshaft gear and the exhaust camshaft gear is kept taut during the fitting procedure.



CAUTION: If the original timing belt is being refitted, ensure the direction of

rotation mark is facing the correct way.

7. Check that timing belt is positioned centrally around all gears and tensioner pulley.
8. Fit timing belt lower cover.
***** 12.65.43 Cover - timing belt - front lower - without A C *****
9. Temporarily assemble pulley to crankshaft, fit and lightly tighten bolt.
10. Remove camshaft gear alignment tool LRT-12-134.



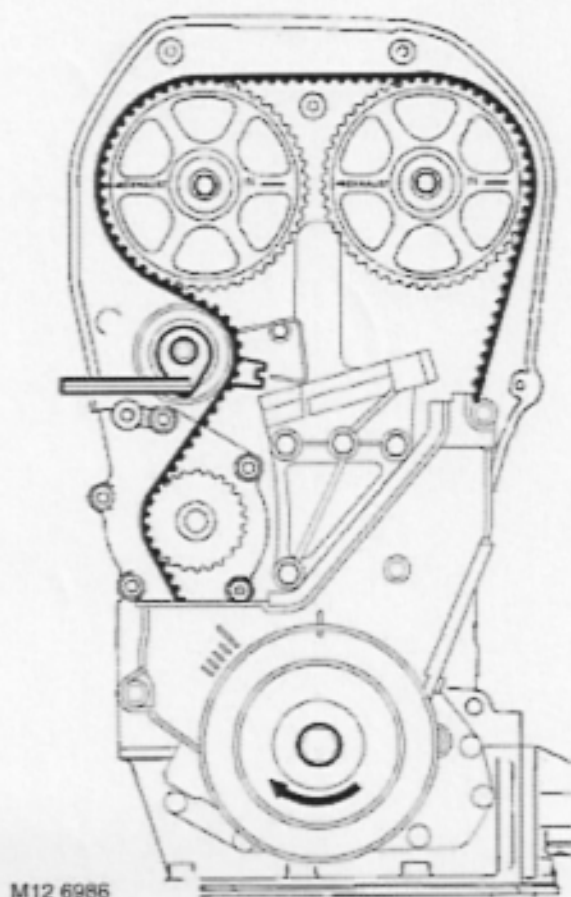
11. Using a 6 mm Allen key, rotate tensioner anti-clockwise and align the centre of the indent on the tensioner pointer to the index wire.

NOTE: If original belt is being refitted, align index wire to lower land of pointer.



CAUTION: Ensure that pointer approaches index wire from above. Should pointer go past index wire, release tension completely and repeat tensioning procedure.

12. Ensuring pointer maintains correct position, tighten tensioner bolt to 22 Nm (16 lbf.ft).



13. Rotate crankshaft 2 turns clockwise and align camshaft gear timing marks.



CAUTION: Never use the camshaft gear, the camshaft gear retaining bolts or the timing belt to turn the crankshaft.

14. Check that pointer is correctly aligned with index wire.
15. If pointer is not correctly aligned, loosen bolt until it is just possible to move tensioner lever. Rotate tensioner lever clockwise until tension is completely backed off, then rotate tensioner lever anti-clockwise until pointer is aligned correctly to index wire.
16. Ensuring pointer maintains correct position, tighten tensioner bolt to 22 Nm (16 lbf.ft).
17. Rotate crankshaft 2 turns clockwise and align camshaft gear timing marks.
18. Check alignment of pointer to index wire, if incorrect, repeat adjustment procedure.
19. Remove crankshaft pulley.
20. Position flywheel locking tool, LRT-12-145, in starter motor aperture and secure with 2 bolts.
21. Fit camshaft timing belt upper cover.
***** 12.65.41 Cover - timing gear - upper *****
22. Fit hydramount.
***** 12.45.12 Hydramount - engine - RH *****

23. Connect battery earth lead.