

2.3L 4-CYL & 2.3L 4-CYL TURBO

Selected Block

1990 Volvo 740

Timing Belt R & I

SOHC

CAUTION: Ensure timing marks align before removing timing belt. DO NOT rotate crankshaft or camshaft with timing belt removed or valves may contact pistons.

Removal

- 1) Disconnect negative battery cable. Loosen adjustments and remove all drive belts and water pump pulley. Remove fan, preheater hose (below fan shroud) and fan shroud.
- 2) Using center bolt on crankshaft, rotate crankshaft so mark on camshaft pulley aligns with timing mark on inner timing belt cover, and crankshaft pulley mark aligns with TDC mark on timing belt cover.
- 3) Remove nut and washer from belt tensioner. Install Crankshaft Holder (5284) on crankshaft pulley and belt tensioner stud. Install nut on stud. Remove crankshaft center bolt, crankshaft pulley and lower timing belt cover. Ensure timing marks are aligned. See Fig. 4.

NOTE: If reusing timing belt, mark direction of rotation for installation reference.

- 4) Place mark on timing belt to indicate direction of belt rotation. Loosen belt tensioner nut one turn. Pull on timing belt to compress belt tensioner spring. Tighten belt tensioner nut.
- 5) Install a 3-mm drill bit through hole of belt tensioner bolt to lock belt tensioner spring in place. Remove timing belt from camshaft sprocket. If removing camshaft sprocket, use Holder (5034) and remove sprocket retaining bolt. Remove sprocket and spacer washer.

Inspection

Check belt teeth for cracks, damage or oil contamination. Inspect all sprockets for damage. Check belt tensioner for roughness in rotation. Replace components if damaged.

Installation

- 1) Install belt tensioner if previously removed. Ensure all timing marks align. See Fig. 4.
- 2) Timing belt has 2 lines on outer side of belt which should fit toward crankshaft marks. Install belt over crankshaft sprocket first, then over intermediate shaft. Stretch belt on tension side and fit over camshaft sprocket. Slide back of belt onto belt tensioner.
- 3) Loosen nut on belt tensioner to permit spring tension to act against drive belt. Tighten belt tensioner nut. Ensure timing marks align. To install remaining components, reverse removal procedure.

CAUTION: Readjust timing belt MUST when engine reaches normal operating temperature.

- 4) Warm engine to normal operating temperature. Remove plug from front timing belt cover. Loosen belt tensioner bolt one turn and allow belt tensioner spring to apply pressure on timing belt. This readjusts timing belt to allow for belt stretch. Tighten belt tensioner nut. Install rubber plug.

