

# INSTRUCTIONS FOR: HYDRAULIC BALL JOINT INSTALLATION / REMOVAL KIT - BMW MODEL: VSE127H

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 INSTRUCTIONS

- WARNING! Ensure all health and safety, local authority, and general workshop practice regulations are strictly adhered to when using tools.
- Maintain this tool in a good, clean condition for the best and safest performance.
- ✓ Ensure the vehicle to be worked on is adequately supported with axle stands, ramps and chocks as necessary.
- 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 and parts being used and do not leave them in or on the vehicle.
- ▲ 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).
- X DO NOT use tools if damaged.
- ▲ IMPORTANT: These instructions are provided as a guide only. Always refer to the vehicle manufacturer's service instructions, or proprietary manual to establish the correct procedure and data.
- Only use on vehicles as specified.

### 2. INTRODUCTION

This tool is designed to remove and install press-fit control arm ball joints on BMW 3 series cars (E36). MOT specific application. Simple, easy hydraulic ram action. Use in-situ, there is no requirement to remove the control arm from the vehicle. Includes all necessary adaptors.

## 3. 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.

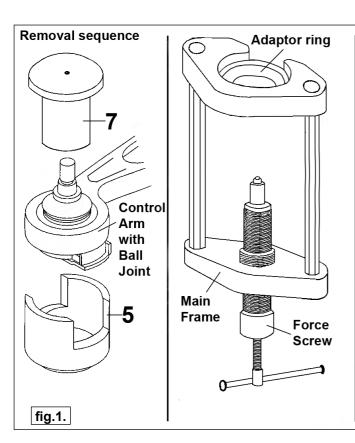
The adaptors are identified 5,6,7 and 8 as shown in fig.1. It will save time and make the assembling of the correct configuration for removal or installation easier, if the operator reads and becomes familiar with the assembly sequence beforehand.

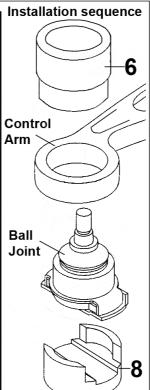
### 3.1. PREPARATION REQUIRED TO REMOVE BALL JOINT.

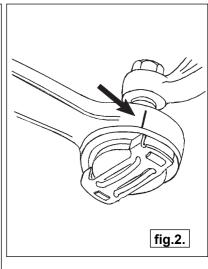
- 3.1.1. Unscrew nut on stabiliser connection on the control arm.
- 3.1.2. Unscrew nut on the ball joint until it touches the spring strut and separate the ball joint from axle using a suitable tapered separator fork.
- 3.1.3. Unscrew and remove the ball joint nut.
- 3.1.4. Push the axle journal outward to give access to the ball joint/control arm, and support steering knuckle in position.
- **3.2. REMOVING BALL JOINT.** (See fig.1. for adaptor assembly sequence).
- 3.2.1. Fit adaptor 7 over the ball joint gaiter and locate it in the rubber bonded joint recess.
- 3.2.2. Position the open end of adaptor 5 over the lower part of the ball joint to rest on underside of the control arm face.
- 3.2.3. Ensure the force screw is well lubricated and unscrew to give maximum opening within the frame.
- 3.2.4. 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.
- 3.2.5. Screw in force screw so that the bearing assembly aligns with the recess in adaptor 5.
- 3.2.6. Continue to screw in the force screw assembly to extract the ball joint out of the control arm.
- 3.2.7. 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.
- 3.3. INSTALLING NEW BALL JOINT. (See fig.1. for adaptor assembly sequence).
- 3.3.1. Fit adaptor 6 over control arm (fig.1.).
- 3.3.2. 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.
- 3.3.3. Lubricate the force screw well and screw it in until the bearing locates in the recess in the bottom of adaptor 8.
- 3.3.4. Continue to turn the force screw to press the ball joint FULLY HOME into the control arm.

### 3.4. RE-ASSEMBLY.

- 3.4.1. Screw a new self locking nut on ball joint.
- 3.4.2. To assist when tightening the nut, hold up the ball joint/control arm with a jack.
- 3.4.3. Replace self locking nut and fit washer on stabiliser connection on the control arm.
- 3.4.4. Tighten all nuts to specified torque.

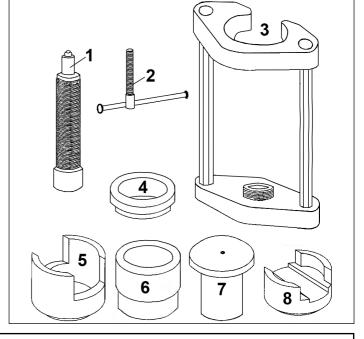






### PARTS

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



# 5. DECLARATION OF CONFORMITY

Declaration of Conformity We, the sole importer into the UK, declare that the product listed below is in conformity with the following standards and directives

**Hydraulic Ball Joint** Installation / Removal Kit - BMW Model: VSE127H

89/392/EEC Machinery Directive 93/68/EEC CE Marking Directive



The construction file for this product is held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd.

Signed by Tim Thompson



05 December 2006

For Jack Sealey Ltd. Sole importer into the UK of Sealey Professional Tools.

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 catalogue and latest promotions call us on 01284 757525 and leave your full name, address and postcode.



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