



INSTRUCTIONS FOR:

DIESEL ENGINE SETTING/LOCKING KIT FORD /JAGUAR 2.2D/3.2 TDCI - CHAIN DRIVE

MODEL NO: **VSE5863**

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. SAFETY



Refer to instruction manual



Wear eye protection

- WARNING!** Wear approved eye protection. Wear appropriate Personal Protective Equipment. A full range of Personal Protective Equipment is available from your Sealey dealer.
 - WARNING!** Ensure that Health & Safety, Local Authority Regulations and general workshop practice Regulations are adhered to when using tools.
 - DO NOT** use tools if damaged.
 - Maintain tools to ensure that they are in an adequate condition for safe use and optimum performance.
 - Ensure that a vehicle that has been raised by a jack is adequately supported. Use axle stands.
 - DO NOT** attempt to start or move a vehicle whilst in gear and with timing devices fitted.
 - Wear suitable clothing to avoid snagging. **DO NOT** wear jewellery. Tie back long hair.
 - Account for all tools, parts and components being used. **DO NOT** leave these in or near the engine. Return tools to suitable storage after use.
 - When not in use, store in a safe, dry childproof place.
 - Keep children and unauthorised persons away from the work area.
- 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 correct procedure and data.
- WARNING!** The warnings, cautions and instructions in this manual cannot cover all possible conditions and situations. The Operator / user must apply caution and common sense (good practical sense).
 - When timing an engine, always prevent the engine from being turned over. Use a notice and / or inhibit the engine.
 - WARNING!** Incorrect or out of phase camshaft timing can result in contact between the valve head and the piston crown. This will cause damage to the engine.

2. INTRODUCTION

Suitable for Ford 2.2TDCi Puma Duratorq chain drive diesel engines. Includes useful holding wrench for locating the crankshaft pulley correctly to allow for fitting of the TDC sensor.

3. CONTENTS

Item	Part No.	Description	OE Number
1.	VSE5863.01	Flywheel Locking Pin	303-698
2.	VSE5863.02	Crankshaft Holding Tool	303-1310
3.	VSE5863.03	Camshaft Locking Pins (2 in kit)	303-732



4. APPLICATIONS

Make:

Ford

Models:

Transit 2.2 TDCi (06-17)
Ranger (11-17)

Engines:

2.2 TDCi

CVFF	DRFA	QVFA
CVF5	DRFB	QWFA
CV55	DRFF	SRFA
CVR5	DR5F	SRFB
CYFA	DRR5	SRFC
CYFB	BGVAJPF	SRFD
CYFF	GBVAJQJ	SRFE
CYFG	PGFA	UHFA
CYF5	PGFB	UHR5
CYR5	P8FA	
	P8FB	

2.2TDCi EcoNetic

DRFC
DRFG
CYFC

2.2 TDCi HDT

USR6
UYR6

2.2 D

QJBA
BG

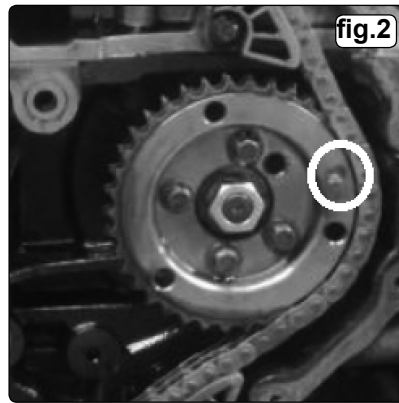
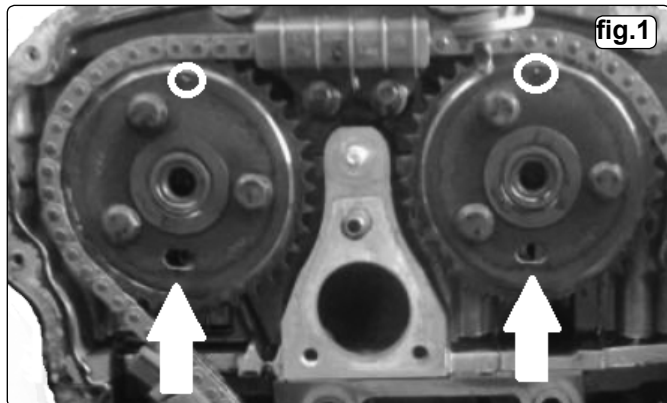
3.2TDCi

SAFA

5. INSTRUCTIONS

5.1. Chain Removal

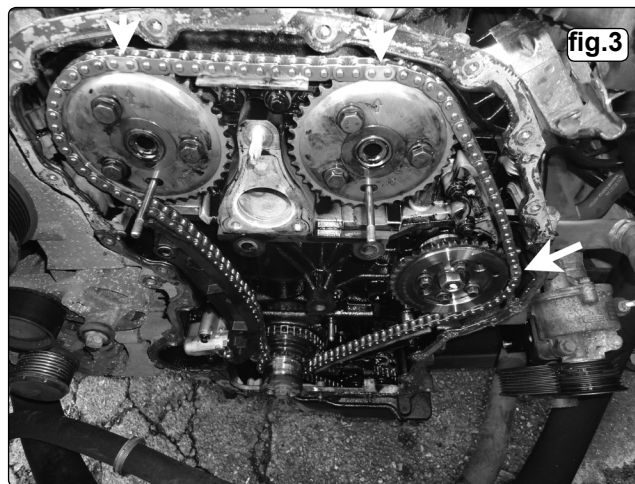
5.1.1. Turn the engine so that the camshaft sprocket timing marks are at the 12 o'clock position, see fig.1.



- 5.1.2. Fit the VSE5863.02 Crankshaft Holding Tool, with the engine in the timed position, this tool bolts to the end of the crankshaft and is bolted to the cylinder block at approximately the 8'clock position.
- 5.1.3. Remove the crankshaft position sensor and fit the VSE5863.01 Flywheel Locking Pin.
- 5.1.4. Ensure the timing mark on the high pressure fuel pump is located as shown, see fig.2.
- 5.1.5. Lock the camshaft sprockets using the VSE5863.03 Camshaft Locking Pins, through the holes, arrowed in fig.1. Lock the timing chain tensioner in a retracted position using a suitable locking pin.
- 5.1.6. Remove the VSE5863.02 Crankshaft Sprocket Holding Tool and the VSE5863.03 Camshaft Locking Pins.
- 5.1.7. The timing chain, timing chain tensioner and timing chain sprockets can now be removed.

5.2. Installation

- 5.2.1. Ensure the VSE5863.01 Flywheel Locking Pin is correctly located and the high pressure fuel pump mark is located as shown, refer to fig.2.
- 5.2.2. Fit the camshaft sprockets and timing chain, align the coloured chain links with the timing marks on the camshaft sprockets and high pressure fuel pump sprockets, refer to fig.3.
- 5.2.3. Lock the camshafts into position with the VSE5863.03 Camshaft Locking Pins.
- 5.2.4. Fit the tensioner rail and chain guides.
- 5.2.5. Fit the VSE5863.02 Crankshaft Holding Tool.
- 5.2.6. Make sure the timing chain is taught on its non-tensioned side and remove the timing chain tensioner locking device.
- 5.2.7. Tighten the camshaft sprocket fixing bolts to 35 Nm.
- 5.2.8. Remove all tooling, turn the crankshaft through two revolutions and recheck the timing.
- 5.2.9. Once the timing is confirmed as correct, remove all tooling and reassemble the engine.
- 5.2.10. The crankshaft pulley securing bolt tightening torque is 45 Nm +120 degrees.



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, drain off any fluids (if applicable) into approved containers and dispose of the product and the fluids according to local regulations.

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.



Sole UK Distributor, Sealey Group,
Kempson Way, Suffolk Business Park,
Bury St. Edmunds, Suffolk,
IP32 7AR



01284 757500

01284 703534



www.sealey.co.uk

sales@sealey.co.uk