

## Instructions for:

# TIMING BELT TENSIONER SET - (ADJUSTABLE TENSIONER ROLLER)

Model No: VS4841

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.



#### 2. INTRODUCTION & APPLICATIONS

Suitable for VAG 1.8/1.8T and 2.0 petrol engines with an adjustable tension roller as fitted to early Pumpe Duse diesel engines. Kit includes tension adjuster, locking and setting tools.

AUDI

A4 Cabriolet A6

SEAT

Ibiza

SKODA

Superb

VOLKSWAGEN
Polo Fos Passat

Engine codes:

ALT, AMB, AUG\*, AVJ, AWM\*, AWT\*, BBU, BEX, BFB, BJX, BKV, BLZ (\*from 08/2000)

## 1. SAFETY INSTRUCTIONS

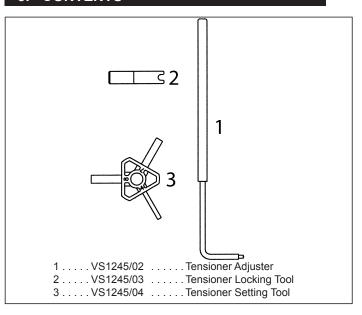
- WARNING! Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools.
- X DO NOT use tools if damaged.
- ✓ Maintain tools in good and clean condition for best and safest performance.
- ✓ Ensure that a vehicle which has been jacked up is adequately supported with axle stands.
- ✓ 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! Incorrect or out of phase camshaft timing can result in contact between valve head and piston crown causing damage to the engine.

**IMPORTANT:** These instructions are provided as a guide only. Always refer to the vehicle manufacturer's service instructions, or a proprietary manual, to establish the current procedure and data.

WARNING: The warnings, cautions and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.



## 3. CONTENTS



### 4. INSTRUCTIONS

Many of the VAG 1.8/1.8T and 2.0 petrol engines have an automatic timing belt tensioner that requires VS4808 Set for timing belt replacement applications.

However, a particular group of these engines have an Adjustable Tensioner Roller, of the same type as fitted on earlier VW Pumpe Duse diesel engines.

Timing belt replacement/tensioning on this group of petrol engines (see Applications), requires the tools in the VS4841 Set, and the following procedure.

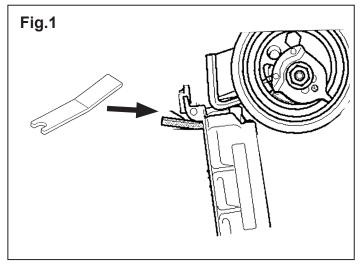
Remove the auxiliary belt and tensioner.

Remove the timing belt upper cover and turn the crankshaft to TDC No. 1 cylinder

Check that the timing marks for the camshaft sprocket align, and marks for the crankshaft pulley align.

Remove the crankshaft pulley and timing belt lower covers.

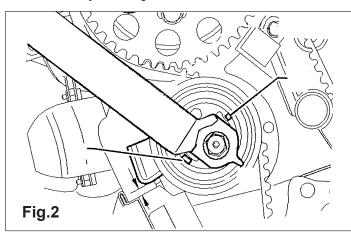
Page 1 of 2



#### 4.1.1 VS1245/03 Tensioner Locking Tool

Fit a hexagon key into the tensioner roller and apply constant and moderate pressure in an **anti-clockwise** direction, until the plunger of the tensioner unit can be locked with VS1245/03. Insert VS1245/03 Locking Tool. **(Fig.1)** 

WARNING: The belt tensioner unit is oil dampened. It can only be compressed slowly by applying a constant pressure, and therefore it will take a time to compress. DO NOT attempt to apply more force than is necessary as damage could result.



## 4.1.2 VS1245/02 Tensioner Adjuster

Insert VS1245/02 Tensioner Adjuster into the two holes in the tensioner roller and loosen the roller nut.

Turn the roller **clockwise**, using VS1245/02 Adjuster, sufficient to slacken the timing belt. **(Fig.2)** 

Remove the timing belt.

Turn the crankshaft back slightly (pistons must not be at TDC at this stage).

## 4.1.3 Installing the new timing belt

Fit the new timing belt onto the crankshaft gear and install lower cover (for timing mark alignment).

Fit the crankshaft pulley. **NOTE:** the hole the pulley must locate over the projection in the crankshaft gear.

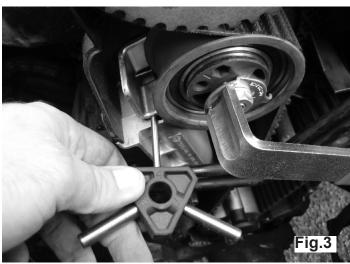
Align the camshaft sprocket timing marks and the crankshaft timing

Fit the timing belt in the following sequence – coolant pump, tensioner roller, and camshaft sprocket.

### 4.1.4 Tensioning the timing belt.

Fit VS1245/02 Adjuster into the two holes in the tensioner roller and turn **anti-clockwise** to "stop".

Retain the roller in this position, using VS1245/02 Adjuster, and pull out VS1245/03 Locking Tool.



#### 4.1.5 VS1245/04 Tensioner Setting Tool

Using VS1245/02 Adjuster, turn the roller in a clockwise direction and insert the appropriate size setting pin, of VS1245/04 Setting Tool, between the lever and the housing of the tensioner unit. (Fig.3)

Codes: - ALT/AMB/AUG/AVJ/

AWM/AWT/BEX/BFB - use 8mm.

Codes:- BBU/BJX/BKV/BLZ - use 4mm.

Using VS1245/02 Adjuster, retain the roller in this position and tighten nut (27Nm.)

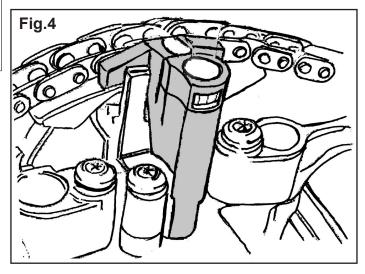
Rotate the crankshaft two turns and return to TDC checking that all timing marks align.

Check that VS1245/04 Setting Tool can be inserted into the gap between the lever and housing.

If the VS1245/04 cannot be inserted – use a hexagon key in the roller, turning **anti-clockwise** to compress the plunger of the tensioner unit, as previously, and insert VS1245/03 to 'lock' in position.

Retain the position of the tensioner roller using VS1245/02 Adjuster and loosen the roller nut.

Allow the roller to move until VS1245/04 Setting Tool can be inserted, and tighten the nut.



#### 4.2 VS4809 Chain Tensioner Retainer

Associated Tool – not in VS4841 Set.

These engines have a chain in the cylinder head linking the two camshafts together. **(Fig.4)** 

If work is required involving the removal and refitting of the valve gear, camshafts, timing chain etc. the chain tensioner will need to be compressed and retained, using VS4809.

**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.



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