



# How to Printrbot Simple

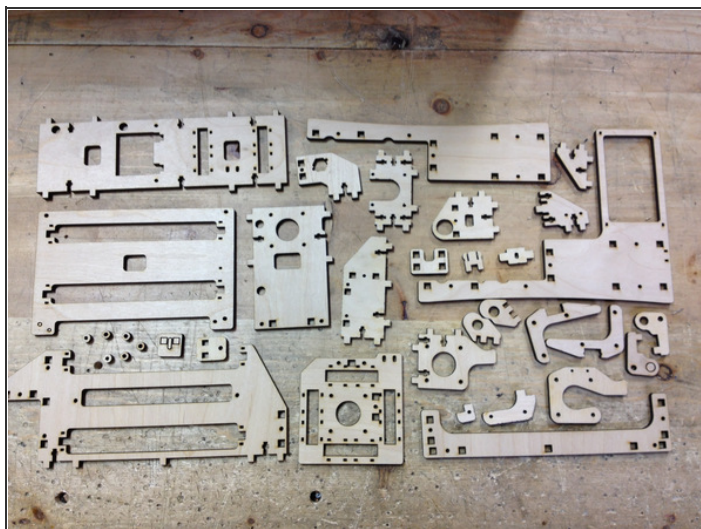
Written By: Brook Drumm



## TOOLS:

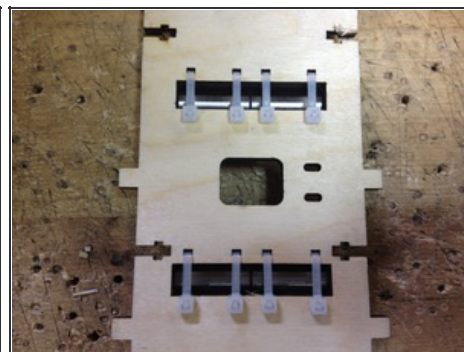
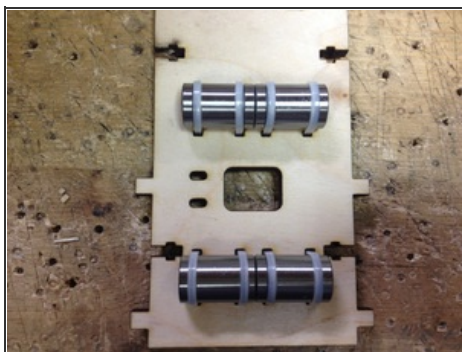
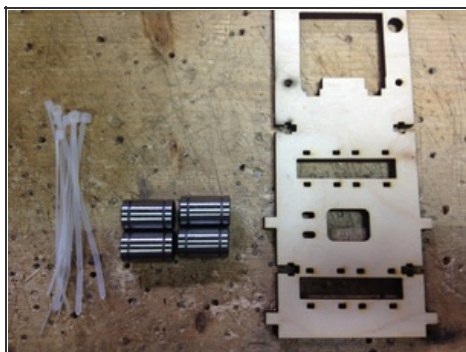
- [Phillips Screwdriver \(1\)](#)
- [8mm or 5/16" Wrench \(1\)](#)
- [2.5mm Allen Wrench \(1\)](#)
- [1.5mm Allen Wrench \(1\)](#)
- [Hammer or Rubber Mallet \(1\)](#)
- [Wood or Super Glue \(1\)](#)

## Step 1 — Printrbot Simple Instructions



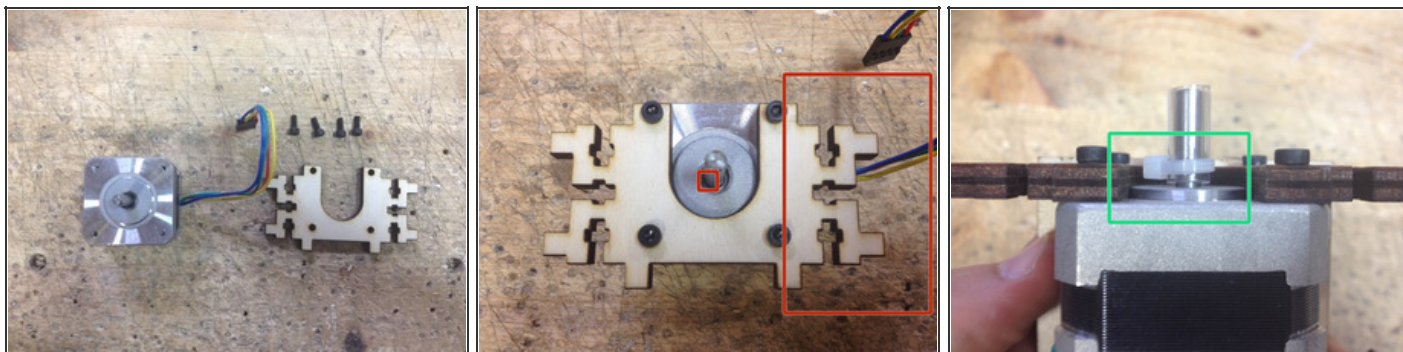
- The wood kit for the Simple

## Step 2



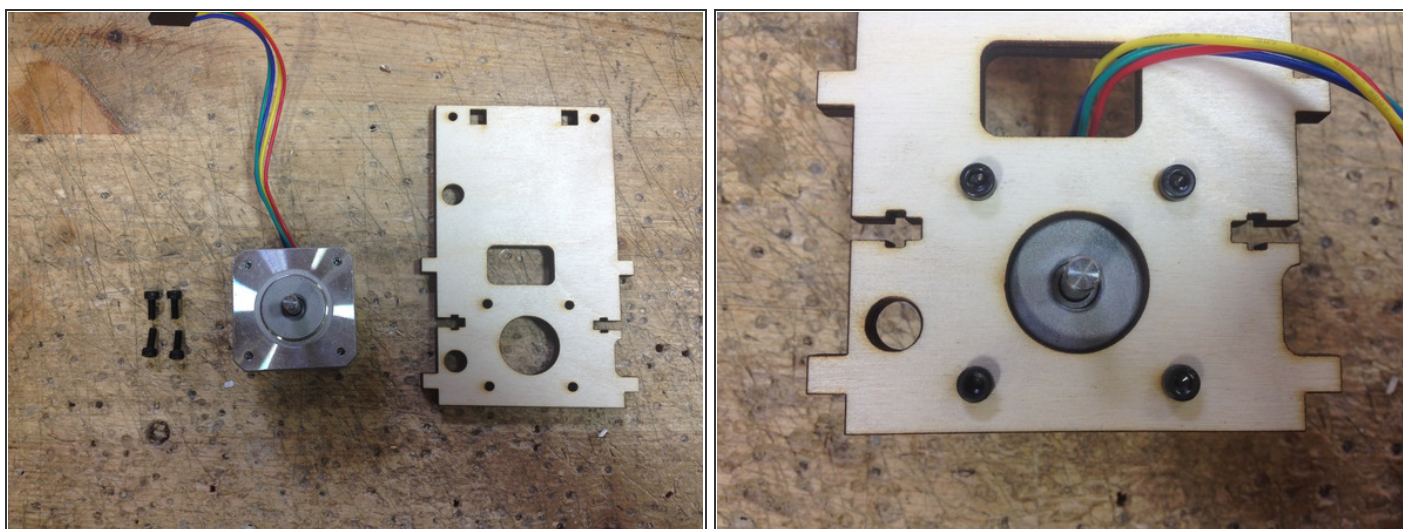
- Zip tie your bearings on the base plate bringing the zip tie up through the bottom of the plate.
- It does not matter which side the nub is on the bearing slot.
- 8 - zip ties
- 4 - LM8UU Bearings
- Tip - place 8mm smooth rod through the bearings as you tighten the zip ties to ensure alignment of bearings.

### Step 3



- X-axis motor installation
- 4 - M3 10mm
- Choose whether you want to have the fishing line drive directly on the motor rod or if you want to use the vinyl tubing.
- If you want vinyl tubing place on the rod and zip tie at the base of the rod, green box.
- Make sure the wiring is coming off the side of the assembly as shown in the photo in the red box.

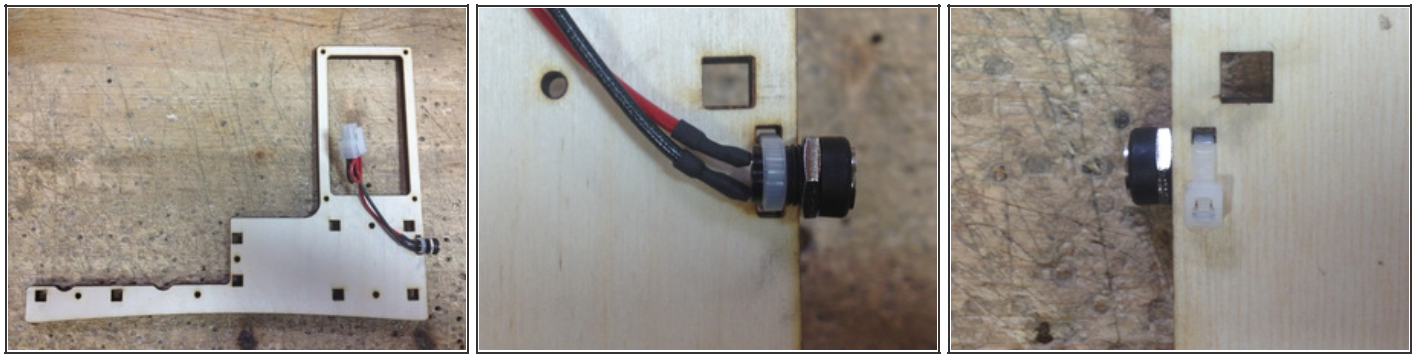
### Step 4



- Z-axis motor installation
- 4 - M3 10mm
- Make sure z-axis rod hole is on the left of the motor as seen in photo #2.
- Face motor wiring toward the slot in the plate.



## Step 5



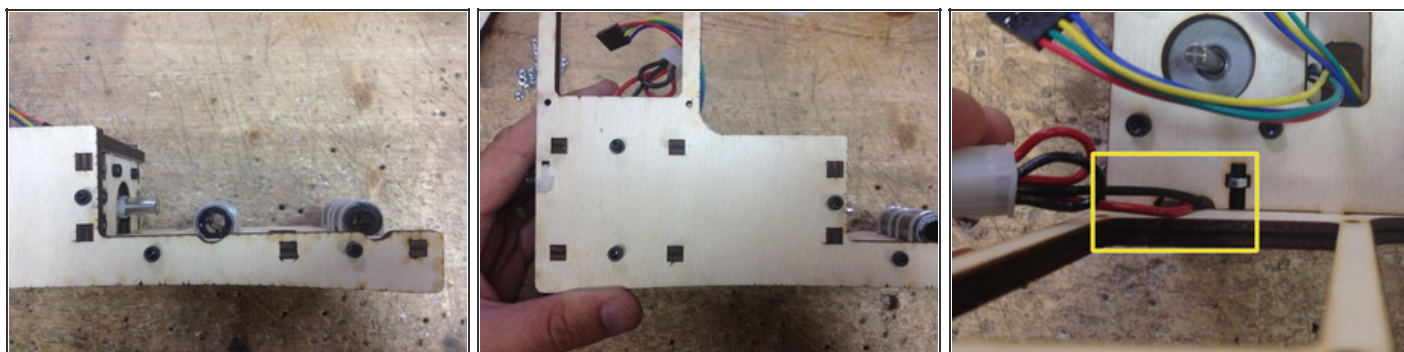
- Attach power adapter onto plate with zip tie.
- Zip tie nub is on opposite side of the power adapter.

## Step 6



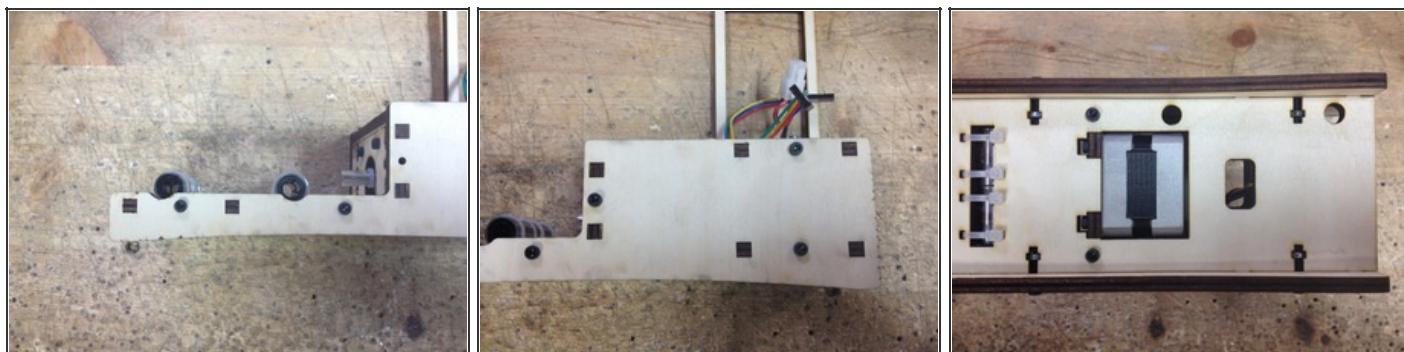
- Mount X-axis motor assembly and Z-axis motor assembly together
- 4 - M3 16mm
- 4 - M3 Hex Nuts

## Step 7



- Attach left side piece with M3 16mm screws.
- 5 - M3 16mm screws
- 5 - M3 Hex Nuts
- Make sure that the wiring for the power adapter is routed through the provided slot before securing with M3 screws.

## Step 8



- Attach right side piece with M3 16mm screws.
- 5 - M3 16mm screws
- 5 - M3 Hex Nuts

## Step 9



- Install the 10" smooth rods.
- Use hammer or rubber mallet to get smooth rods through the two wood plates.
- Make sure to provide support under the bottom plate so you don't blow out the bottom of the plate.

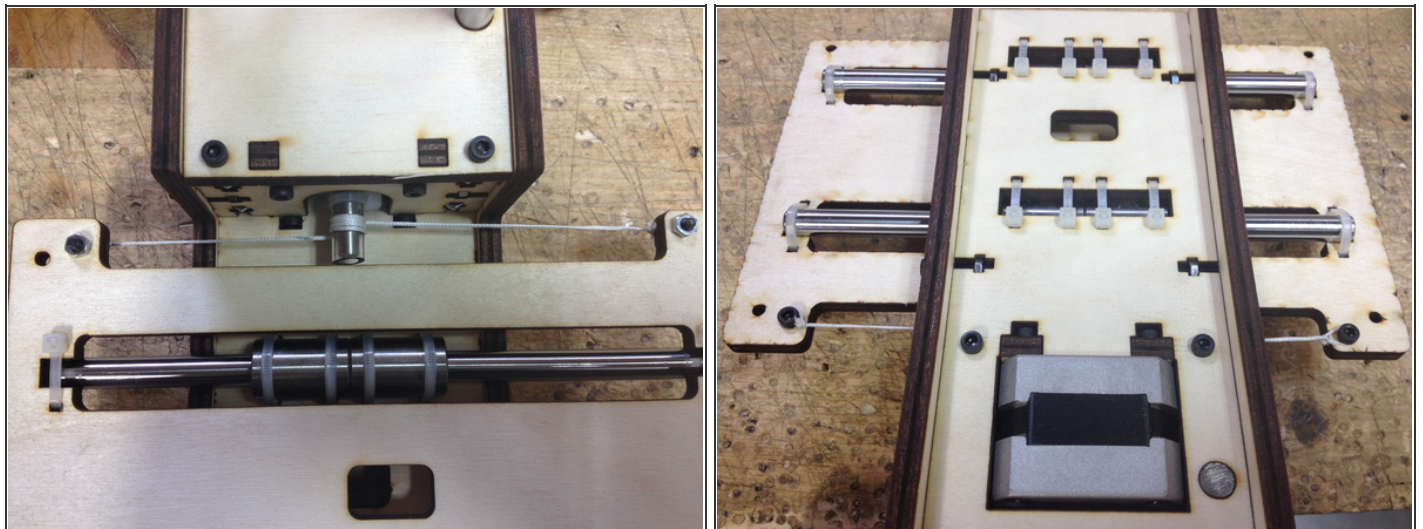
## Step 10



- 4 - Zip ties
- 2 - 6.5" 8mm smooth rod
- Make sure small hole is on the left as you assemble the bed platform, red circle.

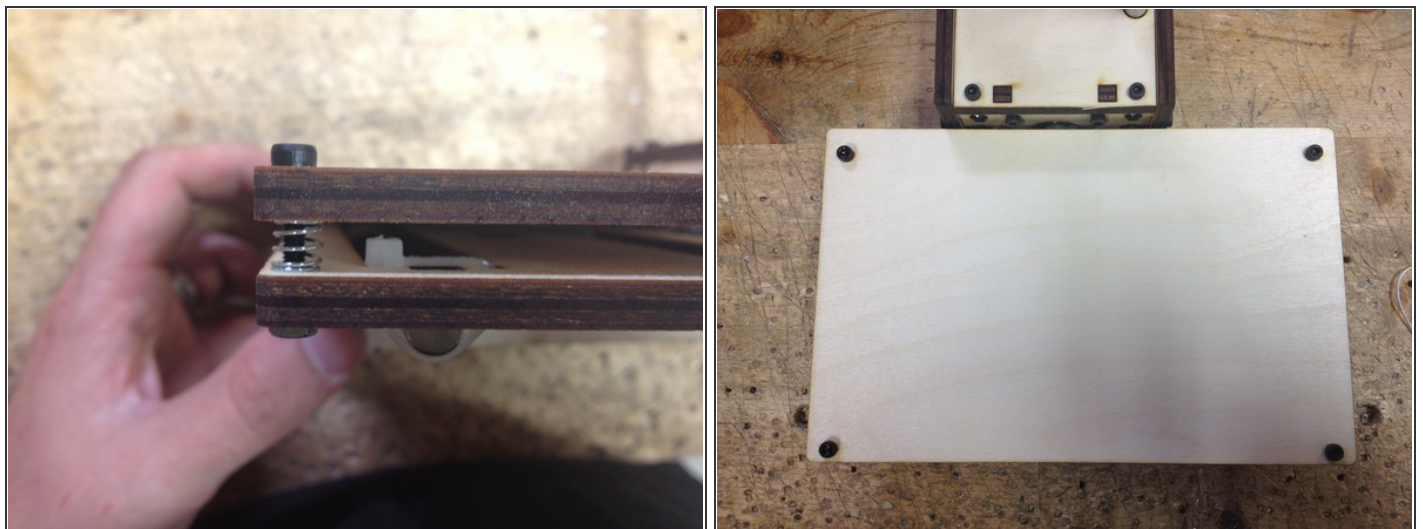


## Step 11



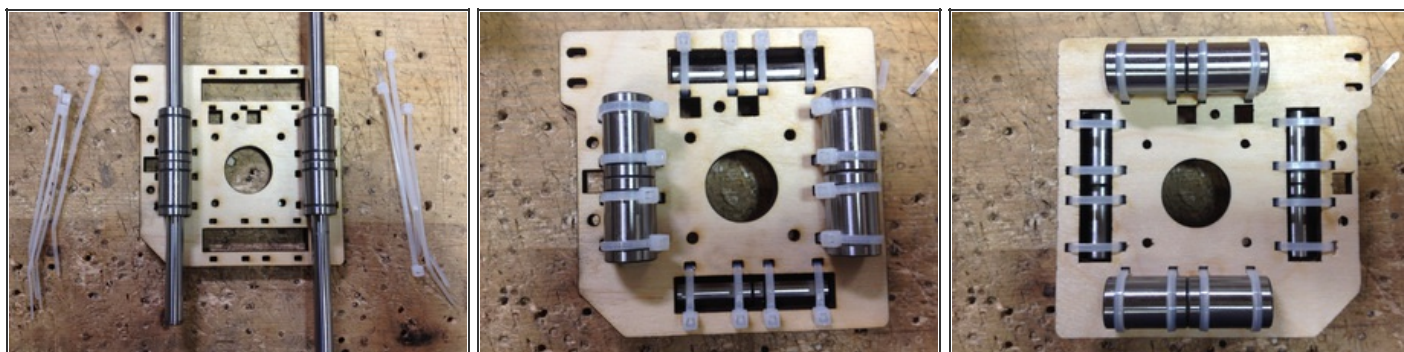
- Fishing line installation
- Line should come off the bottom of the motor rod for the x-axis.
- Three to four wraps on the motor rod.

## Step 12



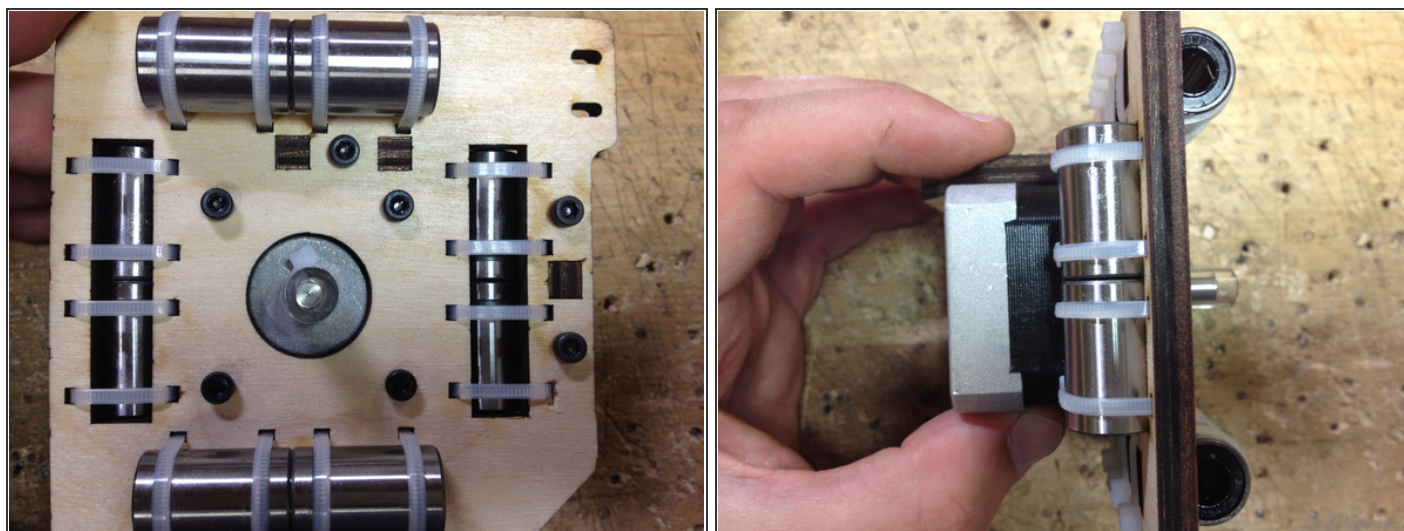
- 4 - M3 20mm screws
- 4 - M3 Hex Nuts
- 4 - bed springs

## Step 13



- 8 - LM8UU Bearings
- 16 - Zip Ties
- Zip tie nubs should all be on the same side of the wood piece which is shown in photo #2.
- Tip - place 8mm smooth rod through the bearings as you tighten the zip ties to ensure alignment of bearings.

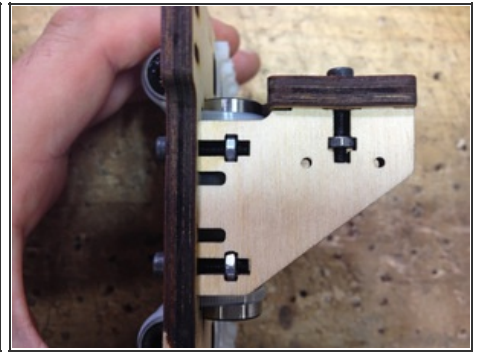
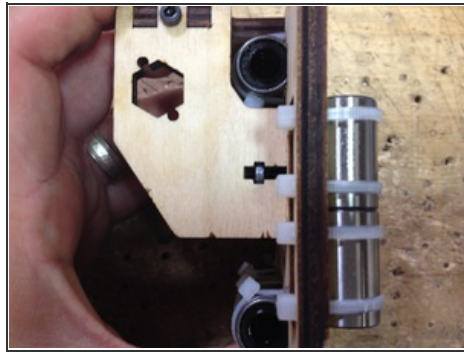
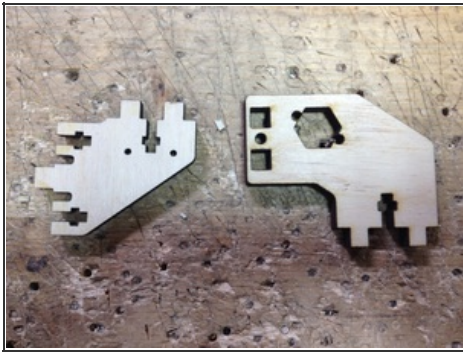
## Step 14



- Y-axis motor installation
- 4 - M3 10mm

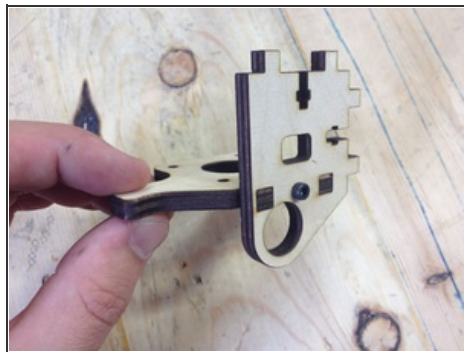


## Step 15



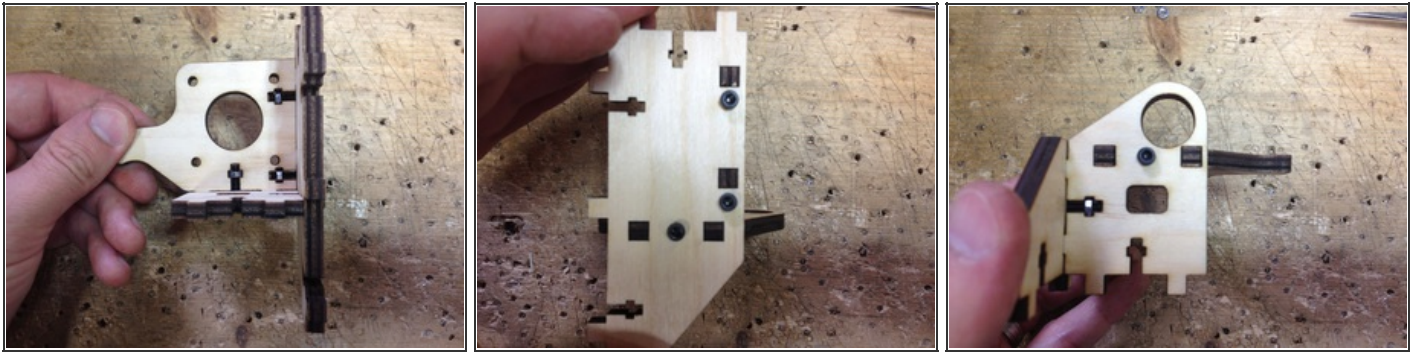
- 4 - M3 16mm screws
- 4 - M3 Hex Nuts

## Step 16



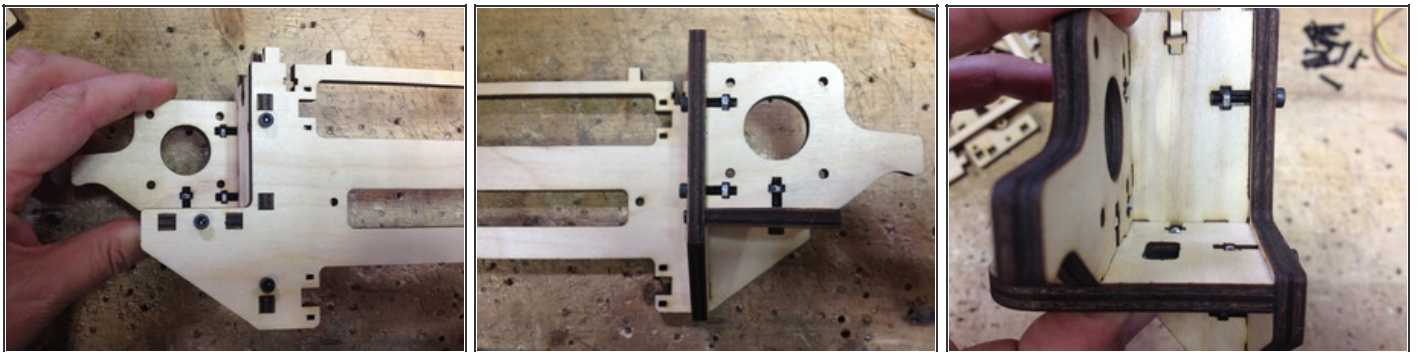
- 1 - M3 16mm Screw
- 1 - M3 Hex Nut

## Step 17



- 3 - M3 16mm Screws
- 3 - M3 Hex Nuts

## Step 18



- 3 - M3 16mm Screws
- 3 - M3 Hex Nuts

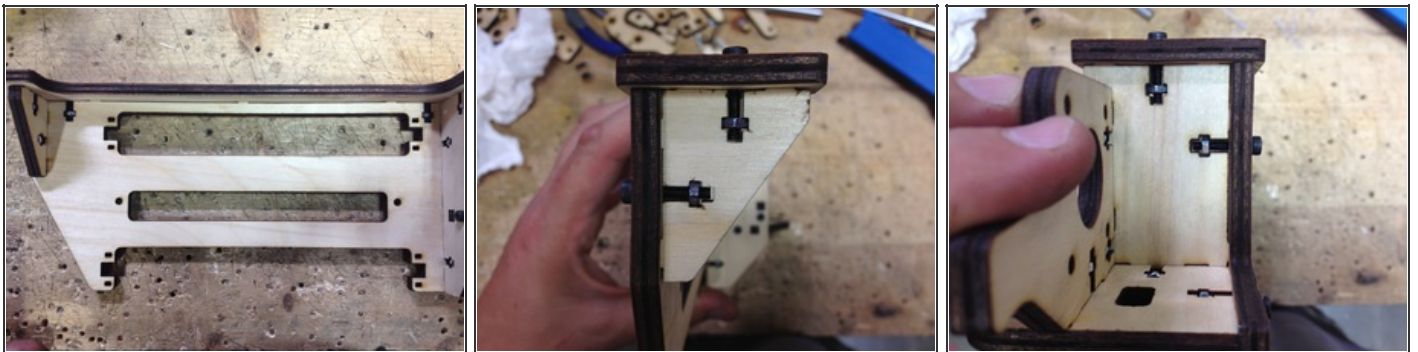


## Step 19



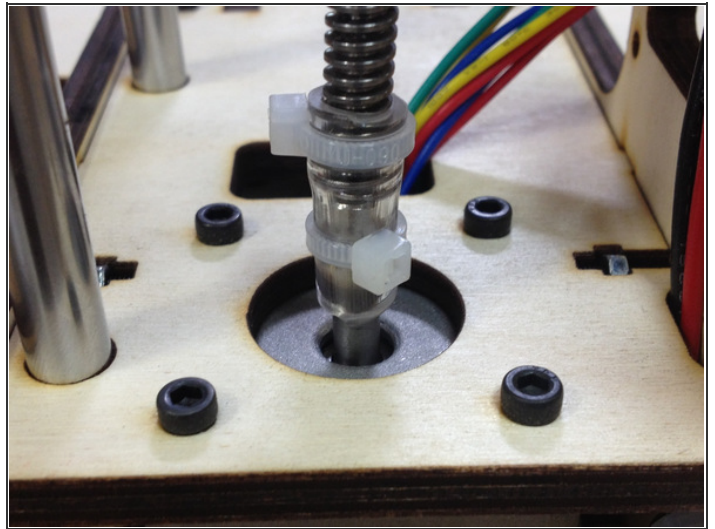
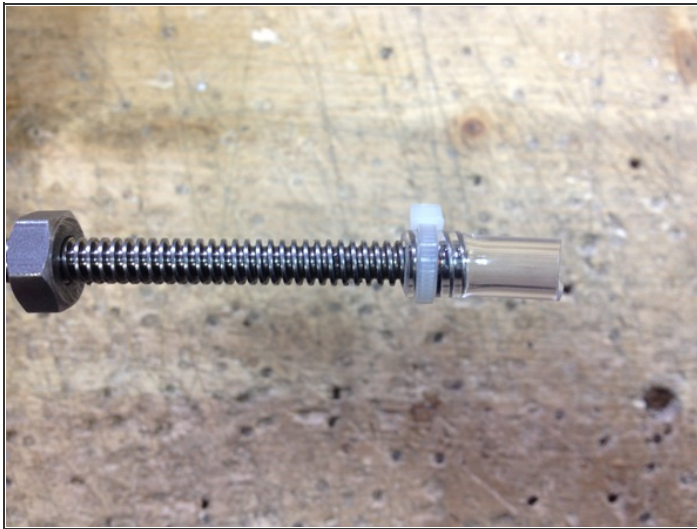
- 1 - M3 16mm Screw
- 1 - M3 Hex Nut

## Step 20



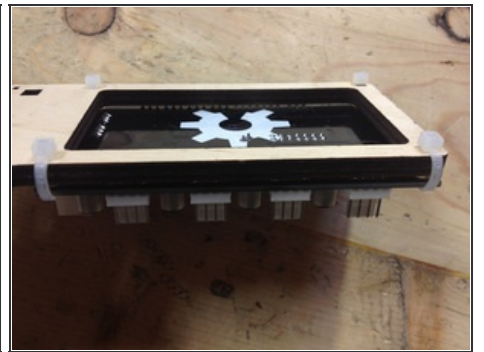
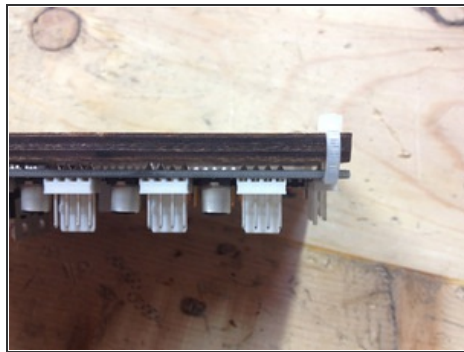
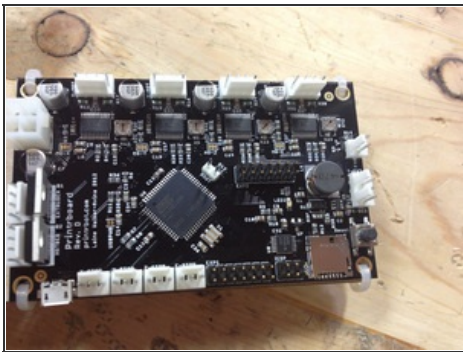
- 4 - M3 16mm Screws
- 4 - M3 Hex Nuts

## Step 21



- Vinyl Tubing
- 2 - Zip Ties

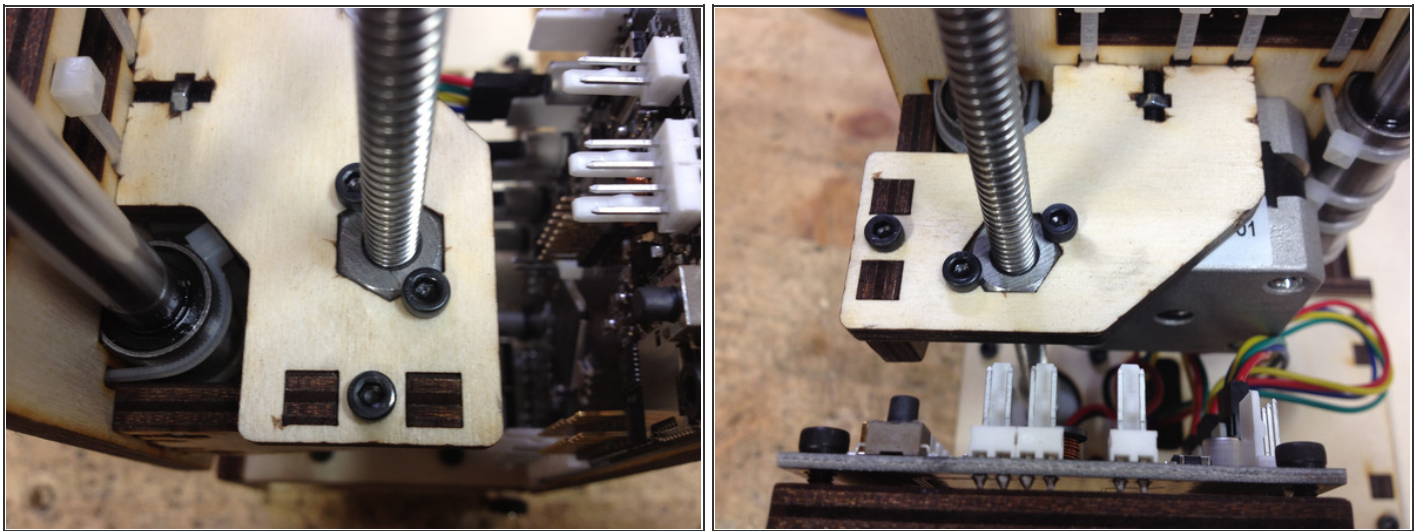
## Step 22



- 4 - Zip Ties

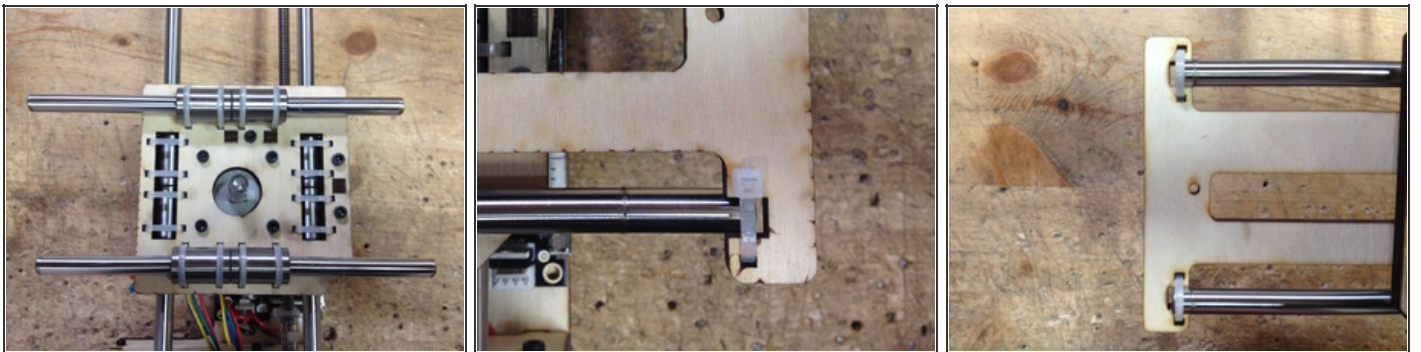


## Step 23



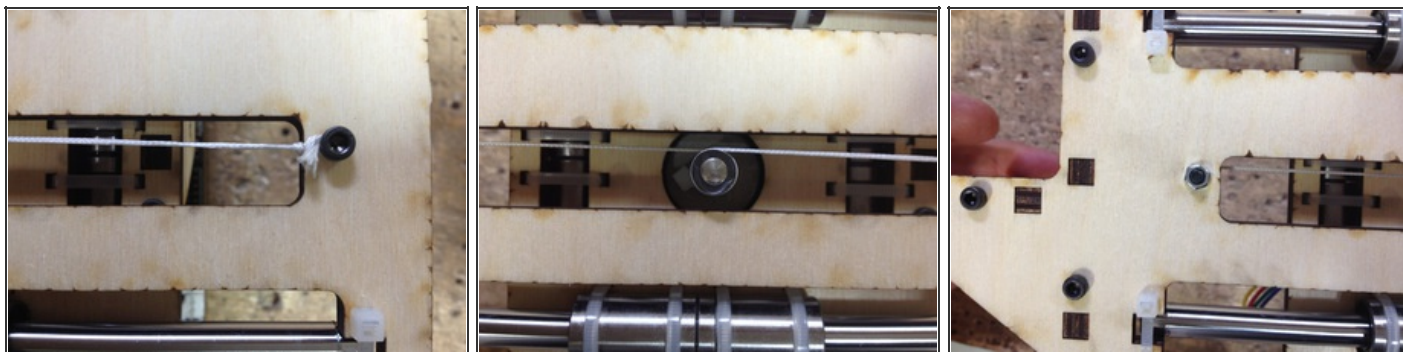
- 2 - M3 10mm Screws

## Step 24



- 2 - 6.5" 8mm Smooth Rod
- Insert rod into bearings for Y-axis
- Secure the wood piece to smooth rods with zip ties.

## Step 25



- 2 - M3 10mm Screws
- 2 - M3 Hex Nuts
- Fishing Line
- Wrap around the Y-axis motor rod three to four times.
- Fishing line will come off of the top of the motor rod for the Y-axis as shown in photo #2.

## Step 26



- Place pieces on top of each other in order as shown in photos.
- This assembly continues in next step.



## Step 27



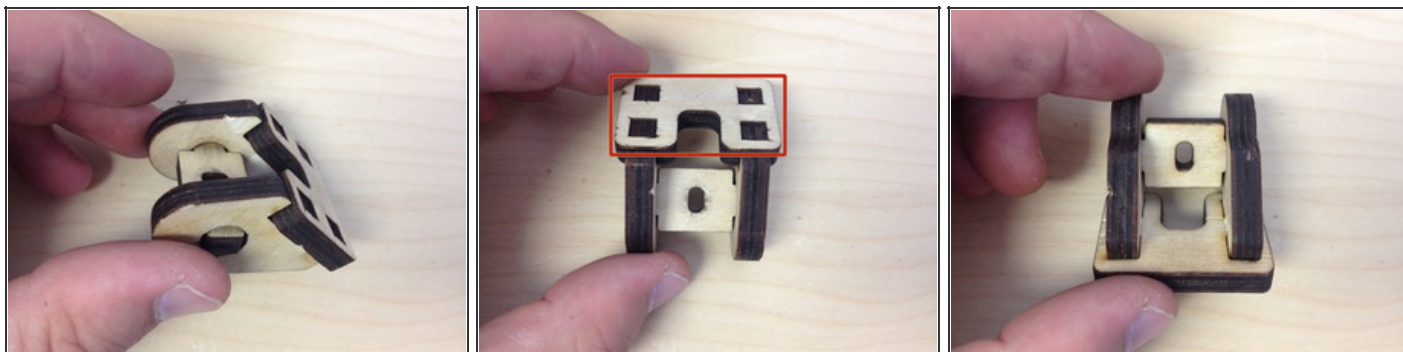
- 3 - M3 30mm Screws
- M3 30mm screws fasten into the extruder motor.

## Step 28



- 1 - M5 16mm Screw
- 1 - 625ZZ Bearing
- Wood or super glue the wooden joints together, green boxes.

## Step 29



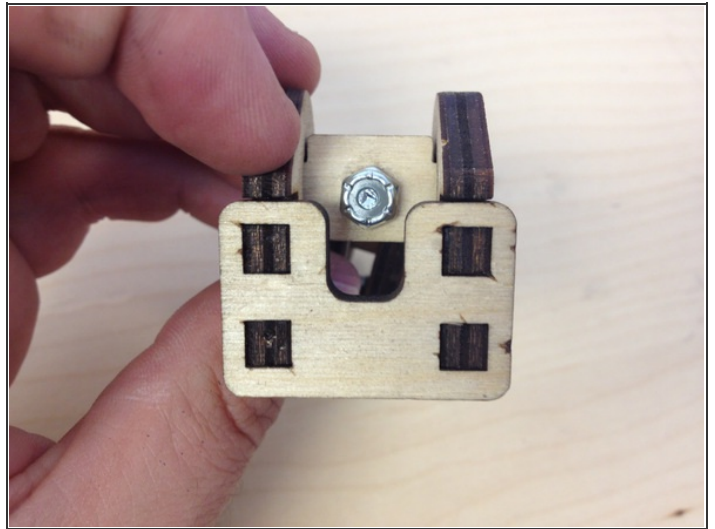
- Wood or super glue
- Glue the four slots in the red box.
- DO NOT glue the circle holes on the side of the assembly. You will want the piece inside the circles to rotate.

## Step 30



- 1 - 2.5" 6-32 Screw
- 1 - Extruder Spring
- 1 - 6-32 Hex Nut (Locking)

## Step 31



- A few more photos of the previous assembly.

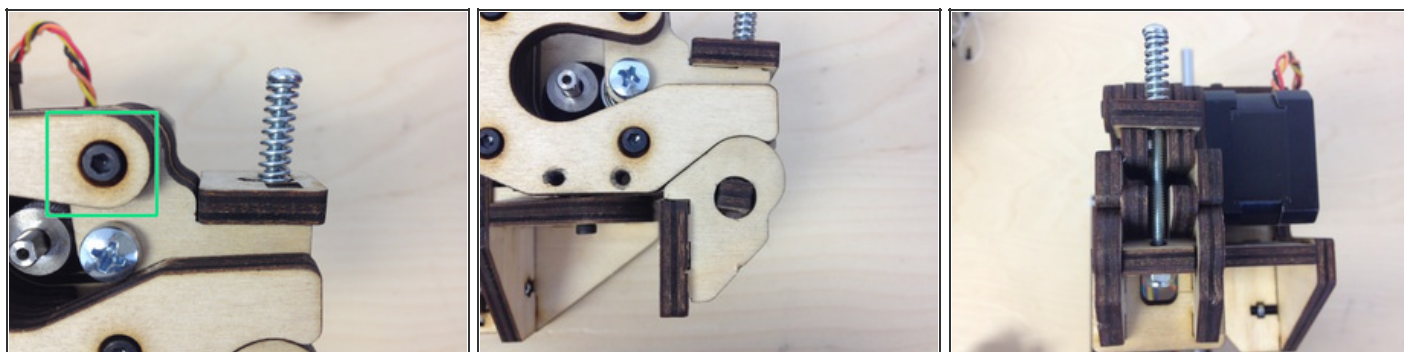
## Step 32



- Three small wooden bushings

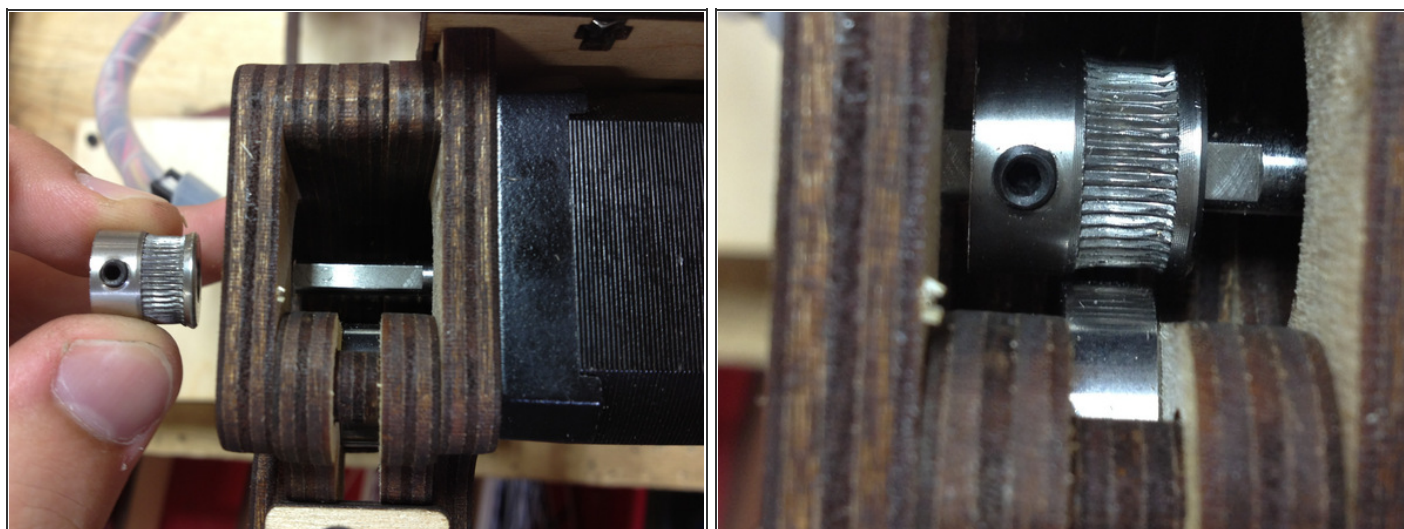


### Step 33



- 1 - M3 30mm Screw
- Secure previous assembly into extruder with M3 30mm screw through the wooden bushings, green box.

### Step 34



- 1 - Driver Gear
- Use a 1/16" Allen Wrench to tighten the set screw onto the motor rod.
- Make sure that you tighten the set screw onto the flattened portion of the motor rod.
- Align the teeth of the gear with the 625ZZ Bearing.

## Step 35



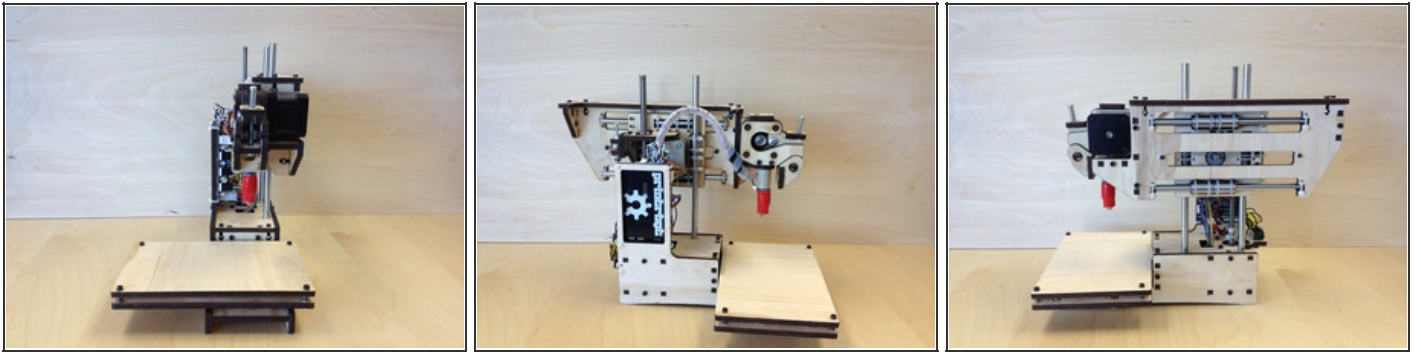
- 1 - Hot end
- 2 - M3 20mm Screws
- First set the hot end inside the circular slot.
- Once placed inside slot secure with two M3 20mm screws.

## Step 36



- Glue or Super Glue
- Make sure to glue the two slots, yellow box.

## Step 37



- Simple build finished.
- Congratulations!

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