

# H.C.B-E2183

## UNIVERSAL REMOVE AND INSTALL SLEEVE KIT (26PCS)



**IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY.**

※ Warning! Ensure Health and Safety, local authority and general work shop practice regulations are adhered to when using tools.

※ DO NOT use tool if damaged.

※ Maintain tool in good and clean condition for best and safest performance.

※ WARNING! The warnings, caution and instructions referred to in this manual cannot cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.



**Operating Instructions**

- ≡ Universal application of step disc fits many kinds of different vehicles.
- ≡ Easy work to remove and install for :
  - Bearing bush
  - Silent bearing
  - Hydraulic bearing
  - Rubber bearing

**Contents:**

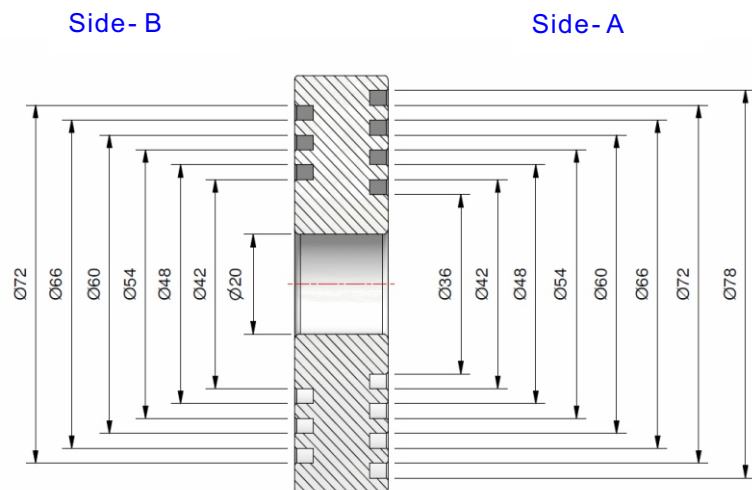
•Force Screw



<b>L:450mm</b> <b>(4 pieces)</b> <b>(with 27mm HEX nut)</b>
<b>Size</b>
M10 x P 1.5
M12 x P 2.0
M14 x P 2.0
M16 x P 2.5



• Step disc (2 pieces, each one has 2 sides as A & B)



**\*\* Special design for bolt, when the bolt is broken and you only just replace the bolt of c-clamp, not change the whole c-clamp set.**

- The C-clamp was forged, its material is SCM440 and hardness is HRC 38° -42°
- It contains heavy-duty C frame press, receiver tubes, and adapters that both install and remove pins.
- This tool set is designed for use on most cars and light trucks that have press-fit type ball joints.
- It will help the user remove and install ball joints without the need to remove the control arm from the vehicle.

**NOTE: Some cars and light trucks may have the upper ball joint spot-welded to the control arm. The weld must be cut before attempting to remove the ball joint.**



Sleeve 'A'(11 pcs) <b>Gold</b>
Sizes
D44 x d34
D46 x d36
D54 x d44
D56 x d46
D58 x d48
D66 x d56
D68 x d58
D70 x d60
D78 x d68
D80 x d70
D82 x d72



Sleeve 'B'(9 pieces) <b>Silver</b>
Sizes
D48 x d38
D50 x d40
D52 x d42
D60 x d50
D62 x d52
D64 x d54
D72 x d62
D74 x d64
D76 x d66

**Instruction:**

Step 1: Choose an available spindle, a step disc, and a sleeve for each A & B.

Step 2: Install needed contents and choose a 27mm wrench to make removing or installing work.

*NOTE: The special U-shape hole on each sleeve helps users to see the working.*

Step 3: After work, please place tools in store case.

**Bush/Bearing Removal**

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.

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.

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.*

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.

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.

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.

1.7 Once the bush/bearing has been successfully removed, clean the components used and return them to the carry case.

### ⚡ **Bush/Bearing Installation (Fig.5)**

2.1 Select the appropriate sized sleeves for the housing and bush/bearing as described in Section 4.1.

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.

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.

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.

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.

2.6 Once the bush/bearing has been successfully installed, clean the components used and return them to the carry case.

### ⚡ **Using with a workshop press**

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.

