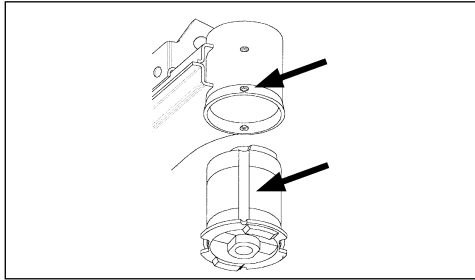
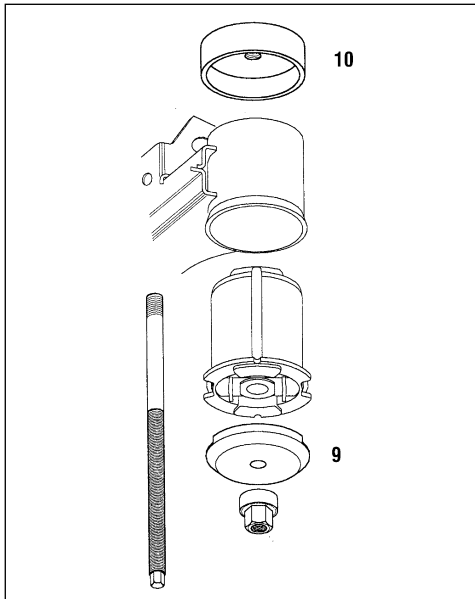


#### 4.4 Installing a new bush



Alignment of bush - 'grooves' and 'indents'

**IMPORTANT:** The correct alignment/orientation of the new bush in its housing is imperative. Close inspection of the bush will show it has location grooves down the length of its sides. The bush housing has internal indents, and the bush **MUST BE ALIGNED AND INSTALLED** with its grooves locating into the housing indents.



Installation assembly sequence (E32, E34)

**IMPORTANT:** Check that the assembly is correctly mounted onto the frame and bush correctly aligned.

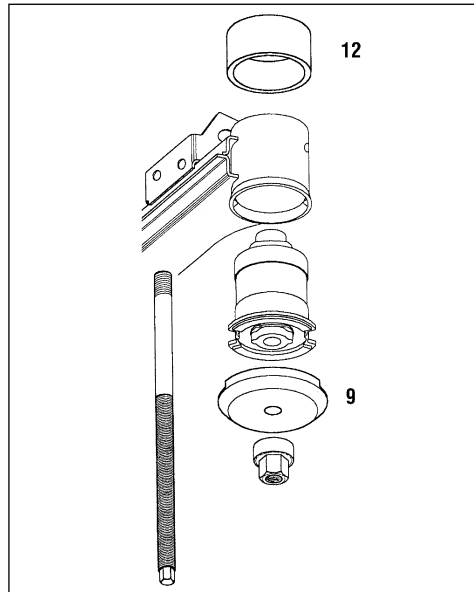
**NOTE:** Installation will be assisted if 'circolight' or equivalent is applied to the new bush. Grease or oil **MUST NOT** be used.

**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.

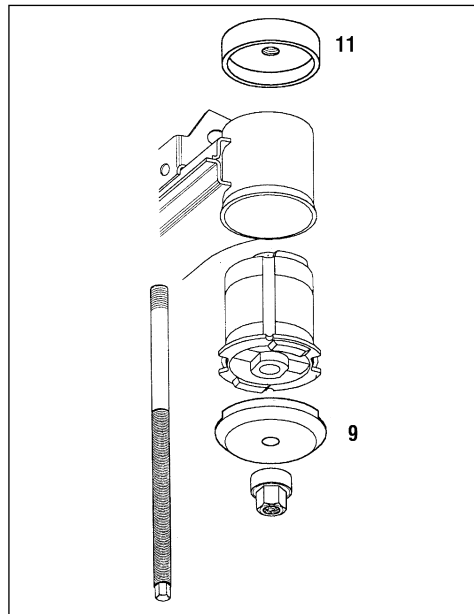
**IMPORTANT:** No liability is accepted for incorrect use of this product.

**WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim.

**INFORMATION:** For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.



Installation assembly sequence (E30)



Installation assembly sequence (E23, E24, E28)



## INSTRUCTIONS FOR: BMW REAR SUBFRAME BUSH TOOL MODEL NO: VS4465

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 Health and Safety, local authority and general workshop practice regulations are adhered to when using tools.
- X **DO NOT** use the kit if any parts are missing or damaged.
- X **DO NOT** use the subframe bush replacement tool for any purpose other than that for which it is designed.
- ✓ Maintain the tool components in good and clean condition for best and safest performance.
- ✓ Ensure that a vehicle which has been jacked up is adequately supported with axle stands.
- ✓ 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.
- ✓ Keep children and other unauthorised persons away from the working area.
- ✓ Ensure there is adequate lighting prior to using the subframe bush replacement tool.

**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.

### 2. INTRODUCTION & APPLICATIONS

#### 2.1 Introduction

With Kit VS4465 the axle bush can be removed and a replacement installed ON CAR, without the need to disassemble the rear axle carrier.

The kit includes a main Removal Frame which is used together with combinations of Adaptors and Removal Plates when removing the bush. Combinations of Installer Plates and Thrust Plate are used to install the new bush.

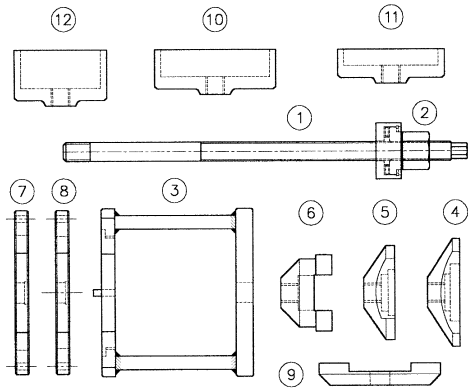
#### 2.2 Applications

<b>BMW 3 Series</b>	<b>(E30) 1982-90</b>
	<b>(E36) Compact</b>
	<b>(Z3)</b>
<b>BMW 5 Series</b>	<b>(E28) 1981-87</b>
	<b>(E34) 1986-94</b>
<b>BMW 6 Series</b>	<b>(E24) 1976-90</b>
<b>BMW 7 Series</b>	<b>(E23) 1977-85</b>
	<b>(E32) 1988-95</b>

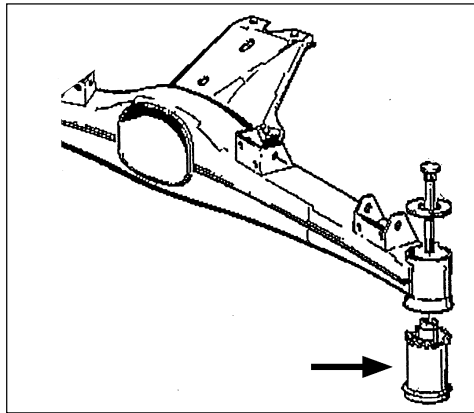


### 3. CONTENTS/PARTS LIST

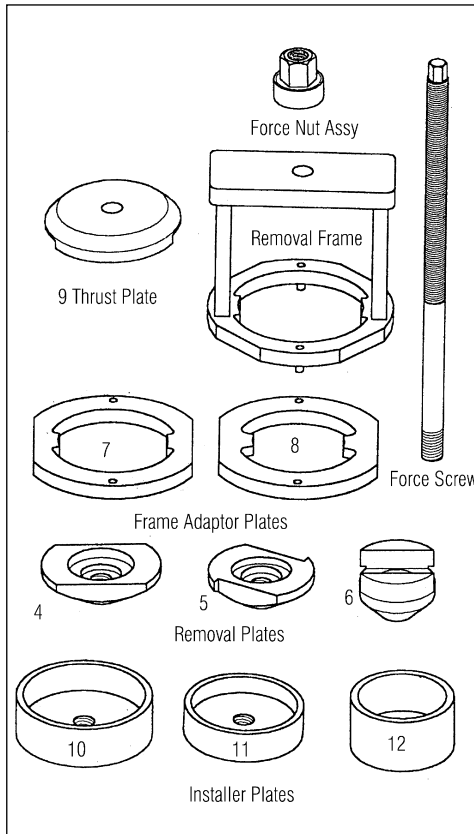
1	VS4465.01	Force Screw
2	VS4465.02	Force Nut Assembly
3	VS4465.03	Removal Frame
4	VS4465.04	Removal Plate (E32,E34)
5	VS4465.05	Removal Plate (E23, E24, E28)
6	VS4465.06	Removal Plate (E30)
7	VS4465.07	Frame Adaptor Plate (E23, E24, E28)
8	VS4465.08	Frame Adaptor Plate (E30)
9	VS4465.09	Thrust Plate
10	VS4465.10	Installer Plate (E32, E34)
11	VS4465.11	Installer Plate (E23, E24, E28)
12	VS4465.12	Installer Plate (E30)
--	VS4465.84	Case + Insert



**IMPORTANT:** Care should be taken when selecting the Adaptor/Plates to ensure they are appropriate for the model being worked on. Use of incorrect parts will damage the car and the tool see - Plate/Adaptor Identification Guide below.



Rear axle subframe bush.



### 4. INSTRUCTIONS

#### 4.1 VS4465 Kit comprises

- Force Screw
- Force Nut Assembly
- Removal Frame
- Frame Adaptor Plates (2 sizes)
- Removal Plates (3 sizes)
- Thrust Plate
- Installer Plates (3 sizes)

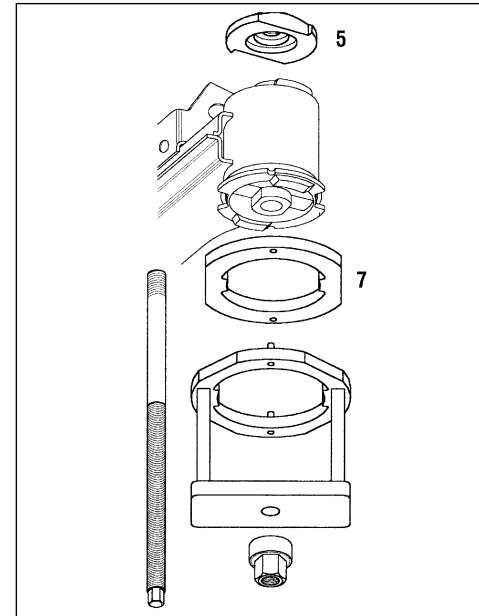
The Force Nut Assembly incorporates a needle bearing to assist the powerful action required to remove and install bushes.

**ALWAYS KEEP FORCE SCREW WELL LUBRICATED**

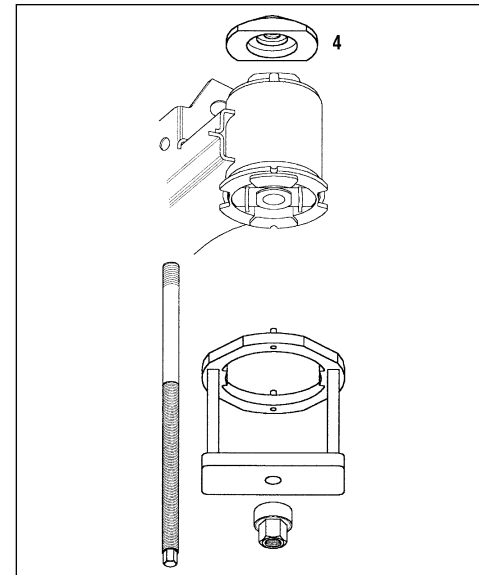
**DO NOT USE AIR TOOLS**

4.2 VS4465 Kit covers a number of BMW car series with both the removal and installer plates applying to specific models. The Plates are marked/identified with numbers 4, 5, 6 (Removal), 7, 8 (Frame Adaptors), 9 (Thrust Plate), 10, 11, 12 (Installation).

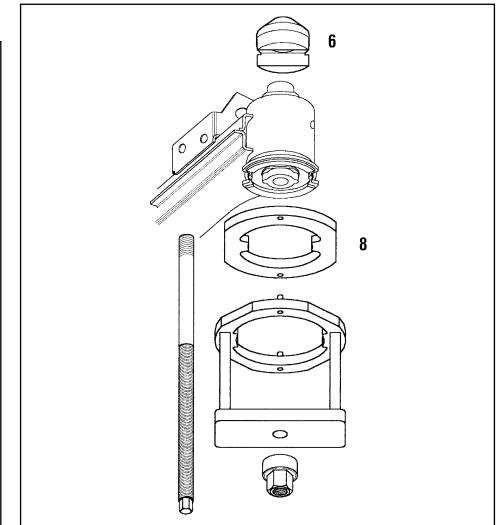
### 4.3 Removing the old bush



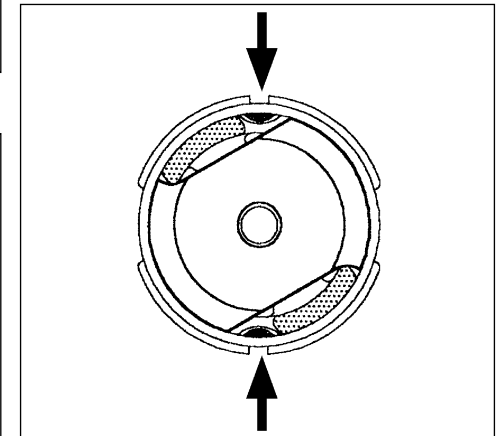
Removal assembly sequence (E23, E24, E28)



Removal assembly sequence (E32, E34)



Removal assembly sequence (E30)



**Removal Plate MUST BE positioned correctly on top of bush to avoid internal indents in housing**

**IMPORTANT:** The bush housing has internal indents which are used to correctly align the bush in the housing, (grooves running down the sides of the bush align with indents during installation). When correctly aligned, on the top of the bush, the shaped sides of the Removal Plates are specifically designed to avoid contact with the indents as the plate is pulled through the housing bore to remove the bush. It is therefore imperative that the Removal Plate is positioned correctly on top of the bush.

		Sole UK Distributor Sealey Group, Bury St. Edmunds, Suffolk.	01284 757500		<a href="http://www.sealey.co.uk">www.sealey.co.uk</a>
				01284 703534	