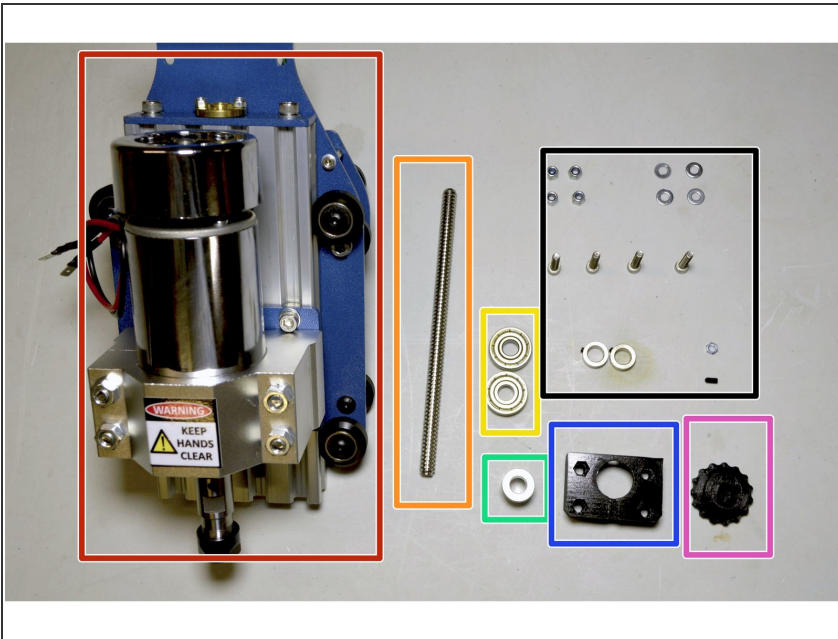


cron

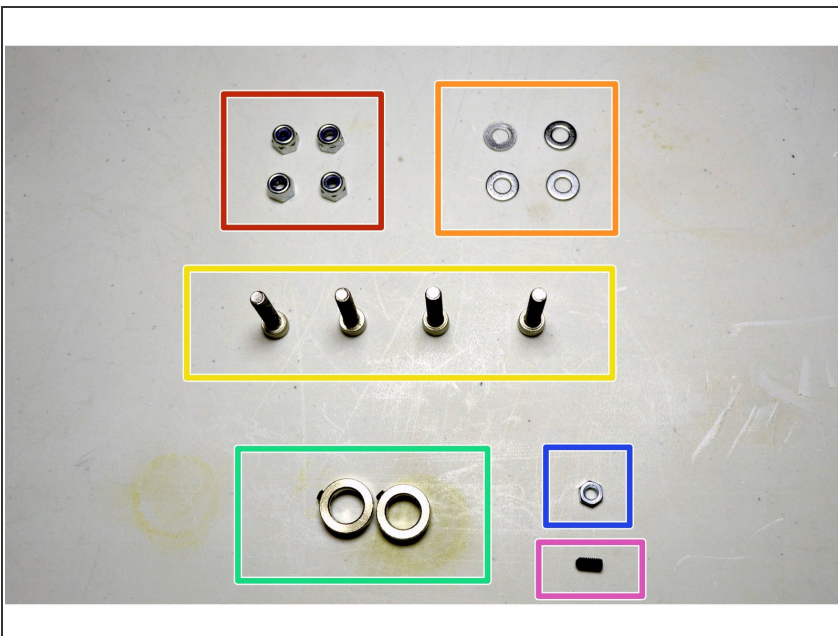
# 10. Assemble Z-Axis Lead Screw

Written By: Paul Cronje



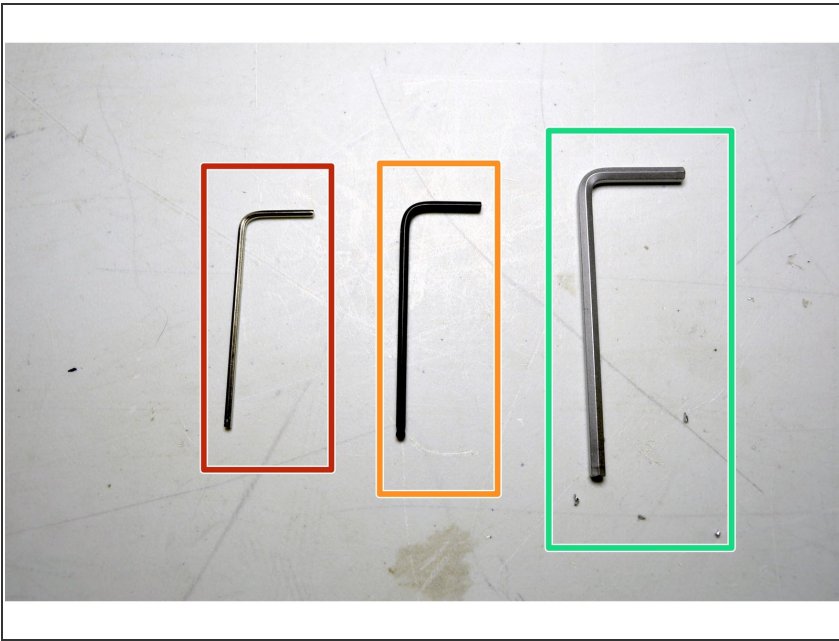
**Step 1 — Parts Required: 1**

- Spindle Z-Axis Assembly
- 8mm Lead screw
- 608 Bearing (2 Pcs)
- GT2 Pulley, 20 Teeth, 8mm Bore
- Z Bearing Block
- Z Knob
- Nuts & Bolts (See next step)

**Step 2 — Parts Required: 2**

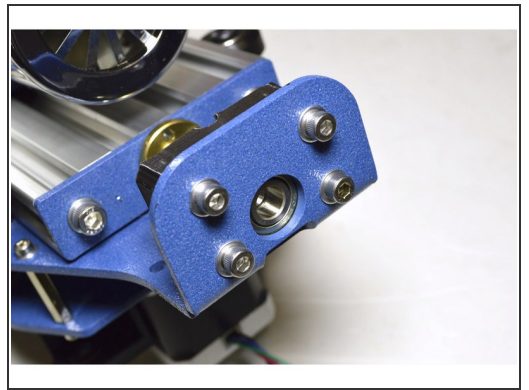
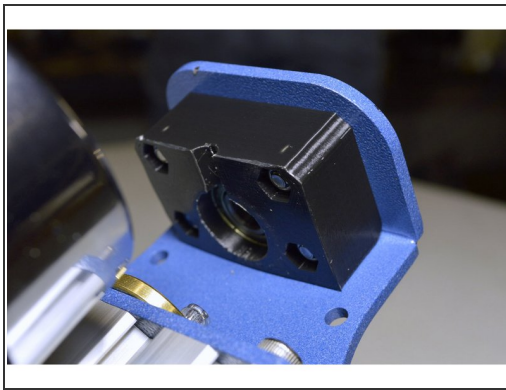
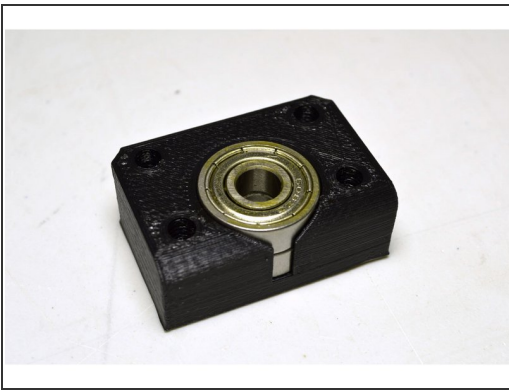
- M4 Lock Nut (4 Pcs)
- M4 Washer (4 Pcs)
- M4x20 Cap Screw (4 Pcs)
- 8mm Shaft Sleeve (2 Pcs)
- M3 Nut
- M3x6 Grub Screw

### Step 3 — Tools Required



- 1.5mm Allen Key
- 2mm Allen Key
- 3mm Allen Key

### Step 4 — Mount Bearing Block

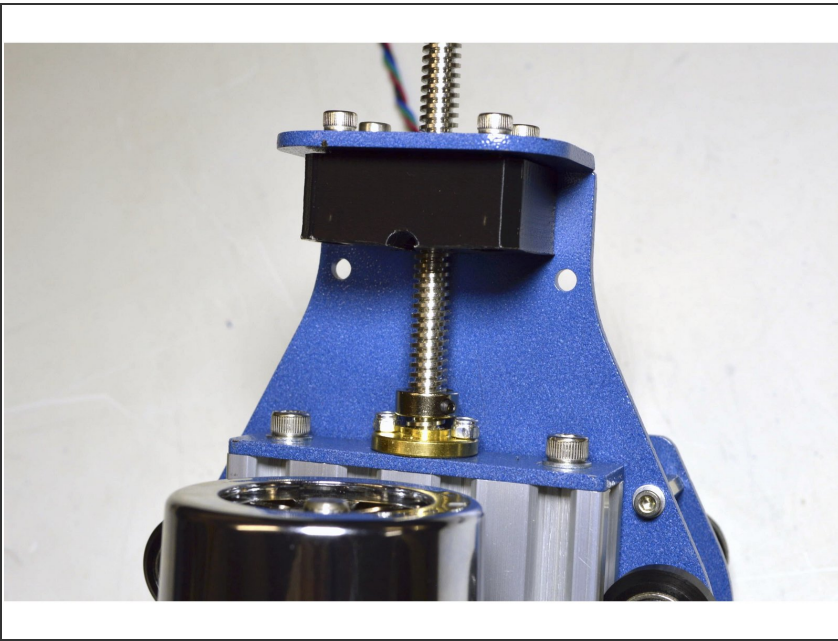


- Insert the 608 bearings (2 Pcs) into the printed bearing block
- Mount the bearing block onto the Spindle Z-Axis Assembly with the M4x20 cap screws (4 Pcs), M4 Washers (4 Pcs) and M4 Lock Nuts (4 Pcs)

**⚠ Do not fully tighten the M4 screws yet, the alignment needs to be done first**



## Step 5 — Insert the lead screw



- Insert the lead screw through the bearing block, through one 8mm Shaft Sleeve and screw it into the brass lead screw nut

## Step 6 — Prepare the Z-Knob



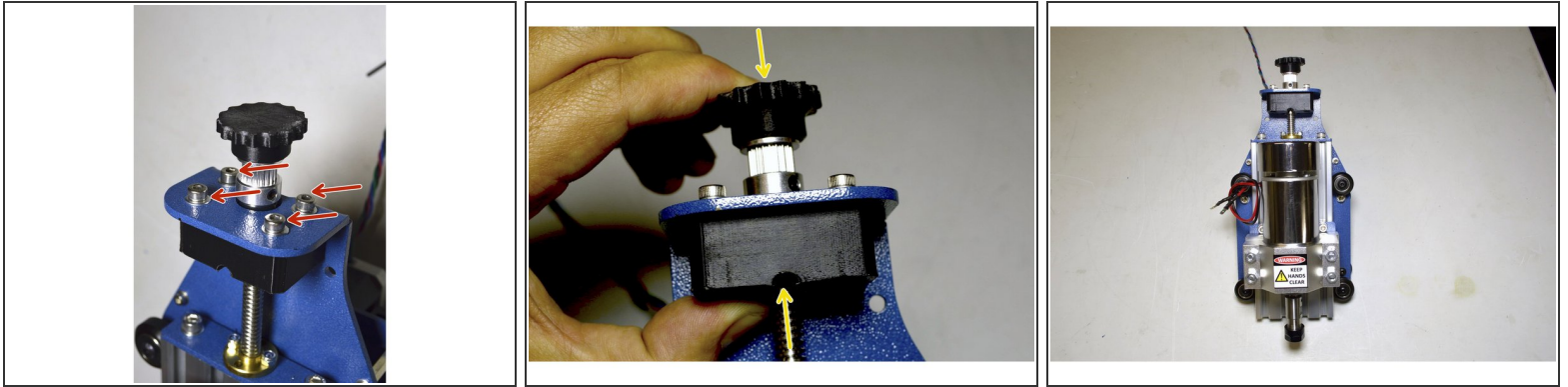
- Insert the M3 nut into the slot at the bottom on the Z-knob
- Screw the M3x6 grub screw into the M3 nut with the 1.5mm Allen Key

## Step 7 — Assemble Z-Knob



- Slide the other 8mm Shaft Sleeve, GT2 Pulley and Z-Knob onto the lead screw
- Mount the Z-knob onto the lead screw by tightening the M3 grub screw
- Slide the GT2 Pulley and the 8mm Shaft Sleeve upwards till it is against the Z-knob and tighten them

## Step 8 — Mount Lead Screw



- Tighten the M4x20 screws which mounts the bearing block
- Make sure not to over tighten these screws so that the Bearing block breaks
- Push the Z-knob and bottom collet towards each other, while tightening the bottom collet
- Make sure the lead screw can turn easily and that there is no vertical play on the spindle assembly, else the collets needs to be adjusted