

# INSTRUCTIONS FOR: FUEL PUMP HOLDING TOOL JAGUAR/ LANDROVER 3.0 DIESEL ENGINE MODEL NO: VSE5312

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

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & 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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



#### **Refer to Instruction**

## Manual

## 1. SAFETY

- **WARNING!** Ensure all health and safety, local authority and general workshop practice regulations are strictly adhered to when using tools.
- ✓ 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 stockist.
- ✓ 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.
- **X DO NOT** use tools if damaged.
  - **IMPORTANT:** Always refer to the vehicle manufacturer's service instructions, or proprietary manual to establish the current procedure and data. These instructions for use are provided as a guide only .

#### 2. INTRODUCTION

Used to position and lock the high pressure fuel pump into its timed position when changing the fuel pump drive belt.

## **3. APPLICATIONS**

**OEM Tool No:** 310-212

#### MODELS:

**Jaguar:** XF (09-14), XJ (09-14) **Land Rover:** Discovery 4 (09-14), R

ver: Discovery 4 (09-14), Range Rover (09-14), Range Rover Sport (09-14)

#### ENGINE;

3.0 TDV6:

306DT



## 4. INSTRUCTIONS

- **NOTE:** The Sealey VSE5312 Fuel Pump Holding Tool should be used in conjunction with the Sealey VSE5000A Setting and locking Kit. **4.1. REMOVAL**
- 4.1.1. Remove the rear engine cover and right hand bulkhead cover.
- 4.1.2. Disconnect and seal off the EGR coolant hoses.
- 4.1.3. Remove steering column lower joint bolt and disconnect the steering angle sensor multi-plug.
- 4.1.4. Remove steering rack mounting bolts to gain access to starter motor, remove starter motor
- 4.1.5. Remove the high-pressure fuel pump belt cover.
- 4.1.6. Turn the crankshaft clockwise until the timing marks are aligned.
- 4.1.7. Fit the appropriate Flywheel Locking Tool from the VSE5000A Setting and locking Kit, and secure it using a starter motor bolt.
- 4.1.8. Remove the high fuel pump tensioner, and tensioner pulley.
- 4.1.9. Remove the high-pressure fuel pump belt.
- NOTES:

The high-pressure fuel pump rotates in an anti-clockwise direction when viewed from the rear of the engine.

Early engines had timing marks on the high pressure pump drive belt and pulleys which must be aligned, these early variants also have elongated camshaft sprocket bolt holes. On later variants the fuel pump is not timed to the engine and therefore it has no timing marks and does not have adjustable pulleys.

Fig.1 shows the early engine variant with adjustable pulleys and the timing mark locations indicated.

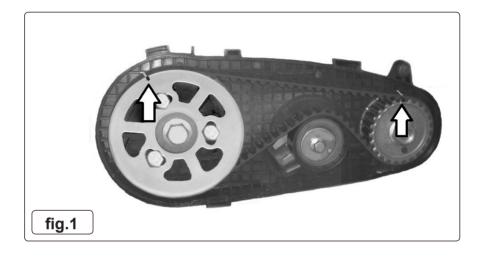
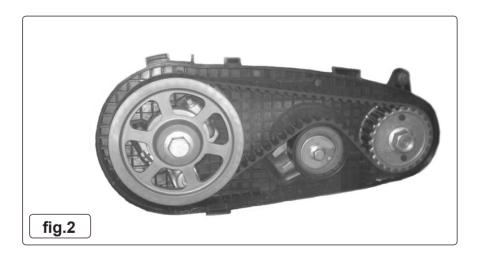


Fig.2 shows the later engine variant with fixed pulleys and no timing marks.



#### 4.2. Installation

NOTE: DO NOT remove the belt tensioner pulley locking pin before fitting tensioner pulley to engine.

- 4.2.1 Fit the new high-pressure fuel pump belt and the new tensioner pulley, these items should all be fitted together; ensure the timing marks on belt are aligned with the marks on sprockets. (If applicable to the engine variant).
- NOTE: Ensure lug on rear of the tensioner pulley is located in groove in cylinder head.
  4.2.2. Fit the VSE5312 Fuel Pump Sprocket Locking Tool ensuring its location pin is correctly located into the datum point on the engine and the pins are correctly located into the drive sprocket.
- 4.2.3. Slacken the camshaft rear sprocket securing bolts sufficiently to allow the sprocket to be moved within the slotted holes. (If applicable to the engine variant).
- 4.2.4. Tighten the tensioner pulley securing bolt to 23 Nm to the specified torque.
- 4.2.5. Remove the tensioner pulley locking pin, the tensioner is a self-tensioning type.

- 4.2.6. Tighten the tensioner pulley securing bolt to the specified torque.
- 4.2.7. Remove the tensioner pulley locking pin, the tensioner is a self-tensioning type.
- $\label{eq:2.8.1} \mbox{ 1.2.8. Tighten the camshaft rear sprocket securing bolt(s) to the specified torque.}$
- 4.2.9. Remove the VSE5312 Fuel Pump Sprocket Locking Tool.
- 4.2.10. Re-fit the high-pressure fuel pump belt cover.
- 4.2.11. Install the remaining components in the reverse order of removal.



Environmental Protection

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal of it according to local regulations.

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

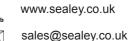
**IMPORTANT:** No liability is accepted for incorrect use of this product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.



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Original Language Version

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