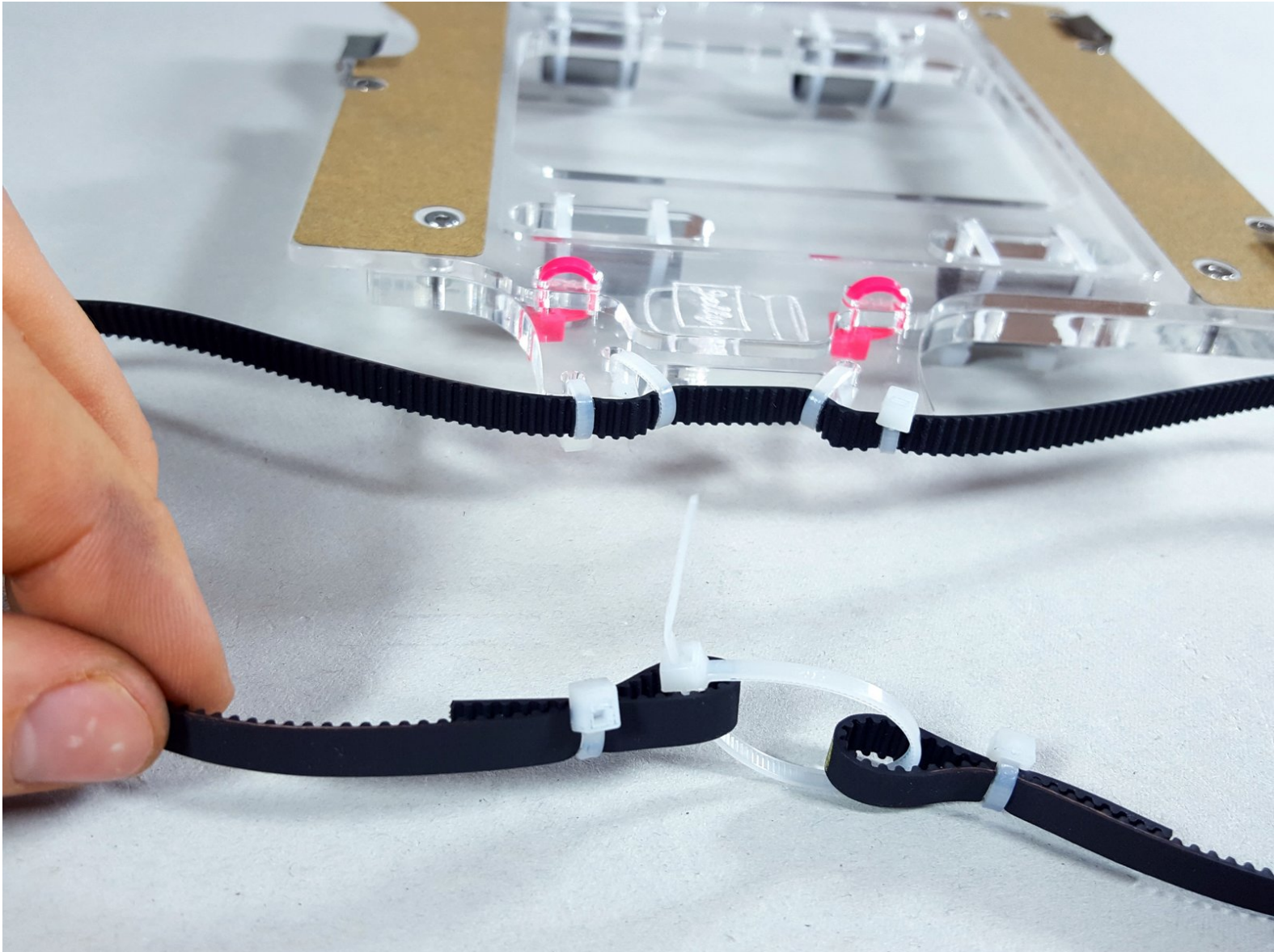


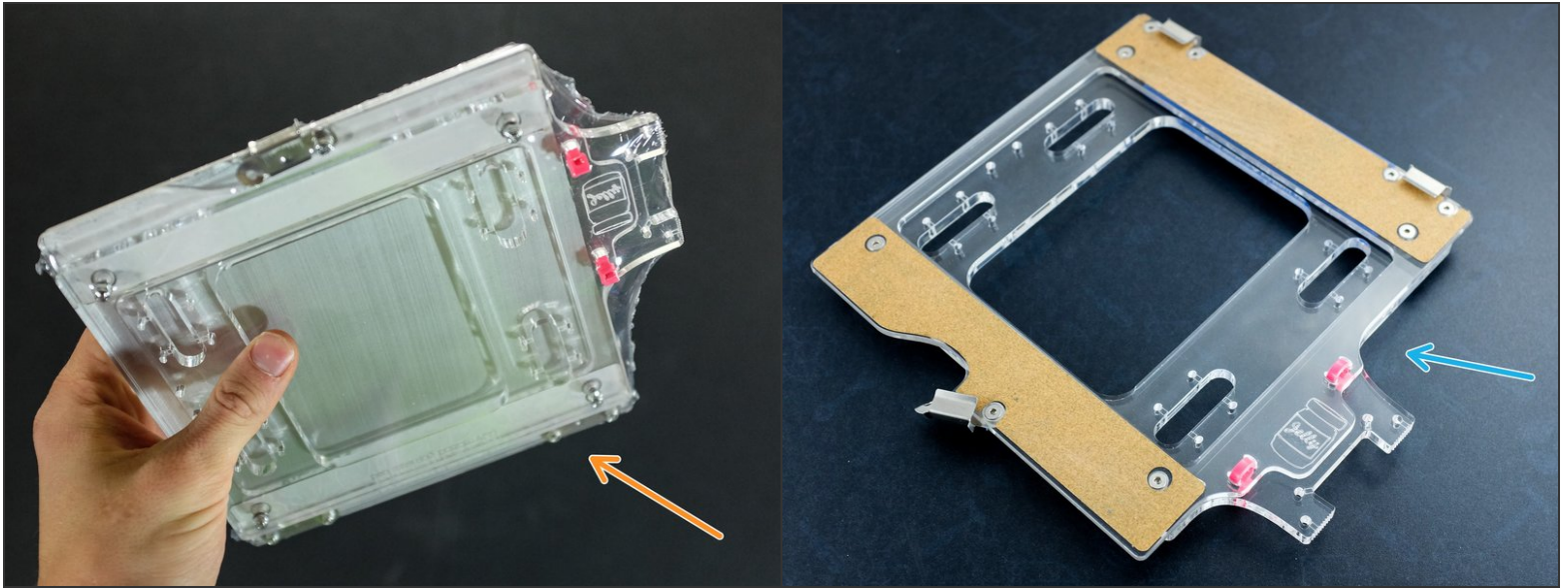


# Assemble the Y Assembly

We'll finish up the Y assembly by installing linear bearings and a belt.

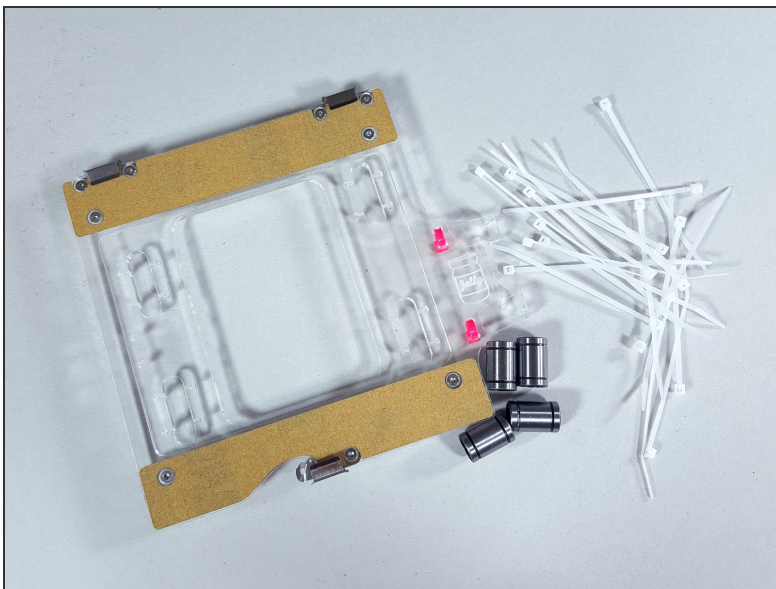


## Step 1 — ↳ The Build Plate



- Note that the Y assembly comes packaged with the aluminum build plate.
- Remove the build plate for now, or it will be difficult to attach the bearings.

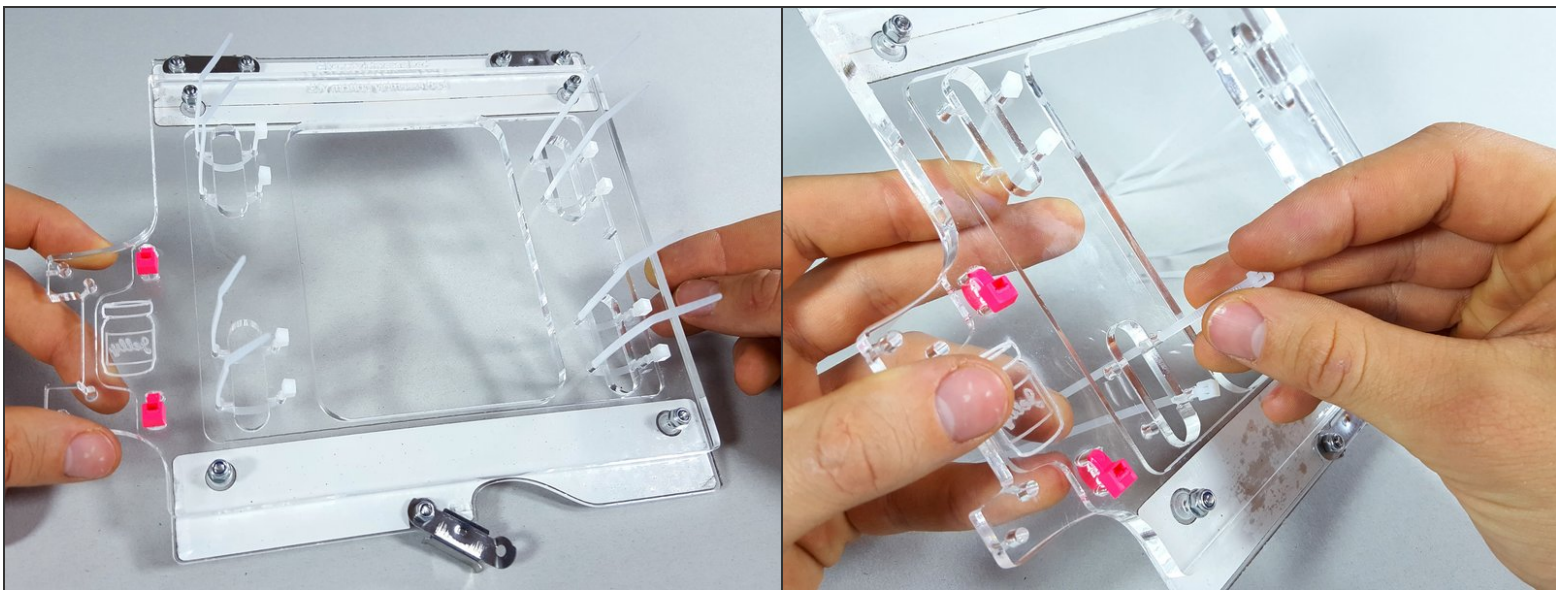
## Step 2 — ↳ Linear Bearings



- Partially pre-assembled build platform
- Linear bearings (4)
- 4" Zip ties

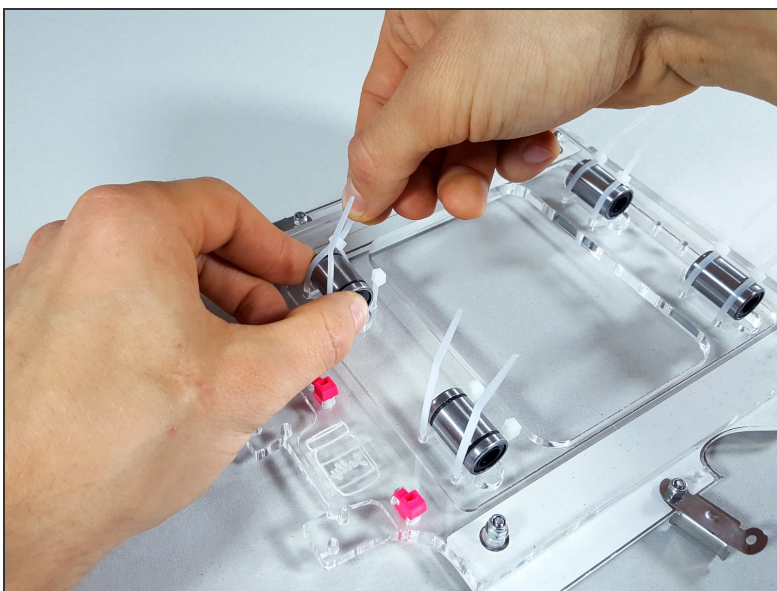


### Step 3



- Thread all 4" zip ties into the holes around the edges of all slots.
- It's important the zip tie heads are on the bottom of the assembly.

### Step 4



- Drop in the bearings.
- Tighten with your hand first (it's fast.)

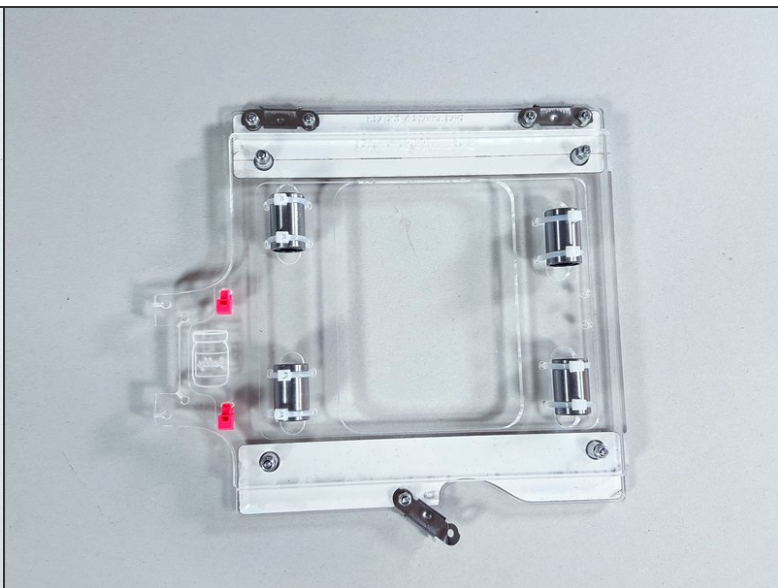
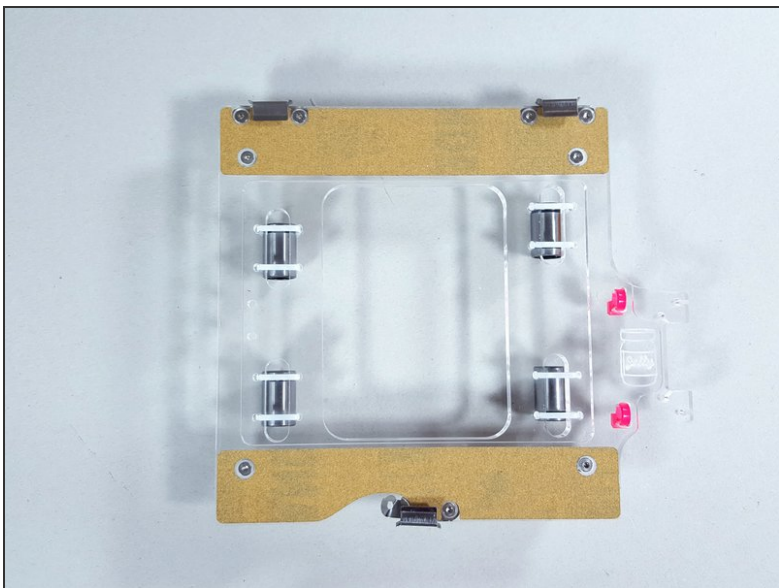
**⚠ All the heads of the zip ties should end up on the bearings. (Else it's impossible to properly tighten the zip ties later.)**

## Step 5



- Tighten the zip ties with vise grips.
- The proper tightening motion first pulls and stretches the zip tie upwards, and then pulls back.

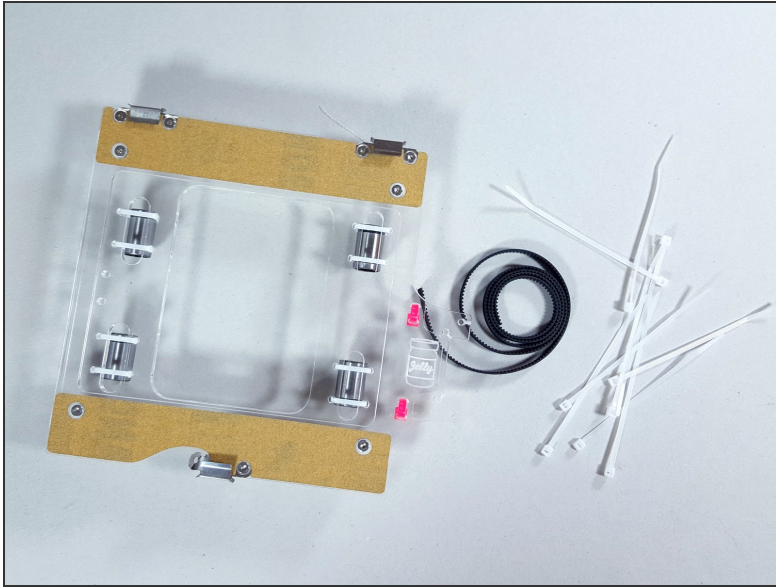
## Step 6



- Done.

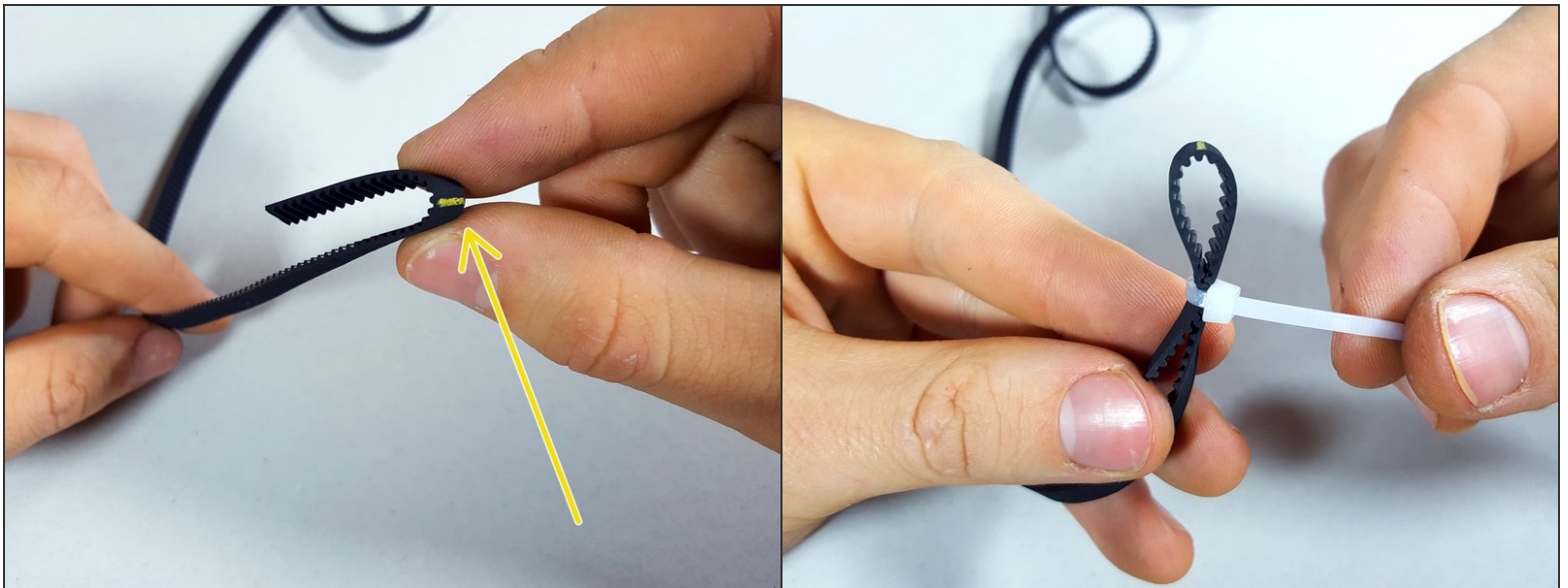


## Step 7 — ↳ Y Belt



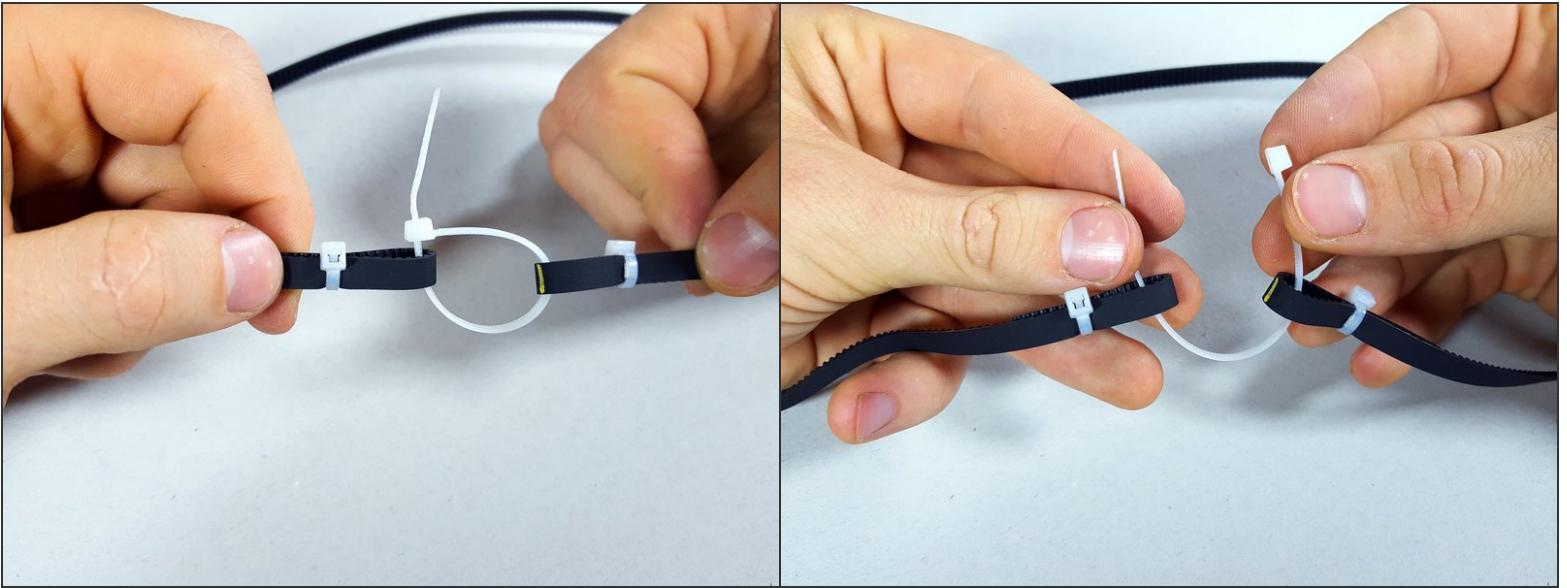
- Y Belt
- 4" zip ties
- Y assembly

## Step 8



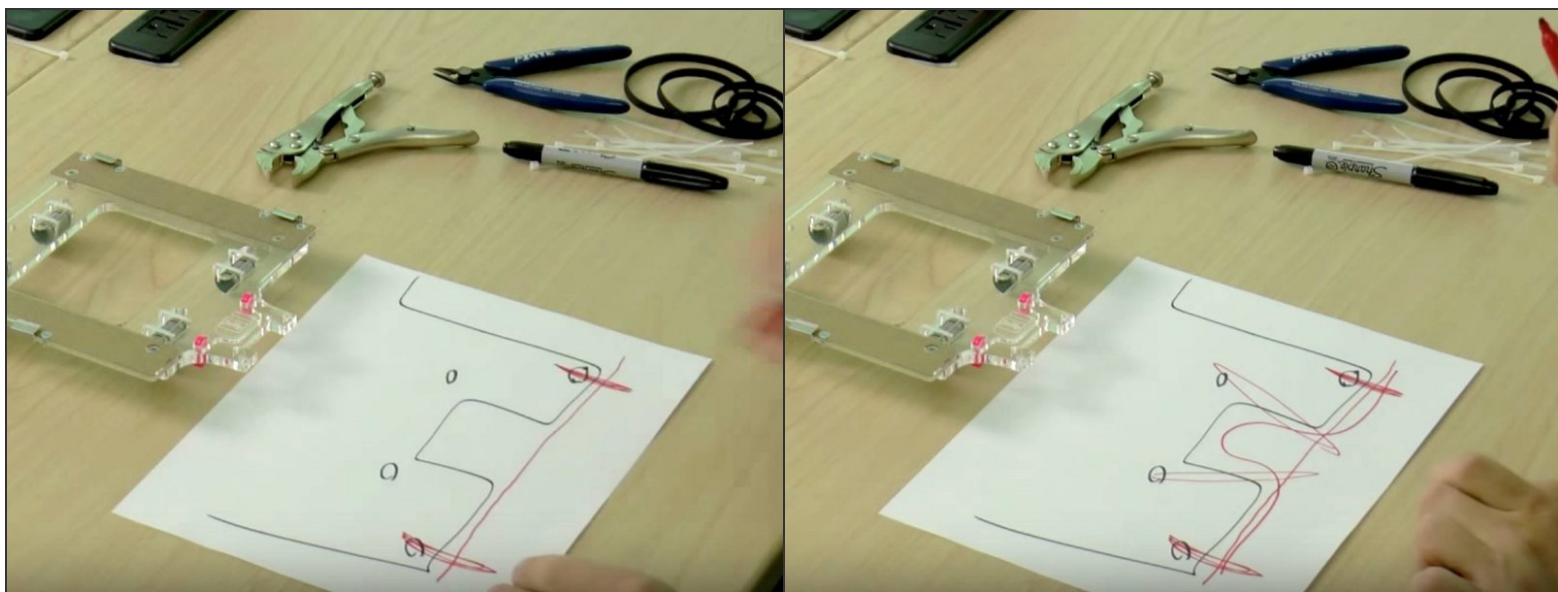
- Make two loops at both ends of the Y belt.
- The yellow marks will end up on the top of the loops.

## Step 9



- Connect the two loops with another 4" zip tie.
- Make sure to have the tail of the zip tie pointing 'upwards'.

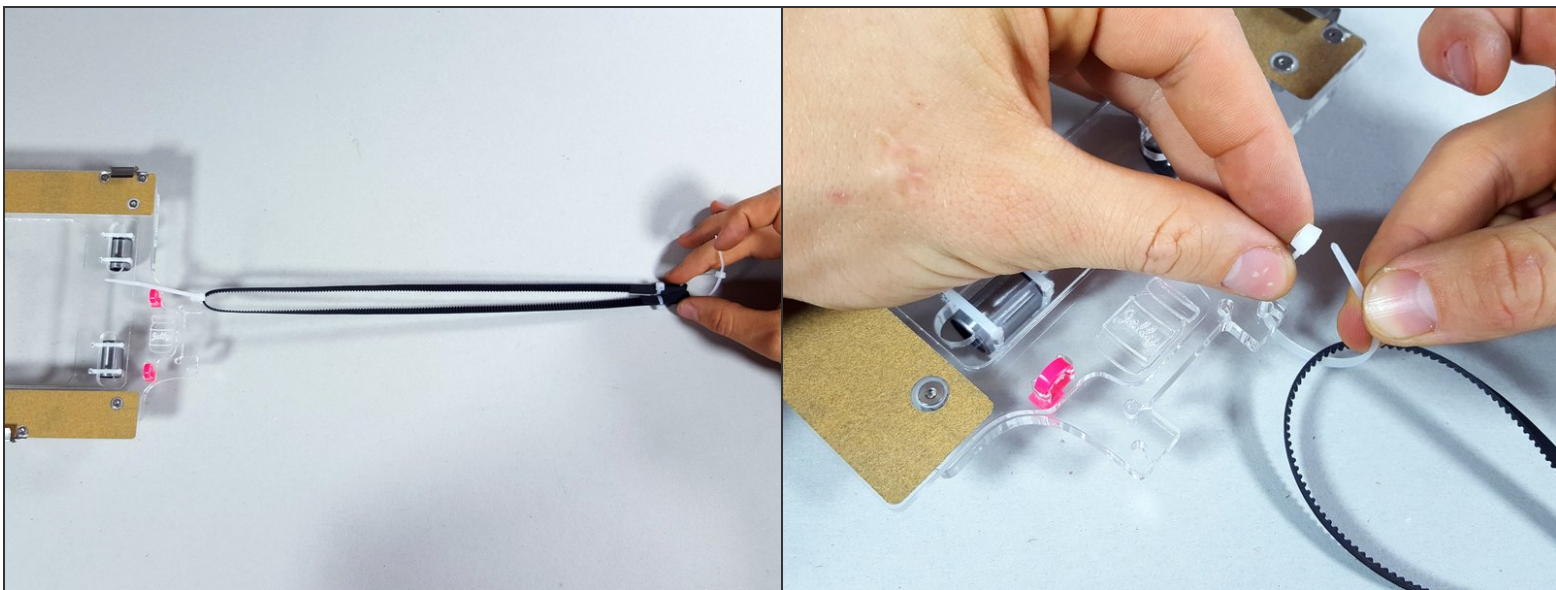
## Step 10 — Belt Installation Overview



- == Overview of the belt Installation ==
- First, we attach the belt to the two outer-most holes.
- Then we'll put tension on the belt connection with two more zip ties in the middle.
- This makes the connection solid as a rock.

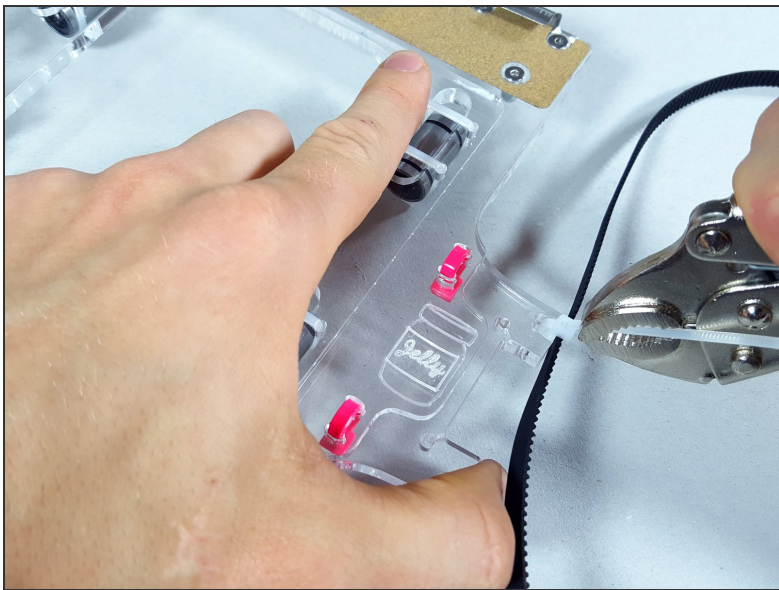


## Step 11



- Attach the **middle** of the belt to the right-most hole on the acrylic platform.
- Tooth-side of the belt should be facing away from the acrylic.
- (The zip tie head position does not matter here.)

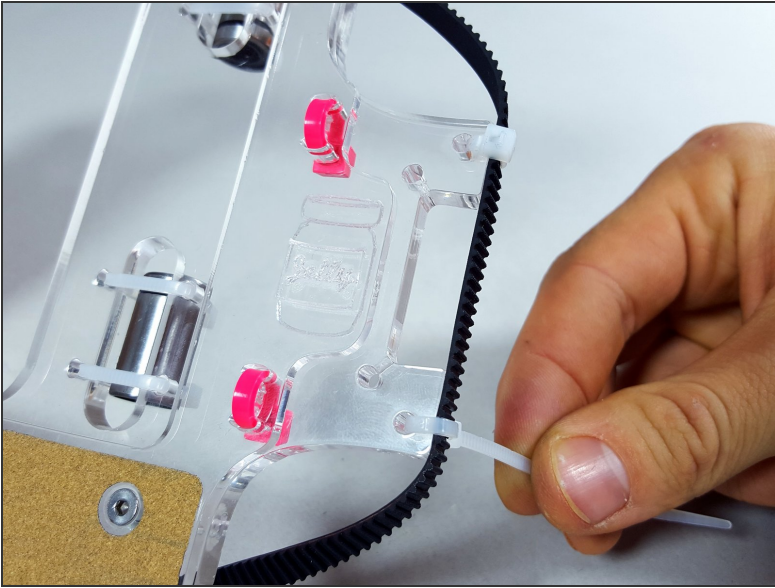
## Step 12



- Tighten well with vise grip.

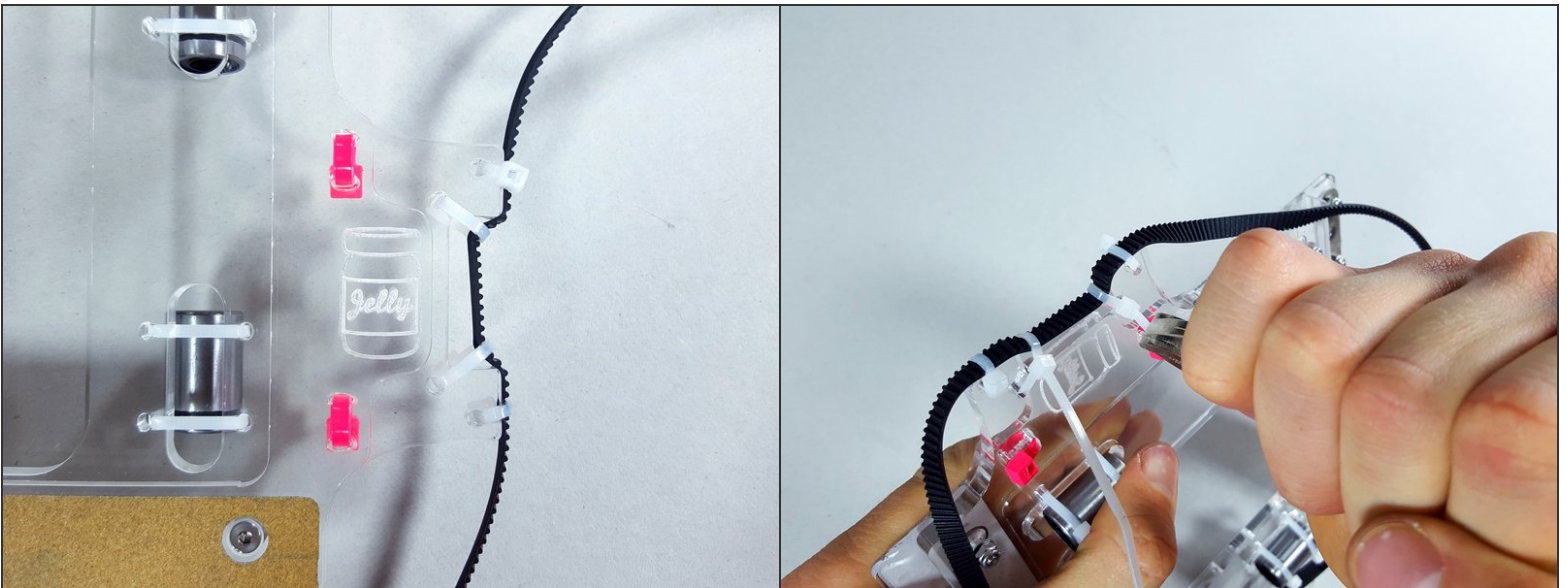


## Step 13



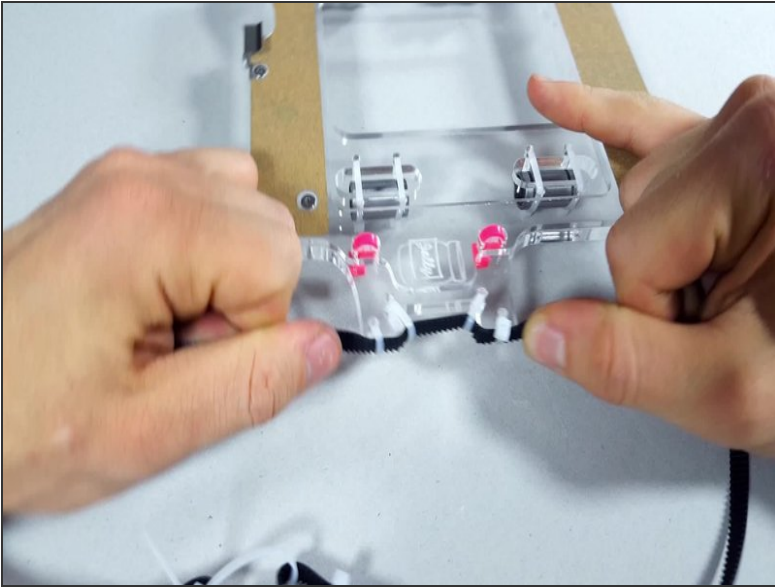
- Stretch the belt lightly across the cutout, and secure it to the left-most hole on the platform.
- Tighten well with vise-grip.

## Step 14



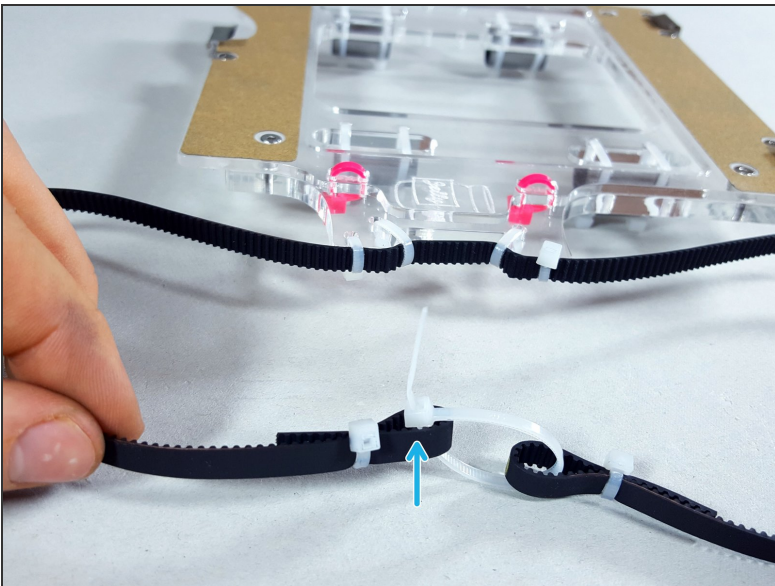
- Tension the belt by putting two more zip ties in the middle two holes.
- Tighten these little by little, and alternate sides to get an even tension.
  - This would be the belt equivalent of 'cross-tightening' for screws.

## Step 15



- When you pull the belt side to side, it should feel solid, with little play or movement.
- (The two zip ties in the middle should have removed any slack from the connection.)

## Step 16



- Done.
- (Notice the zip tie tail still facing upwards.)