



BMW OIL PUMP AND BALANCE SHAFT ALIGNMENT KIT

MODEL NO: **VSE6198**

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 instruction manual



Wear eye protection

1. SAFETY

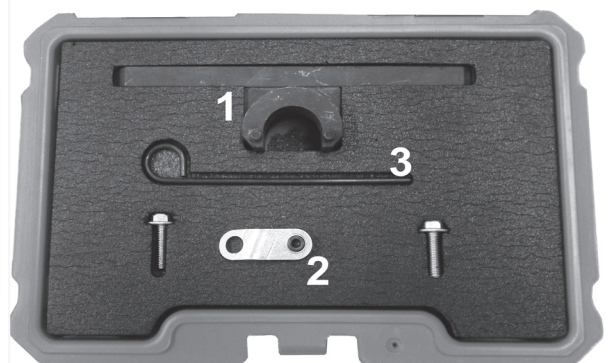
- WARNING!** Wear approved eye protection. Wear appropriate Personal Protective Equipment. A full range of Personal Protective Equipment is available from your Sealey stockist.
- WARNING!** Ensure that Health & Safety, Local Authority Regulations and general workshop practice Regulations are adhered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

Suitable for BMW N20 and N26 2.0L engines. Use in conjunction with VSE6188 Timing Tool Kit. Supplied in a storage case with instructions.

3. CONTENTS

Item	Sealey Part No.	Description	OEM Number
1	VSE6198.01	Sprocket locking tool + bolts	22-12-825
2	VSE6198.02	Balance shaft locking tool	23-18-117
3	VSE6198.03	Tensioner locking pin	11-4-120
Associated tools		VSE6188 Timing tool kit	

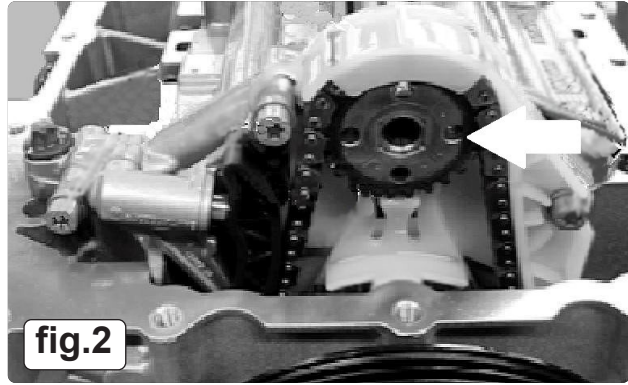
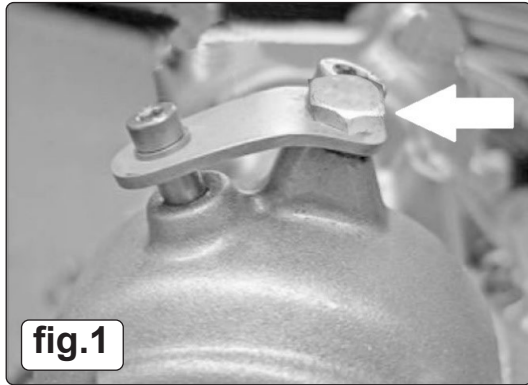


4. APPLICATIONS

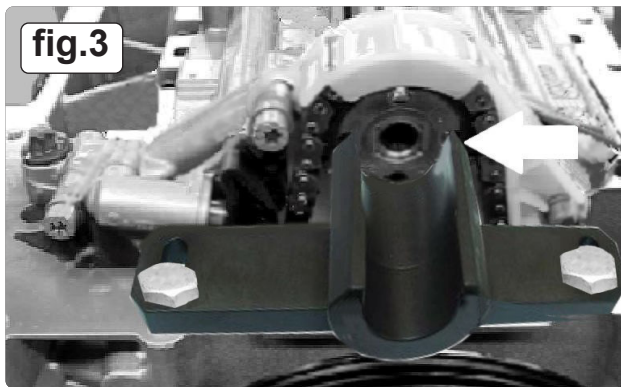
Models:	Engine codes:
BMW 1 Series: 125i (12-16)	2.0
BMW 2 Series: 220i Coupe F22; 228i (14-16), 220i Coupe (14-16), 228i Coupe (14-16), 220i Cabriolet (15-16)	N20B20, N20B20A, N20B20B, N20B20/UO, N20B20O0, N26B20
BMW 3 Series: 320i xDrive (12-16), 328i (12-15), 328i xDrive (12-15)	
BMW 4 Series: 420i F32 x-Drive Coupe (13-16), x-Drive Gran Coupe (14-16), 420i F33 Cabriolet (14-16)	
BMW 5 Series: 520i (11-17), 528i xDrive (11-17)	
BMW X1: xDrive 20i(11-15), sDrive 20i(11-15), xDrive 28i(11-15)	
BMW X3: xDrive 20i (11-17)	
BMW X4: xDrive 40i (14-18)	
BMW Z4: sDrive 20i (11-17), sDrive 28i (11-16)	

5. OPERATION

- 5.1. This Oil Pump/Balancer Shaft Positioning Kit is for positioning and holding the oil pump and balance shaft during engine repair procedures, it is be used in conjunction with the Sealey VSE6188 Timing Tool Kit.
Note: Setting the oil pump and balancer shaft requires removal of the engine sump.
- 5.2. Follow the timing procedures as described in the VSE6188 Timing Tool Kit.
- 5.3. Ensuring the engine is positioned correctly at TDC on cylinder number one.
- 5.4. Remove blanking plug from balancer shaft housing using a screwdriver.
- 5.5. Install VSE6198.02 Balancer Shaft Locking Tool and secure with a suitable bolt. (fig.1)
Note: If the Balancer Shaft Locking Tool cannot be correctly inserted the balancer shaft timing is not correct.



- 5.6. The oil pump drive sprocket holes should now be positioned as shown in figure 2.
- 5.7. Fit the VSE6198.01 Oil Pump Locking Tool ensuring it is correctly located in the holes in the sprocket and secure it to the housing with the bolts provided. (fig.3)
Note: The sprocket must be held with special tool VSE6198.01 in order to release central bolt. Do not exert excessive force when removing or tightening the central bolt.



- 5.8. Push back the chain tensioner and lock into place with the VSE6189.03 tensioner locking pin.



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.

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. 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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