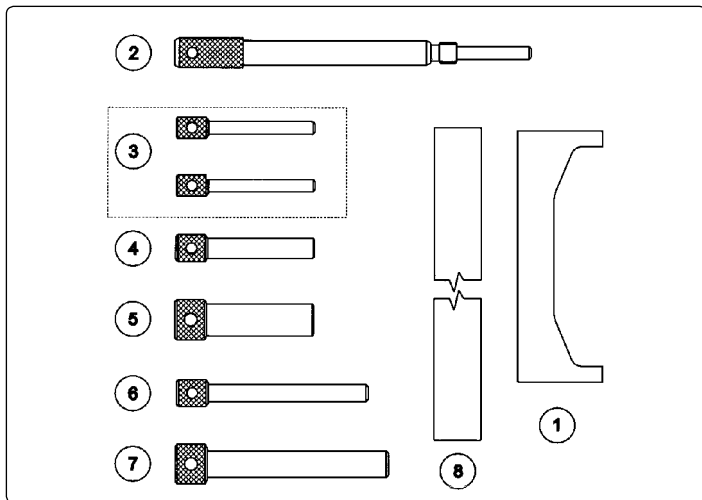


Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

**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.**

### 1. INTRODUCTION & CONTENTS

Designed to lock the crankshaft, camshaft and injection pump at their datum positions on a range of Ford and Mazda diesel engines.



Contents			OEM Number
Item	Part Number	Description	Ford
1.	VS101/1	Cam Setting Plate	21-105
2.	VS101/2	Crankshaft TDC Location Pin	21-104/303-193
3.	VS101/3	6.0 Locking Pins (*2 per kit)	23-019
4.	VS101/4	9.5 Locking Pin	21-123
5.	VS101/5	15.4 Locking Pin	23-047
6.	VS101/6	8.25 Locking Pin	23-029
7.	VS101/7	12.7 Locking Pin	23-020
8.	VS115/01	Cam Setting Plate	21-162B/303-367/303-376
-	VS1011/84	Case + Insert	

This information table provides the Vehicle Manufacturer's Specialised Tool references and the Sealey tool numbers covering the relevant service application.

\*These spares are sold as individual tools - not as pairs or multiples.

### 2. APPLICATIONS

#### Vehicle Applications:

#### Engine Codes:

Make:	Model:	Year:	1.8D/TD:	1.9D:	2.5D/T/TCi:
<b>Ford:</b>	Courier/Kombi	(89-02)	RFA	AFN	4EB
	Escort/Orion	(89-99)	RFM	AHN	4EC
	Fiesta	(89-02)	RFN	AVG	4ED
	Galaxy	(95-00)	RTA	1Z	4FA
	Mondeo	(93-00)	RTB		4FB
	Transit	(94-00)	RTC		4FC
					4FD
<b>Mazda:</b>	121	(95-97)	RTE		4GA
			RTF		4GB
			RTG		4GC
			RTH		4GD
			RTJ		4GE
			RTK		4GF
			RVA		4HA
					4HB
					4HC
					4HD

### 3. 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!** Incorrect or out of phase camshaft timing can result in contact between the valve head and the piston crown causing possible damage to the engine. Incorrect injection pump timing may cause excessive smoke emissions, poor starting and low output of power.

**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.

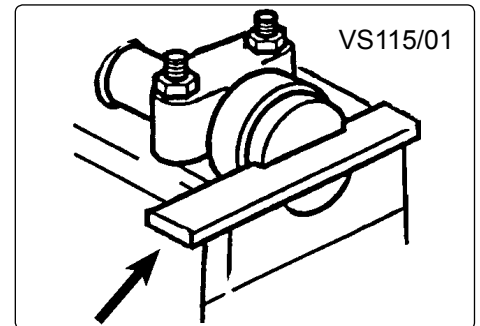
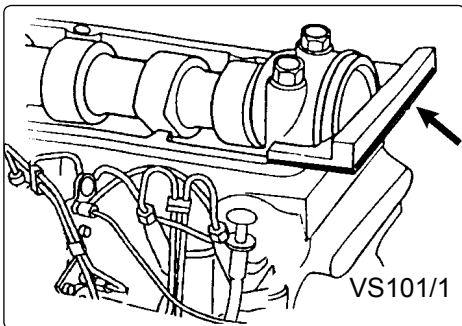
### 4. INSTRUCTIONS FOR USE

- WARNING!** Ensure you have read and understood Section 3 safety instructions before commencing.

#### 4.2. VS101/1, VS115/01 Camshaft Setting/Locking Plates - (see applications).

Camshaft setting/locking plates are used to accurately align a datum slot located in the end of the camshaft, with the top face of the camshaft housing to hold the camshaft at the TDC position.

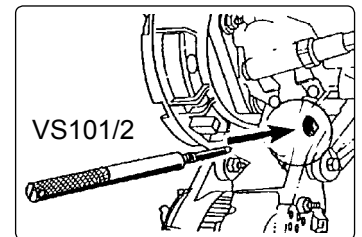
1. Follow the service manual instructions to remove the camshaft cover and timing belt cover.
2. Turn engine in normal direction of rotation until camshaft setting/locking plate can be inserted into machined slot in the end of the camshaft.
3. If required, feeler gauges of equal thickness can be inserted on either side of the plate until all free play has been eliminated. The camshaft is now locked in its timing position and service work can now be carried out.



#### 4.3. VS101/2 Crankshaft TDC Location Pin - Ford, Mazda. (see applications).

VS101/2 is designed to screw into the cylinder block and provide a stop for the crank to be positioned against in order to set the TDC position.

1. Turn engine in the normal direction of rotation until the timing mark on the injection pump sprocket lines up with the cast lug on the timing cover. Remove the plug from the cylinder block access hole and screw in VS101/2 Location Pin. Slowly turn the crankshaft clockwise until contact is made with the pin. Number 1 cylinder is now set at TDC on ignition stroke.

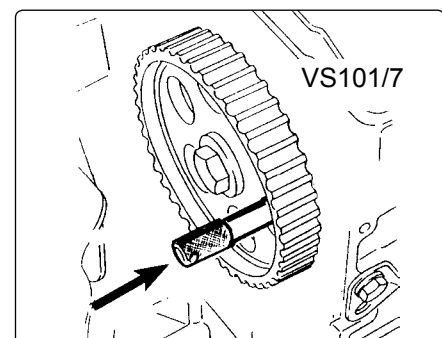
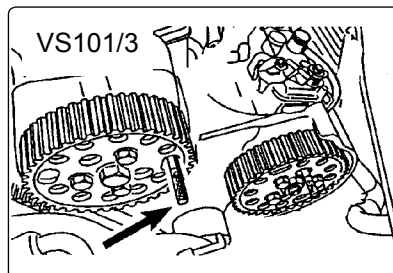


#### 4.4. VS101/3, VS101/4, VS101/5, VS101/6, VS101/7 Locking Pins - (see applications).

Locking pins are designed to pass through datum holes in timing belt pulleys into fixed timing holes on the engine. These can be used at the injection pump pulley, the camshaft sprocket or the flywheel. Follow the service manual instructions to remove the engine timing cover where necessary.

1. Insert the locking pin through the timing pulley or fixed timing hole.
2. Rotate the engine slowly in the normal direction of rotation until the point at which the pulley timing holes and the engine timing holes are aligned. The locking pins can now be engaged to lock the engine in the correct timing position.

**IMPORTANT** When the service application allows for injection pump timing on the vehicle check the pump timing using the appropriate Sealey Pump Timing Tool after belt replacement.



**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 this 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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