



TIMING TOOL KIT FOR MERCEDES, CHRYSLER, JEEP - PETROL/DIESEL

MODEL NO: **VSE4802.V2**

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 & 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
Instructions



Wear Eye
Protection



Wear Protective
Clothing

1. SAFETY

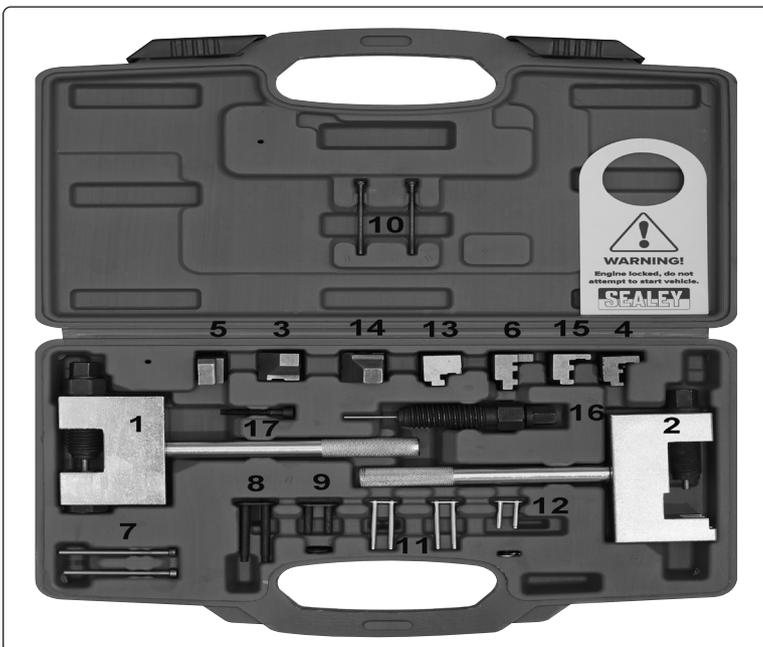
- WARNING!** Wear approved eye protection. Wear appropriate Personal Protective Equipment. A full range of Personal Protective Equipment is available from your Sealey stockist.
- WARNING!** Ensure that Health & Safety, Local Authority Regulations and general workshop practice Regulations are adhered 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 intended 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, conditions 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

Timing chain splitting and fitting tool kit. Enables timing chain replacement with the minimum of engine dismantling. Suitable for Mercedes chain drive engines, and some Chrysler and Jeep applications. The kit includes tools to split the chain and also the temporary chain links required to fit the new chain. Supplied in a storage case with instructions.

3. CONTENTS

Item	Part no.	Description	OE Tools ref Mercedes	OE Tools ref. Chrysler Jeep	Associated Tools
1	VSE4802-V2-01	Link removal tool	602589023300	9312	VSE4808
2	VSE4802-V2-02	Link assembly tool	602589003900		
3	VSE4802-V2-03	Swaging jaw (A)	103589016300	8947	
4	VSE4802-V2-04	Swaging jaw (B)	112589069300		
5	VSE4802-V2-05	Assembly link swaging jaw (A)	602589026300		
6	VSE4802-V2-06	Assembly link swaging jaw (B)	602589026300		
7	VSE4802-V2-07	Spare link removal pins (*2 per kit)	602589046301		
8	VSE4802-V2-08	Temporary link (A)	602589026300		
9	VSE4802-V2-09	Temporary link (B)	602589026300		
10	VSE4802-V2-10	Temporary threading link (A)	602589024000		
11	VSE4802-V2-11	Temporary threading link (B)	602589024000		
12	VSE4802-V2-12	End plates for VSE4802-11	602589024000		
13	VSE4802-V2-13	Swaging jaw (locating)	103589016300		
14	VSE4802-V2-14	4mm swaging jaw (press)	602589036300		
15	VSE4802-V2-15	Swaging jaw (locating)	103589016300		
16	VSE4802-V2-16	Link removal mandrel	602589046300		
17	VSE4802-V2-17	Securing bolt	N/A		



4. APPLICATIONS

Make: Chrysler 300C (05-11), PT Cruiser (02-09) **Jeep** Commander (05-11), Grand Cherokee (01-11) **Mercedes** A-Class (98-12), B-Class (05-12), C-Class (98-13), CL-Class (99-07), CLC-Class (08-12), CLK-Class (98-09), CLS (05-18), E-class (97-16), GLK-Class (08-12), G-Class (00-15), M-Class (98-07), R-Class (05-07), S-Class (98-13), SL-Class (98-07), Viano (03-10), Vito (03-10).

Engines										
1.4	1.5	1.6	1.7	1.7CDi	1.9	2.0	2.1CDI	2.2CDICRD	2.4	2.6
166.940	266.920	166.960	266.940	668.940	166.990	266.960	646.811	611.960	112.910	112.912
				668.941		266.980	646.812	611.961	112.911	112.913
				668.942			646.820	611.962		112.914
							646.821			112.915
							626.951			112.916
							626.961			
							626.962			
							626.963			
							626.966			

Engines								
2.7D CDICRD	2.8	3.0D CDI/CRD	3.2D CDI	3.2	3.9D CDI	4.3	4.0D CDI	5.0
612.961	112.920	642.830	613.960	112.940	628.960	113.940	628.962	113.960
612.962	112.921	642.832	613.961	112.942	628.961	113.941	629.910	113.961
612.965	112.922	642.834	648.960	112.943		113.942	629.911	113.963
612.967	112.923	642.836	648.961	112.944		113.943		113.964
647.961		646.838		112.946		113.948		113.965
		642.850		112.947				113.966
		642.852		112.951				113.967
		642.853		112.953				113.968
		642.854		112.955				113.969
		642.856						113.971
		642.858						
		642.862						
		642.868						
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		642.970						
		642.990						

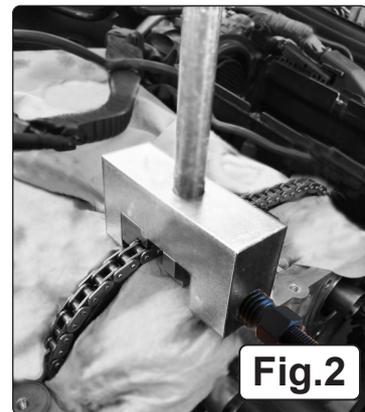
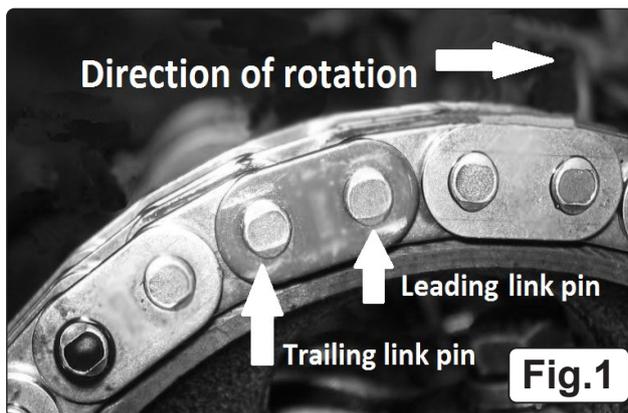
5. OPERATION

The VS802.V2 timing chain kit is a great time saving tool, it provides the tools to split the timing chain and make it possible to renew the chain with the minimum amount of engine dismantling.

- ▲ Due to the large number of applications this kit is suitable for, these instructions have been prepared as a general guide. It is strongly advised to follow the procedures in the relevant vehicle manufacturer's workshop manual with regard to timing chain replacement.

5.1. SPLITTING THE TIMING CHAIN

- 5.1.1. The leading link pin from one of the timing chain links will need to be removed. The leading link is identified as shown in fig.1.



Fit the VSE4802-V2-01 link removal tool ensuring that the correct sized removal pin is used, fig.2.

NOTE: Two sizes of removal pins are supplied.

- 5.1.2. Tighten the 19mm hex until the tool is holding the chain and then screw in the 13mm hex bolt to remove the chain link.

5.2. FITTING THE NEW TIMING CHAIN

Note: Follow the relevant manufacturer's specific instructions for the correct method of turning the engine and the direction of rotation.

- 5.2.1. Connect the new timing chain to the old timing chain using the relevant supplied temporary link. As the engine is turned the new timing chain replaces the old timing chain.
- 5.2.2. Once the old timing chain has been replaced with the new timing chain, the permanent link must be fitted and swaged over.
- 5.2.3. Using the VSE4802-V2-02 link assembly tool, the relevant chain guide block and also depending upon link pin, size either the VSE4802-V2-.03 or VSE4802-V2-14 magnetic Jaw press to press on the outer chain link plate by tightening the 13mm hex bolt, fig.3.
- 5.2.4. Release the 13mm Hex bolt, after ensuring the link end plate is pressed on correctly. Rotate the jaw press so the grooved section is positioned over the link pin. Tighten the 13mm Hex bolt to swage over the end of the link pin, repeat for the second link pin, see fig.4.
- 5.2.5. The ends of the link pins should appear as shown in fig1.1 If necessary repeat the swaging procedure.

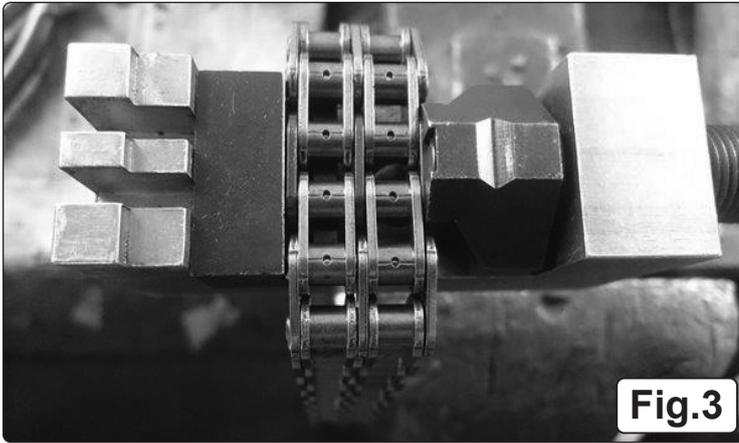


Fig.3

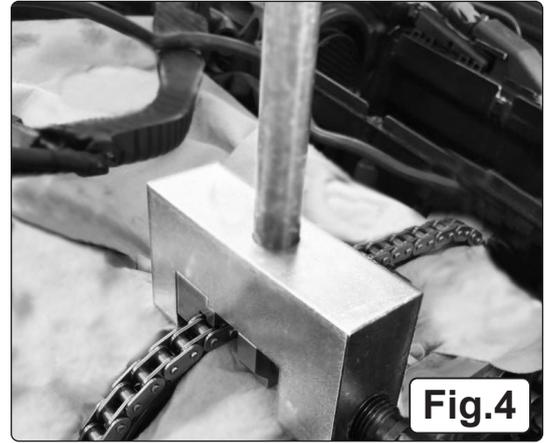


Fig.4

- 5.2.6. Release the 13mm Hex bolt, after ensuring the link end plate is pressed on correctly. Rotate the jaw press so the grooved section is positioned over the link pin. Tighten the 13mm Hex bolt to swage over the end of the link pin, repeat for the second link pin, see fig.4.
- 5.2.7. The ends of the link pins should appear as shown in fig.1 If necessary repeat the swaging procedure.



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



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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. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

Important: No Liability is accepted for incorrect use of this product.

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

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