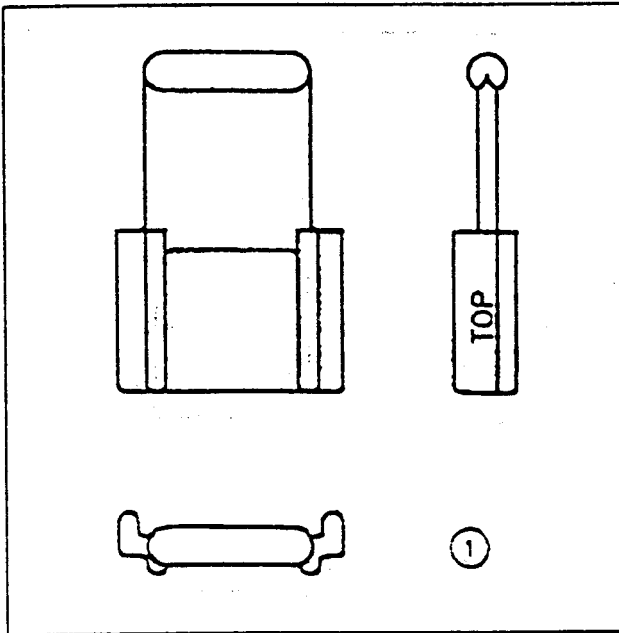


VAUXHALL / OPEL



STANDARD PARTS LIST

1. VS1701 Camshaft Locking Tool

ECO-Tec ENGINE 1.8 16V & 2.0 16V

Application

VAUXHALL/OPEL: ECO-Tec engine: 1.8 16V & 2.0 16V, Astra - F, Cavalier, Calibra, Vectra. Omega.

Introduction

This tool is used to lock the two camshafts in the correct timing position when changing or refitting the timing belt.

Instruction for use

Follow the manufacturer's instructions for toothed belt removal and installation
Only remove and install toothed belt when engine is cold.

Removal

Disconnect earth lead from battery and remove, air guide tube, air cleaner housing, and mass air flow meter.

Raise and support front of vehicle.

Mark the direction of rotation on ribbed auxiliary drive belt.

Use a ring spanner to turn auxiliary belt tensioner clockwise, then insert pin VS1701/1 through hole in tensioner into mounting bracket. Fig.1.

Remove the auxiliary belt, engine torque bracket, and upper and lower timing belt covers.

Instruction for useRemovalCont

Turn the crankshaft clockwise to TDC on No.1 cylinder, and ensure that timing marks are aligned. Undo and remove crankshaft pulley bolts and remove pulley.

Check that the crankshaft pulley mark is aligned with the cover mark 1 and the camshaft pulley marks are aligned with the notched on the rear belt cover 2.

Lock camshaft pulleys by inserting cam locking tool VS1701 between the two pulleys to prevent rotation 3. Fig.2. Loosen toothed belt tension roller until toothed belt is completely free of tension, then remove toothed belt.

Installation

Ensure that timing marks are aligned.

Fit timing belt, starting at the crankshaft sprocket and working anti-clockwise, keeping belt taut between sprockets. Slacken tensioner bolt and turn anti-clockwise until pointer is on RH. Stop, then lightly tighten tensioner bolt.

Remove locking tool VS1701 from between the camshaft sprockets. Rotate the engine two turns clockwise until the timing marks 2 & 3 are aligned. Re-lock camshaft sprockets 4 with VS1701 and re-adjust tensioner clockwise until pointer is:-

Aligned with "V" notch for new belt,

At LH edge of "V" notch for used belt.

Tighten tensioner bolt to specified torque and remove VS1701.

Rotate engine two turns and re-check alignments.

Refit in reverse order of removal.

