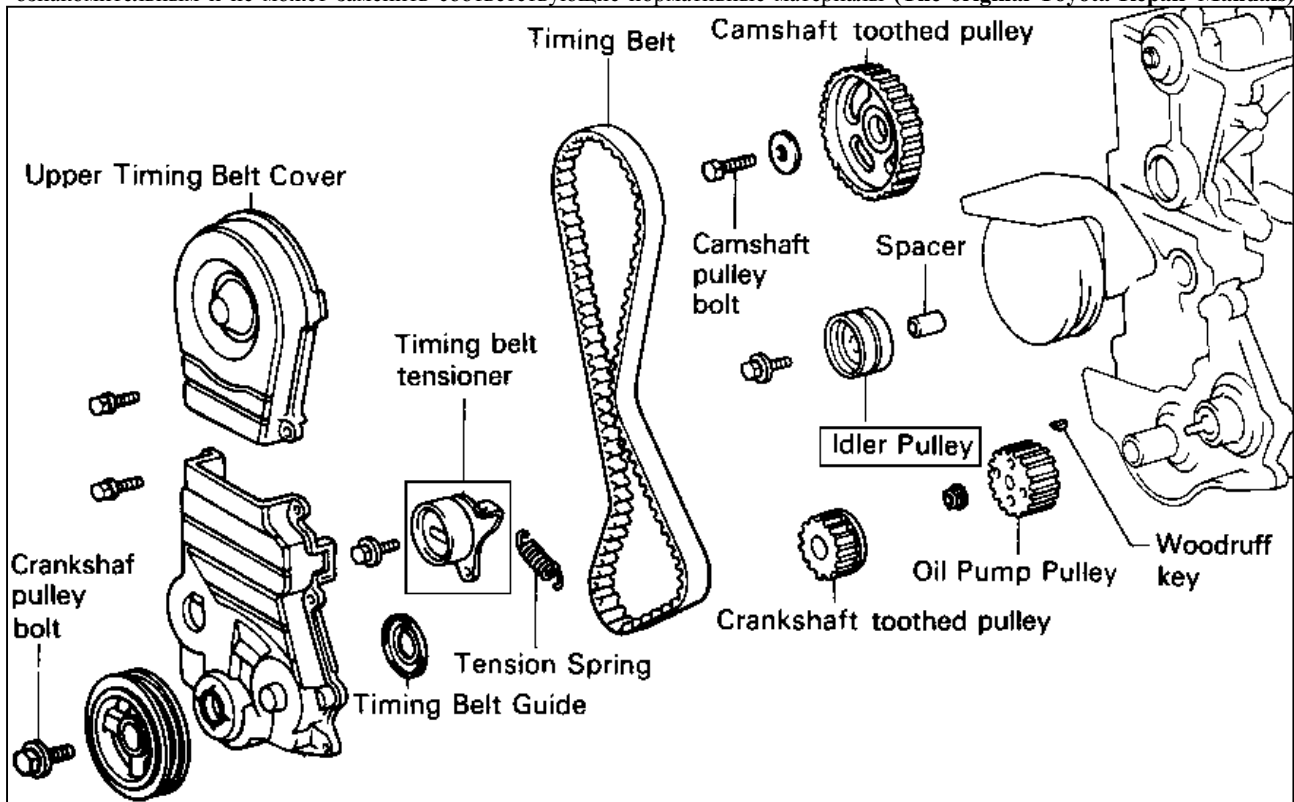


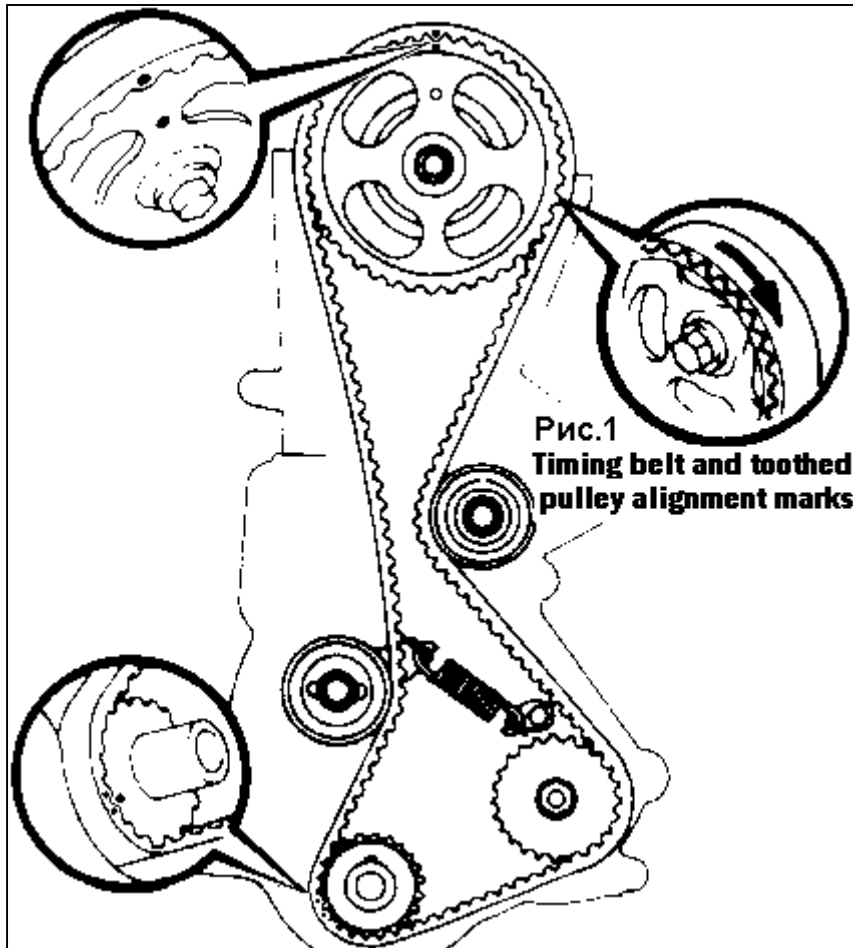
Расположение «меток» ГРМ двигателя 2Е

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... 5. If the timing belt is to be re-used, mark the alignment of the belt to the toothed pulleys and the direction of travel (ie, normal engine rotation) on the belt (Fig.1).

6. Slacken the timing belt tensioner bolt, then push the tensioner pulley away from the timing belt and temporarily retighten the bolt (photo).



7. Remove the timing belt. **Do not** alter the position of the camshaft or crankshaft toothed pulleys with the timing belt removed.

Refitting.

8. In addition to the regular renewal called for as part of the normal service schedule, the timing belt should be renewed, regardless of age or mileage, if it appears to be defective in any manner or if it has been in contact with water, oil or steam; if the belt has evidence of any damage, examine the condition and alignment of all pulleys before fitting a replacement.

9. Before refitting the timing belt, check that the hole on the camshaft toothed pulley (designated '2' or '2E') is centrally aligned with the dot on the camshaft right-hand bearing cap; also check that the TDC marks on the crankshaft toothed pulley and the oil pump body are aligned (Fig.2).

10. Check that the camshaft and crankshaft toothed pulleys have not moved, then fit the timing belt so that it is taut on the run around the oil pump toothed pulley and idler pulley. If the original belt is being refitted, ensure that the directional arrow marked on the belt during removal faces the correct way and that the belt-to-toothed pulley alignment marks line up.

11. Slacken the timing belt tensioner bolt, and allow the tensioner to return

against its spring pressure so that the pulley bears on the timing belt; do not tighten the bolt at this stage.

12. Temporarily install the crankshaft pulley bolt.

13. Use a spanner or socket on the crankshaft pulley bolt to turn the crankshaft through two full turns clockwise (when viewed from

the right-hand side of the vehicle), then check that the camshaft and crankshaft toothed pulley alignment marks remain as described in paragraph 9. If the marks are not correctly aligned, re-adjust the toothed pulley position, turn the crankshaft through two further turns and re-check.

14. Tighten the timing belt tensioner pulley bolt to the specified torque, then check that there is belt tension at the position indicated.

15. Remove the temporarily-installed crankshaft pulley bolt.

16. Refit the timing belt guide to the crankshaft toothed pulley, ensuring that it faces the correct way.

17. Refit the timing belt covers, crankshaft pulley.

18. Refit the power steering pump and/or alternator/water pump drivebelt(s).

8 Timing belt tensioner - removal and refitting

Removal

1. Work as described in paragraphs 1 to 5 of Section 7.

2. Unhook the spring from the timing belt tensioner.

3. Undo the timing belt tensioner pulley bolt, then remove the timing belt tensioner assembly.

Refitting

4. Check that the tension spring is in good condition and that the timing belt tensioner pulley freely rotates. The tension spring should have a free length of 38.4 mm, and should extend to 51.5 mm when subjected to a load of 50 N (5.11 kg).

5. Refit the timing belt tensioner with its bolt, but do not fully tighten the bolt yet.

6. Reconnect the tension spring, and allow the timing belt tensioner pulley to bear against the timing belt; the timing belt should be taut on the run around the oil pump toothed pulley and idler pulley.

7. Proceed as described in paragraph 12 onwards of Section 7.

9 Camshaft oil seal - renewal

1. Disconnect the battery earth terminal.

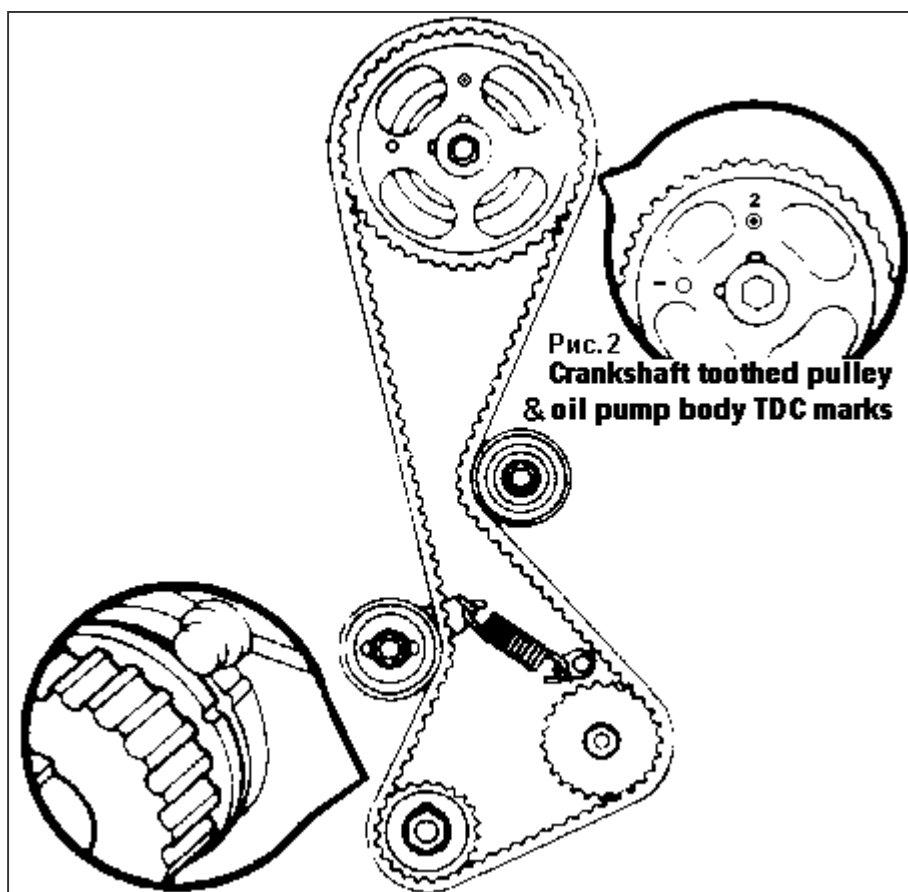
2. Remove the timing belt (Section 7).

3. Prevent the camshaft from rotating with an open-ended spanner applied to its hexagonal section, then slacken the camshaft pulley bolt. Remove the bolt and withdraw the toothed pulley; the camshaft must **not** be rotated with the timing belt removed.

4. Punch or drill two small holes opposite each other in the seal. Screw a self-tapping screw into each hole and pull on the screws with pliers to extract the seal.

5. Clean the seal housing and polish off any burrs or raised edges which may have caused the seal to fail in the first place.

6. Lubricate the lips of the new seal with clean engine oil and apply a smear of gasket sealant to the outer edge of the seal. Ease the seal over the end of the camshaft and drive it squarely into position using a suitable tubular drift, such as a socket, which bears only



on the hard outer edge of the seal until it seats on its locating shoulder. Once the seal is correctly positioned wipe off any excess gasket sealant.

7. Install the camshaft toothed pulley, having first ensured that the locating pin on the camshaft is still positioned in the 12 o'clock position and aligns with the dimple on the right-hand camshaft bearing cap. Refit the pulley bolt and tighten it to the specified torque whilst holding the camshaft with an open-ended spanner.

8. Refit the timing belt (Section 7, paragraph 9 onwards) and reconnect the battery negative terminal.

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