

# **INSTRUCTIONS FOR:**

# BEARING & BUSH REMOVAL/ INSTALLATION KIT 26pcs

MODEL No: VS7023A

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 THIS 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

#### 1.1 GENERAL SAFETY

- □ WARNING! Ensure Health & Safety, local authority, and general workshop practice regulations are adhered to when using this tool.
- ☐ **WARNING!** Familiarise yourself with the specific applications and limitations of the kit, as well as any potential hazards.
- ✓ This kit should be used in conjunction with inspection maintenance procedures recommended in the vehicle manufacturer's manual.
- ✓ Ensure that the kit is correct for the task.
- ✓ Wear the appropriate personal protective equipment for the task. A full range is available from your Sealey dealer.
- X DO NOT use the kit for any purpose other than that for which it is designed.
- ✓ Ensure that the vehicle is properly supported with axle stands before working under the vehicle.
- ✓ Ensure there is adequate lighting prior to using the kit. A range of inspection lamps are available from your Sealey dealer.
- √ Keep children and unauthorised persons away from the working area.
- **X DO NOT** use the kit if any parts are damaged or missing, as this may cause failure and/or personal injury.
- **X DO NOT** use the kit when you are tired, or under the influence of alcohol, drugs or intoxicating medication.

✓ After use, store in a safe, dry childproof area.

The force screw maximum recommended torque is 155Nm (M16X1.5), 99Nm (M14X1.5), 60Nm (M12X1.5), 33Nm (M10X1.5). Exceeding these torque values may shorten the life of the force screws. The force screws are considered to be consumable items and are NOT covered under warranty.

ALWAYS KEEP FORCE SCREW WELL LUBRICATED. MOLYBDENUM/ COPPER BASED RECOMMENDED.



DO NOT USE AIR TOOLS



# 2. INTRODUCTION

Comprehensive kit for fast and effective in-situ removal/installation of wheel bearings/suspension bushes and seals. Reduces the possibility of damaging the bearing/suspension housings. Supplied with 4 stepped end plates and 4 force screws in carry case. Plates and sleeves can also be used in a standard workshop press when in-situ access isn't possible.

# 3. CONTENTS

# 3.1 End Plates (Fig.1)

Two plates with each one having a stepped side marked 'A' and a stepped side marked 'B'

### 3.2 Force Screws (Fig.2)

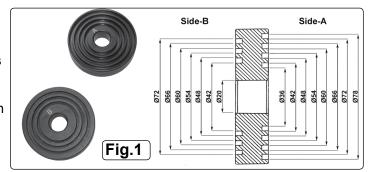
Four different diameter force screws, each 450mm in length. Each force screw is supplied with two nuts and two thrust washers.

#### 3.3 'A' Sleeves (Fig.3)

Eleven different diameter gold coloured sleeves, with a stepped end for use with side-A of the end plates and a force end with U-shaped inspection slot.

#### 3.4 'B' Sleeves (Fig.4)

Nine different diameter silver coloured sleeves, with a stepped end for use with side-B of the end plates and a force end with U-shaped inspection slot.



#### 4. OPERATION

# 4.1 Bush/Bearing Removal (Fig.5)

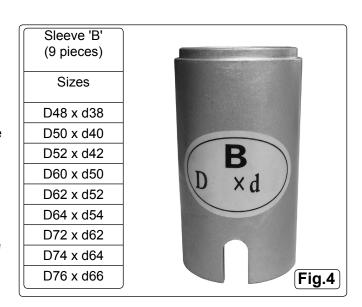
- 4.1.1 Select a sleeve that will sit square on the bearing/bush housing and will allow the bush/bearing to be extracted without interference. Ensure that only the force end of the sleeve with the U-shape inspection slot is used to sit on the bush/bearing housing. The stepped end of the sleeve should be used to locate in the end plate.
- 4.1.2 Select a second sleeve that will sit square on the outer ring of the bearing/bush and will pass through the bearing/bush housing without interference. Ensure that only the force end of the sleeve with the U-shape inspection slot is used to sit on the outer ring of the bush/bearing. The stepped end of the sleeve should be used to locate in the end plate.
- 4.1.3 Remove the nuts and thrust washers and pass the force screw half way through the bush/bearing centre hole. Lubricate the force screw before use.
- **Note!** Always use the largest diameter force screw available that will fit through the centre of the bush/bearing.
- 4.1.4 Fit the end plates to the stepped ends of the selected sleeves. Ensure that side-A is only used for 'A' sleeves and side-B is only used for 'B' sleeves.
- 4.1.5 Slide the assembled end plates and sleeves over the force screw and fit the thrust washers and nuts. Progressively tighten the nuts whilst locating the sleeves squarely on the bush/bearing housing and the bush/bearing outer ring. Once the sleeves are square on the housing and outer ring, tighten the nuts and check that the thrust washers are centralised in the end plates.
- 4.1.6 Using the appropriate size ring spanners for the force screw nuts, gradually tighten the force screw nuts to drive the bush/bearing from the housing. DO NOT use air tools to operate the force screw nuts. DO NOT apply more than 150Nm torque to the force screw nuts.
- 4.1.7 Once the bush/bearing has been successfully removed, clean the components used and return them to the carry case.

# 4.2 Bush/Bearing Installation (Fig.5)

- 4.2.1 Select the appropriate sized sleeves for the housing and bush/bearing as described in Section 4.1.
- 4.2.2 Prior to installing the bush/bearing clean the inside of the housing with abrasive cloth to ensure that it is free from debris and corrosion.
- 4.2.3 Lightly oil the outer ring of the bush/bearing to be installed and using a hammer, gently tap around the outer ring of the bush/bearing to locate it into the housing. Care should be taken to ensure that the bush/bearing is square to the housing when installing.
- **Note!** Always use the largest diameter force screw available that will fit through the centre of the bush/bearing.
- 4.2.4 Lubricate the force screw and assemble the kit as described in Section 4.1 and as shown in Fig.5. Once the sleeves are square on the housing and outer ring, tighten the nuts and check that the thrust washers are centralised in the end plates.

| 450mm long<br>Force Screw<br>(4-pieces)<br>Sizes/Torque* | * Max recommended torque (lubricated). | No.          |
|--|--|--------------|
| M10X1.5/ 33Nm  |  |              |
| M12X1.5/ 60Nm  |  |              |
| M14X1.5/ 99Nm  |  | <b>E</b> : 0 |
| M16X1.5/155Nm  | Fig.2                                  |              |

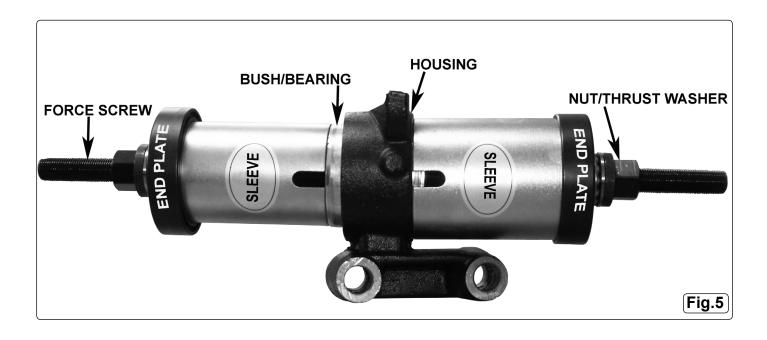
| Sleeve 'A'  |              |
|-------------|--------------|
| (11 pieces) |              |
| , , ,       |              |
| Sizes       |              |
|             |              |
| D44 x d34   |              |
| D46 x d36   |              |
| D54 x d44   |              |
| D56 x d46   |              |
| D58 x d48   | (A)          |
| D66 x d56   | $D \times d$ |
| D68 x d58   |              |
| D70 x d60   |              |
| D78 x d68   |              |
| D80 x d70   |              |
| D82 x d72   | Fig.3        |
|             | Fig.5        |



- 4.2.5 Using the appropriate size ring spanners for the force screw nuts, gradually tighten the force screw nuts to drive the bush/bearing into the housing. Ensure that the bush/bearing is square to the housing during installation. **DO NOT** use air tools to operate the force screw nuts. **DO NOT** apply more than 150Nm torque to the force screw nuts.
- 4.2.6 Once the bush/bearing has been successfully installed, clean the components used and return them to the carry case.

# 4.3 Using with a workshop press

4.3.1 Where in-situ access isn't possible, the end plates and sleeves can be used with a standard workshop press for bush/bearing removal and installation. To avoid damage to the end plates, it is recommended to use mild steel packing between the press and the end plate during workshop press operation.



Parts support is available for this product. To obtain a parts list and diagram please log on to www.sealey.co.uk, email sales@sealey.co.uk or phone 01284 757500

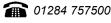
NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. IMPORTANT: No liability is accepted for incorrect use of this product.

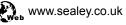
WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

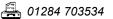
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