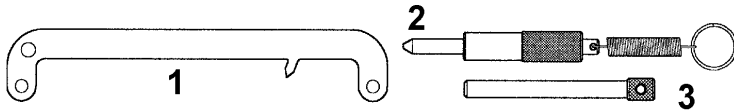


VS1171

DIESEL ENGINE SETTING/LOCKING 'UPDATE' SET FOR VAUXHALL/OPEL



STANDARD PARTS LIST

1. VS117/01 Flywheel TDC Setting Tool
2. VS117/02 Crank TDC Locking Pin
3. VS120/1 Injection Pump Locking Pin

1. INTRODUCTION & APPLICATION

Update of the existing tool range to cover service applications and/or specialised tool introductions on later engines. VS1171 'Update' Set, for Vauxhall/Opel. On Vauxhall/Opel X17DTL diesel, the TDC position was established using VS117/01 Setting Tool on engines up to 1997. The engine was then modified and required the use of VS117/02 Crank Locking Pin. In 1998 a locking pin for the Injection Pump was added to the application. All these tools are included in VS1171 'Update' Set.

Update of the existing tool range to cover service applications and/or specialised tool introductions on later engines.

VS1171 'Update' Set, for Vauxhall/Opel. Comprises:

- VS117/01 Flywheel TDC Setting Tool
- VS117/02 Crank TDC Locking Pin
- VS120/1 Injection Pump Locking Pin

APPLICATION: Vauxhall/Opel Astra-F/Astravan X17DTL diesel engine.

USE PRODUCT WITH THE FOLLOWING TOOLS

For X17DTL Camshaft Setting - Cam Locking Plate AssyVS106A
- Dial Test IndicatorAK9634M

ASSOCIATED TOOL

Camshaft Locking Tool Assembly -
Timing Adjustment on X17DTLVS1065

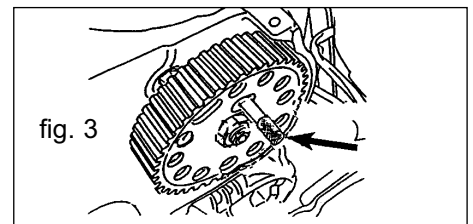
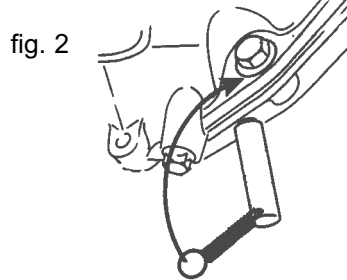
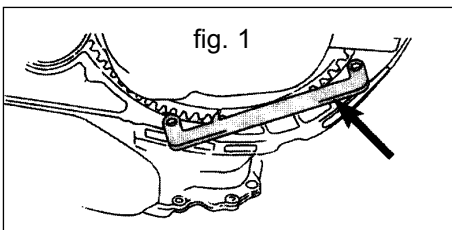
2. SAFETY INSTRUCTIONS

- WARNING!** Ensure all Health and Safety, local authority and general workshop practice regulations are strictly adhered to when using tools.
- DO NOT use tools if damaged.
- Maintain tools in good and clean condition for best and safest performance.
- If required, ensure the vehicle to be worked on is adequately supported with axle stands, ramps and chocks.
- Wear approved eye protection. A full range of personal safety equipment is available from your Sealey dealer.
- Wear suitable clothing to avoid snagging. Do not wear jewellery and tie back long hair.
- Account for all tools, locking bolts, pins and parts being used and do not leave them in or near the engine.
- WARNING!** Always refer to the vehicle manufacturer's service instructions, or a proprietary manual, to establish the current procedure and data. These instructions for use are provided as a guide only.

3. INSTRUCTIONS FOR USE

VS117/01 Flywheel TDC Setting Tool (fig. 1).

When removing/installing timing belt and establishing correct engine timing position, use of the VS117/01 Setting Tool is essential to determine the flywheel/crankshaft TDC position. It is attached to the flywheel housing to provide a pointer position on which to align the flywheel TDC mark. Remove belt, camshaft and clutch covers and turn crankshaft, in normal direction, to align timing marks. Align marks on injection pump and attach VS117/01 to flywheel housing. Align pointer with TDC mark on flywheel to establish crankshaft timing position. Slacken tensioner and remove belt. Re-check timing marks are aligned on injection pump and flywheel. Install timing belt, apply tensioner. Turn engine to achieve 90 degrees BTDC at 1st cylinder and fit Camshaft Setting Tool VS106A and AK9634M DTI to check camshaft timing.



VS117/02 Crank TDC Location Pin (fig. 2).

VS117/02 Pin is used in place of VS117/01 Setting Tool on the latest engines with two-part oil pans. The VS117/02 is inserted through a hole in the gearbox bell housing and locks the crankshaft at TDC.

VS117/02 Pin is supplied with a retaining spring which is attached to the belt drive gear bolt to retain pin in its hole during work on the engine.

WARNING! DO NOT use VS117/02 for locking the crank for the purpose of counter-holding when removing the vibration damper/drive gear. It is for retention of timing position only. Use Flywheel Holding Tool VS1280 (option).

VS120/1 Injection Pump Locking Pin (fig. 3).

From 1998 the timing procedure requires the injection pump sprocket to be locked in its timing position using Pin VS120/1. The timing hole in the sprocket is aligned with the injection pump flange recess.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

IMPORTANT: No liability is accepted for incorrect use of product. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. **INFORMATION:** For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.