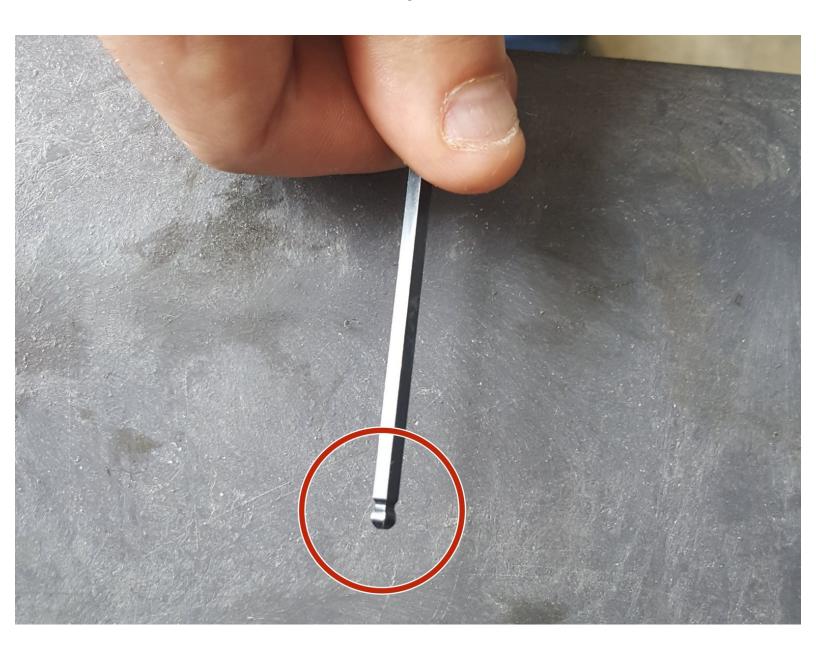


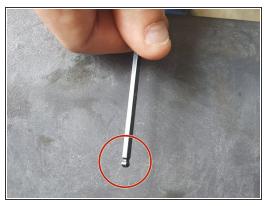
# Disassembling your BoXZY Z axis bearings

This guide will show your the procedure for removing the two(2) vertical bearings for the Z axis, attached to the front of your BoXZY build plate

Written By: BoXZY



#### Step 1 — First things first

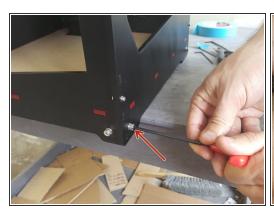


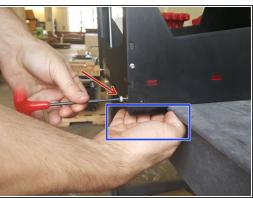




- First press your BoXZY e-stop and remove all the cables attached to your BoXZY
- Next, use a ball-ended Allen Wrench to remove the bolt at the top of your Z axis Vertical rod, as indicated by the red circle in the first image
  - To safely work on your BoXZY Z axis rods and bearings, work on only one side at a time
- Next, you will move your BoXZY to the edge of your work surface so that the front of your BoXZY
  hangs two inches over the edge of your work surface, this can be seen in the third image
- The process for removing your Z axis rod, bearing and mount will be the same for both sides of your Z axis supports
  - Do not remove the components from both sides at the same time, disassemble one side, do
    what you need to then reassemble it before working on the other side

#### Step 2 — Removing the Vertical rod

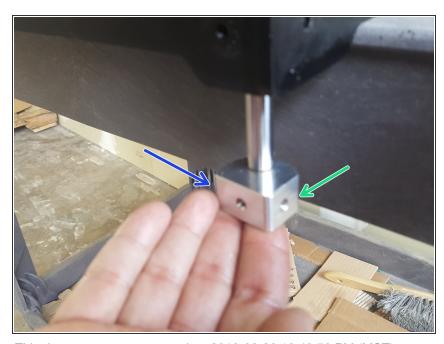






- With an Allen wrench remove the bolt on the side of your BoXZY, as indicated by the red arrow in the first image
- Place your hand underneath the corner of your BoXZY and press gently against the mount that we are removing
  - Now you can remove the bolt from the front of your BoXZY, as indicated by the red arrow in the second image
  - Slowly lower the mount you are holding underneath your BoXZY and pull it out of the bottom of your BoXZY

# Step 3 — The Z axis rod mount, inside the frame



This document was generated on 2019-09-26 10:40:56 PM (MST).

- Pay attention to the orientation of the mount at the bottom of the Z axis rod
  - There will be a wide side, indicated by the blue arrow and a short side, indicated by a green arrow in the image
  - When re-inserting this rod you will have to bolt the mount back on in this orientation

#### Step 4 — Removing the Bearing from the Build Plate







- With your Z axis rod and mount removed from One side of your build plate you can either follow our <u>Greasing the Bearings Guide</u> before reinstalling your rod in Part X of this guide or you can continue this guide to remove and replace your bearing
  - With an Allen wrench remove the four (4) bolts that attach the bearing to the Build Plate, as indicated by the red arrow in the second image
- Next, pull your bearing out of the build plate, notice how this bearing has a wider square end, which you unbolted
  - Now that you have your bearing removed you simply the insert the same bearing or a new bearing into the same location

## Step 5 — Re-inserting the Z axis rod

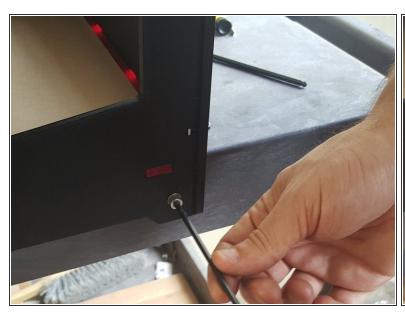






- With your old or new bearing inserted, insert the bolts and use an Allen Wrench to turn the bolts until they catch the threading on the build plate and leave the bolts not fully turned
- From the bottom of your BoXZY, reinsert the rod, be sure that the mount is facing the correct way,
   the Wide Side facing the front of the BoXZY and the Short Side facing the side of the BoXZY
  - Guide the rod through the bearing on your build plate and into the top rod mount, the one we used a ball ended Allen wrench to remove the bolt from
  - Use your ball ended Allen wrench to tighten the bolt on the top of the Z axis rod mount, turn it until you feel resistance and then turn it 1/4 of a full rotation and no further
  - Make sure you do not tighten the flanged bearing in place before the rods has been full re-installed.

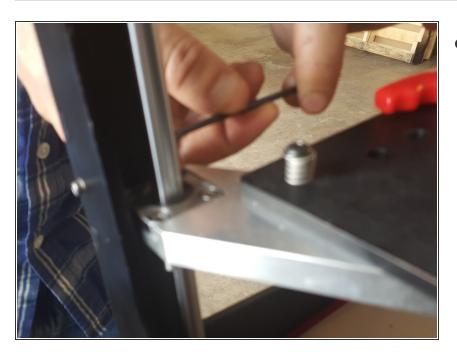
## Step 6 — Tightening the bottom mount bolts





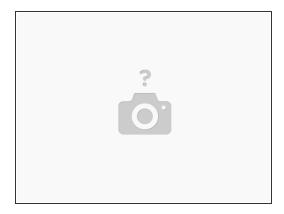
- Use your Allen wrench to turn the bolt on the front of your BoXZY until you feel resistance
- Use your Allen wrench to turn the bolt on the side of your BoXZY until you feel resistance
- Use your Allen wrench to turn the bolt on the front of your BoXZY 1/4 of a full turn
- Use an Allen wrench to turn the bolt on the side of your BoXZY 1/4 of a full turn

## Step 7 — Tightening the bearing



- To tighten the bearing to the build plate you will need to turn each of the 4 bolts 1/4 of a full turn in an X pattern
  - The bolt behind that is nearest the corner of the BoXZY aluminum frame, behind the Z axis rod, will be be difficult to tighten and so long as you tighten all of the other bolts adequately you do not need to worry about this bolt being equally tight
  - Turn the bolt at the front of your build plate 1/4 turn, this is shown in the image
  - Turn the bolt diagonal from it 1/4 turn
  - Turn the bolt nearest the corner of build plate 1/4 turn
  - Turn the bolt in the corner of the BoXZY aluminum frame 1/4 turn
  - Repeat this process until you feel resistance and then turn each bolt 1/4 turn
  - This step may take a while but it is important that you tighten each bolt one at a time, in order and not all the way at one time

# **Step 8** — Repeating the process



 Repeat the steps in this guide for the other Z axis rod on the opposite side of the build plate, if necessary