


# R0000962E Bench assemble Y axis Components

Instructions for assembling components

 Difficulty **Hard**

 Duration **1 hour(s)**

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Comments

## Introduction

### Tools Required

Standard hex key set  
Fine emery tape  
solvent  
Standard drill set

### Parts Required

B0000086 Ball Bearing 15 D 32 D 9 Long + seals x 2  
B0000139 Double Angular Bearing 20 D 47 D 20.6 Long + seals x 1  
B0000236 90 Deg Grease Nipple M6 ST/ST x 1  
C0001122K Servo Motor: Beckhoff AM8032-1E10 (Keyed) x 1  
D0001926 Servo Drive Coupling M20 (Ø14mm) Beckhoff x 1  
D0006488 Y Leadscrew Sleeve x 1  
H0007789 Y Leadscrew x 1

## Step 1 - Unless otherwise stated

Use loctite 243 on all fasteners

Use loctite 572 on all threaded pneumatic connection

Pen mark all fasteners to show finalised



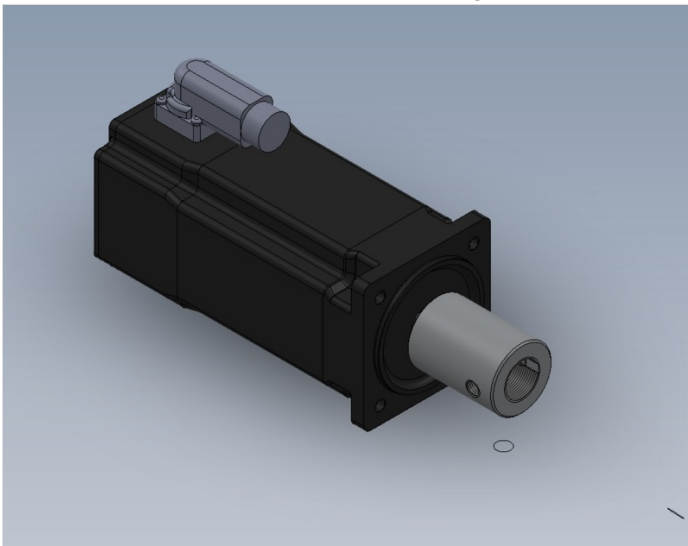
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## Step 2 - Check fit of D0001926

Ensure D0001926 Servo Drive Coupling M20 (Ø14mm) Beckhoff x 1  
fits onto C0001122K Servo Motor: Beckhoff AM8032-1E10 (Keyed) x 1

Fit should be a snug slide fit

Part can be reamed with hand reamer if fit is tight



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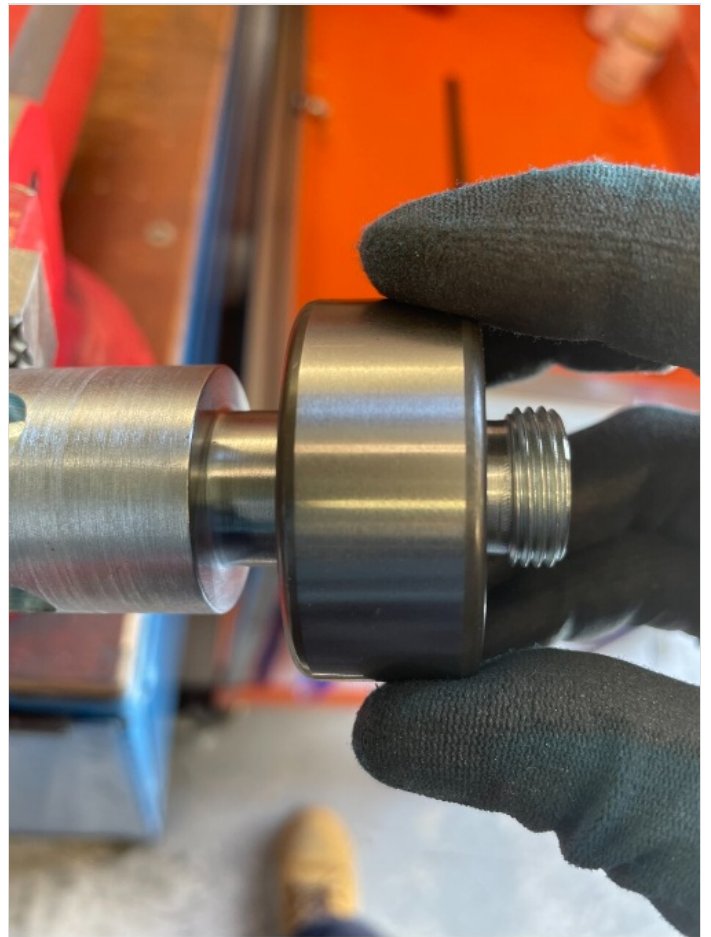
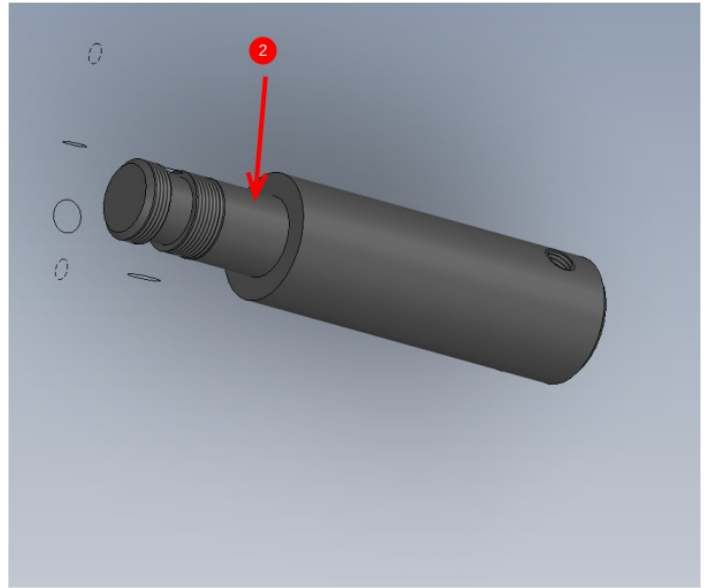
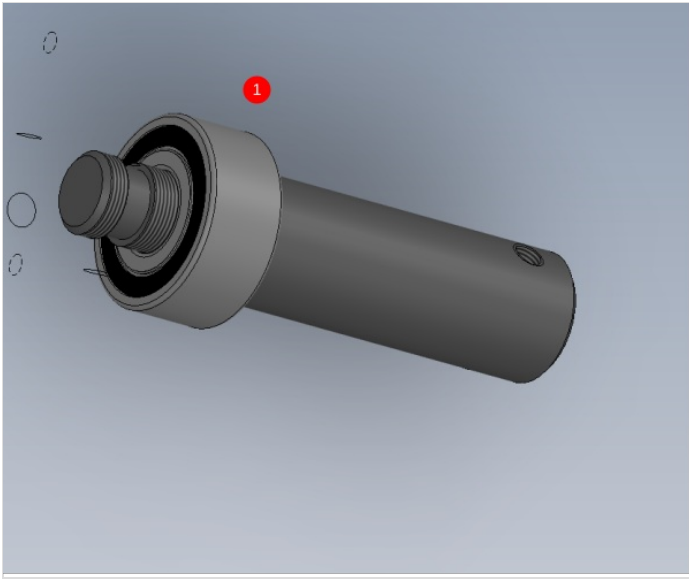
## Step 3 - Fit bearing

1 Check and adjust fit of B0000139 Double Angular Bearing 20 D 47 D 20.6 Long + seals x 1 onto D0006488 Y Leadscrew Sleeve x 1

2 Fit should be a smooth press fit onto sleeve. Indicated face can be polished down with fine emery to obtain desired fit




...Only polish a small amount at a time, to ensure to correct amount is taken of the sleeve



## Step 4 - Tension drive coupling

1 Add m8 socket caps as shown to hold assembly in vice

2 Use 2 off m8 long socket caps and Standard M8 nuts and lock onto drive coupling .

 ...Ensure end of socket cap doesn't touch inner part as rotation is required to tension

Tension using long M8s as leverage



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## Step 5 - Finalise

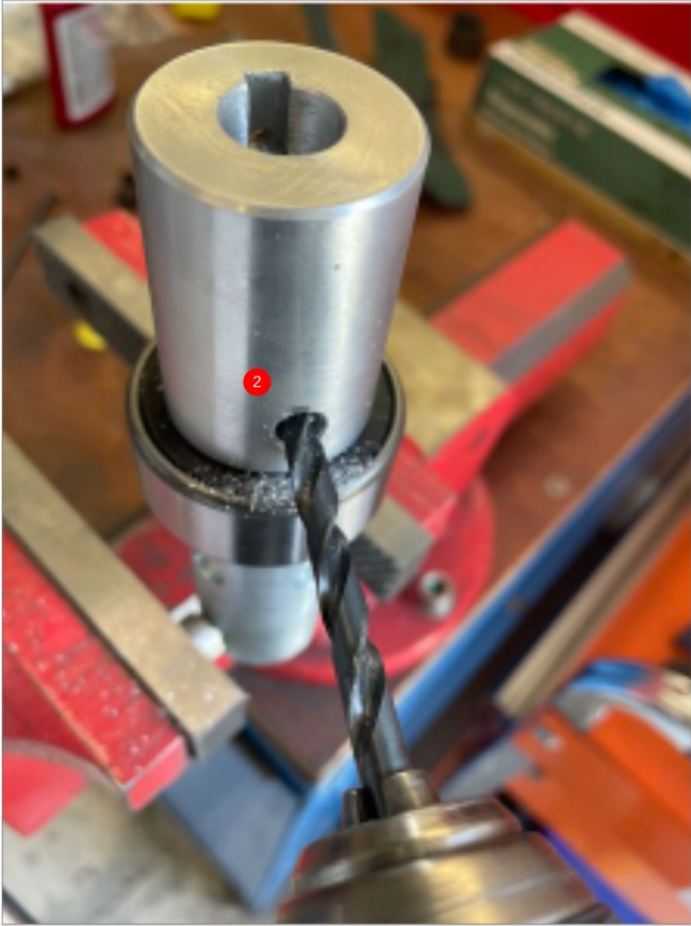
1 Remove 1 off Long M8 socket cap and tension an M8 x 12 kcp grub screw into the hole (do not add adhesive)

2 Remove second Long M8 socket cap and dimple inner shaft using 6.8mm drill  
Clean with compressed air and add M8x 8 kcp with adhesive and tension

3 Remove m8 x 12 kcp grub screw and repeat above step





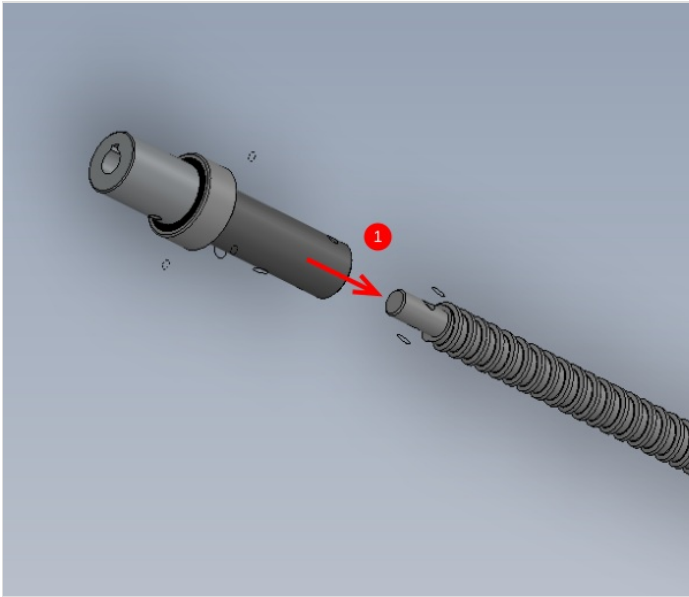




## Step 6 - Check fit of leadscrew to coupling

1 Check fit of coupling to leadscrew H0007789

2 Use reamer / Emery tape if fit is tight



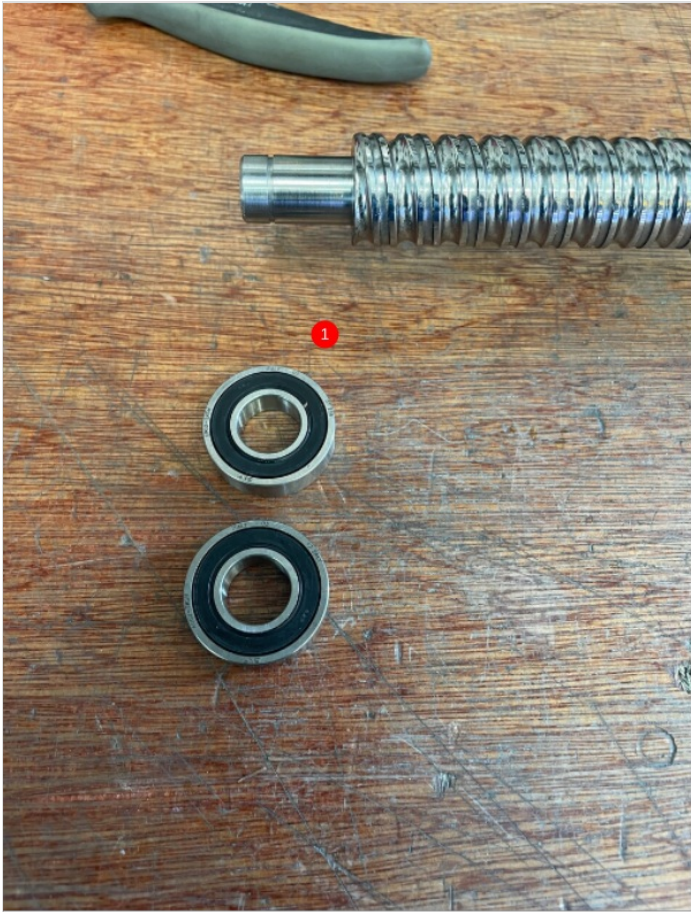
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## Step 7 - Check bearing fit

1 Check bearing B0000086 Ball Bearing 15 D 32 D 9 Long + seals fit is acceptable on leadscrew H0007789

2 Adjust with emery tape if fit is tight







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## Step 8 - Fit Grease nipple and check nut orientation

Fit B0000236 90 Deg Grease Nipple M6 ST/ST x 1 as shown

Check Leadscrew nut is orientated correctly , rotate using leadscrew jig if incorrectly orientated

