

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



Wear protective gloves

1. SAFETY

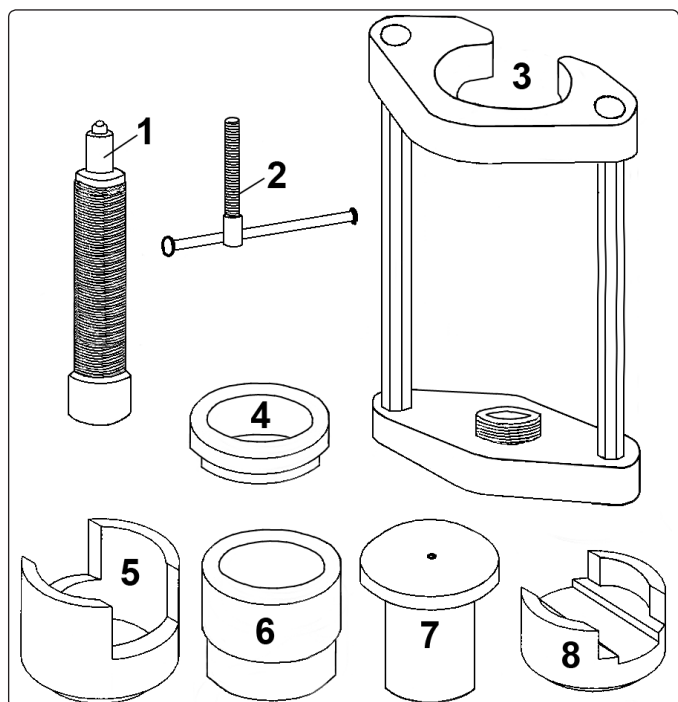
- WARNING!** Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools.
- IMPORTANT:** These instructions are provided as a guide only. Always refer to the vehicle manufacturer's service instructions, or a proprietary manual, to establish the current procedure and data, also any warnings or cautions particular to the vehicle.
- × **DO NOT** use the set if any parts are missing or damaged.
- × **DO NOT** use this tool for any purpose other than that for which it is designed.
- ✓ Switch off vehicle's ignition before commencing work under the car.
- ✓ Ensure the vehicle is adequately supported with axle stands, ramps and chocks as necessary.
- ✓ Wear approved eye and hand 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.
- IMPORTANT:** The force screw must be kept well lubricated.
- IMPORTANT:** Mark a line giving installation position of ball joint on control arm in order to show correct position when installing new ball joint (fig.2).
- ✓ Keep children and other unauthorised persons away from the working area.
- ✓ Maintain the tool components in good and clean condition for best and safest performance.
- ✓ When work on the vehicle is finished, ensure all connections on vehicle are restored, and that there are no tools left in or on the vehicle.
- ✓ Replace tools in the carrying case and store in a safe, dry, childproof location.
- ✓ Use only on vehicles specified.

2. INTRODUCTION

Remove and install press-fit control arm ball joints on BMW 3 Series E36 vehicles. Use in situ, there is no requirement to remove the control arm from the vehicle. Includes all necessary adaptors. Simple, easy hydraulic ram action.

3. CONTENTS

Item	Part No.	Description
1	VSE127H.01	Force screw
2	VSE127H.02	T-Handle
3	VSE127H.03	Main frame
4	VSE127H.04	Adaptor ring
5	VSE127H.05	Adaptor - A
6	VSE127H.06	Adaptor - B
7	VSE127H.07	Adaptor - C
8	VSE127H.08	Adaptor - D



4. INSTRUCTIONS

- ❑ **WARNING!** Ensure you have read and understood chapter 1 safety instructions before commencing.
With VSE127H ball joints can be quickly removed and installed in-situ, by selecting and arranging the adaptors within the frame in the specific order required for removal or installation, as detailed below. Force is applied with the force screw.
The adaptors are identified 5,6,7 and 8 as shown in fig.1. It will save time and make the assembling of the correct configuration for removal or installation easier, if the operator reads and becomes familiar with the assembly sequence beforehand.

4.1. PREPARATION REQUIRED TO REMOVE BALL JOINT.

- 4.1.1. Unscrew nut on stabiliser connection on the control arm.
- 4.1.2. Unscrew nut on the ball joint until it touches the spring strut and separate the ball joint from axle using a suitable tapered separator fork.
- 4.1.3. Unscrew and remove the ball joint nut.
- 4.1.4. Push the axle journal outward to give access to the ball joint/control arm, and support steering knuckle in position.

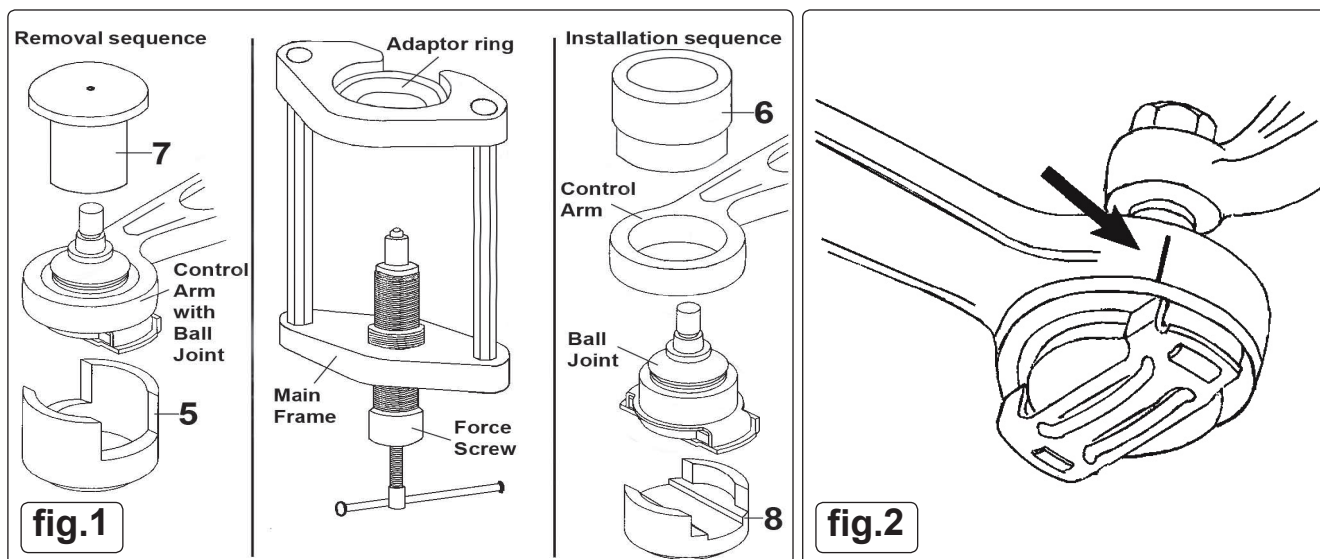
4.2. REMOVING BALL JOINT. (See fig.1. for adaptor assembly sequence).

- 4.2.1. Fit adaptor 7 over the ball joint gaiter and locate it in the rubber bonded joint recess.
- 4.2.2. Position the open end of adaptor 5 over the lower part of the ball joint to rest on underside of the control arm face.
- 4.2.3. Ensure the force screw is well lubricated and unscrew to give maximum opening within the frame.
- 4.2.4. Holding the adaptors in place, position the frame over the ball joint and adaptor assembly, locating the recess in adaptor 7 in the top of the frame.
- 4.2.5. Screw in force screw so that the bearing assembly aligns with the recess in adaptor 5.
- 4.2.6. Continue to screw in the force screw assembly to extract the ball joint out of the control arm.
- 4.2.7. Remove any rust from the lower face of the control arm using a wire brush and clean the bore.

× **DO NOT APPLY GREASE.** Control arm bore and ball joint must be clean and free from grease.

4.3. INSTALLING NEW BALL JOINT. (See fig.1 for adaptor assembly sequence).

- 4.4. Fit adaptor 6 over control arm (fig.1).
- 4.5. Insert adaptor and ball joint assembly into underside of control arm bore.
- ❑ **IMPORTANT:** It is essential to ensure the ball joint is correctly and accurately aligned with the installation position marked on the control arm prior to removal of old ball joint (fig.2). Place open end of adaptor 8 on the bottom of the ball joint and position the frame in alignment with the joint.
- 4.6. Lubricate the force screw well and screw it in until the bearing locates in the recess in the bottom of adaptor 8.
- 4.7. Continue to turn the force screw to press the ball joint FULLY HOME into the control arm.
- 4.8. **RE-ASSEMBLY.**
- 4.8.1. Screw a new self locking nut on ball joint.
- 4.8.2. To assist when tightening the nut, hold up the ball joint/control arm with a jack.
- 4.8.3. Replace self locking nut and fit washer on stabiliser connection on the control arm.
- 4.8.4. Tighten all nuts to specified torque



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.

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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