1995 Volvo 940 Turbo

2.3 4-CYL 1995 ENGINES Volvo - 2.3L 4-Cylinder

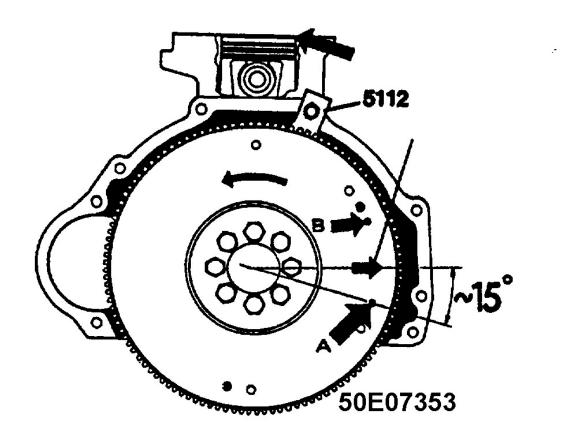


Fig. 4: Using Gear Selector (5112) To Lock Flywheel Courtesy of VOLVO CARS OF NORTH AMERICA

Automatic Transmission

Note position of base plates. The outer plates must be turned with edge outwards.

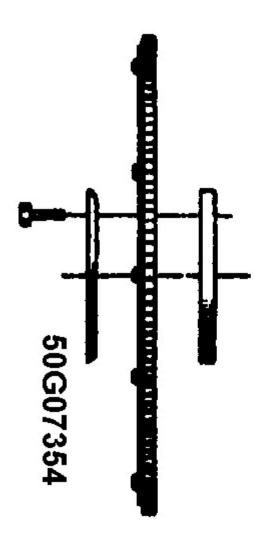


Fig. 5: Noting Position Of Base Plates
Courtesy of VOLVO CARS OF NORTH AMERICA

Manual Transmission

Install clutch and pressure plate. Use centering drift 5111. Tighten bolts crosswise, and a couple of turns at a time, to avoid stress fractures.

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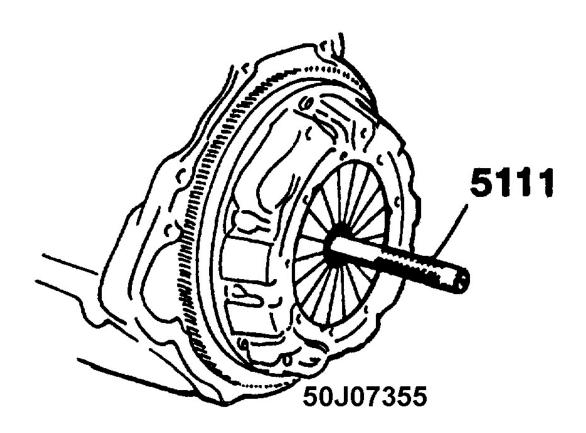


Fig. 6: Centering Drift 5111
Courtesy of VOLVO CARS OF NORTH AMERICA

Remove gear selector (5112).

FRONT COVER OIL SEAL (CRANKSHAFT & INTERMEDIATE SHAFT SEALS)

Removal

Remove timing belt. See **TIMING BELT**. To remove intermediate shaft seal, remove intermediate shaft sprocket and inner timing belt cover. Pry seal from front cover. To remove crankshaft seal, remove sprocket and pry seal from front cover.

Installation

Coat seal lips and seal seating areas with grease. Install seal using proper sleeve. Use Sleeve (5025) for intermediate shaft seal or Sleeve (5283) for crankshaft seal. To install remaining components, reverse removal procedure.

TIMING BELT

1995 Volvo 940 Turbo

2.3 4-CYL 1995 ENGINES Volvo - 2.3L 4-Cylinder

CAUTION: Ensure timing marks align before removing timing belt. DO NOT rotate crankshaft or camshaft with timing belt removed, as it is possible (though unlikely) 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. 7**.

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 spring shaft bolt to ensure belt tensioner spring is locked 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.

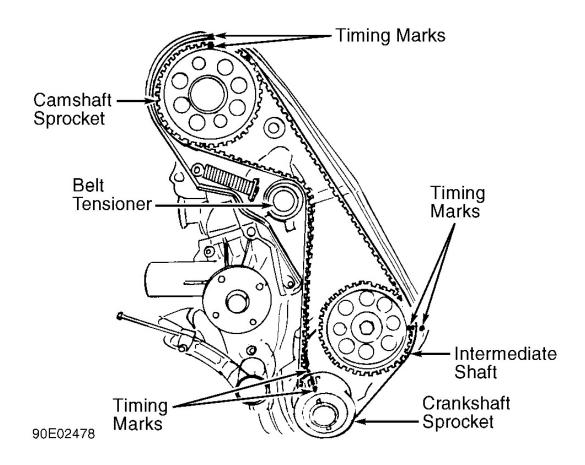


Fig. 7: Aligning Timing Marks
Courtesy of VOLVO CARS OF NORTH AMERICA.

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 <u>Fig. 7</u>.
- 2. Outer side of timing belt has 2 lines, 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 bolt 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 when engine reaches normal operating temperature.