

- 2 M3x16 Screws
- 2 M3 Spring Washers
- 2 M3 Hex Nuts
- 1 Z-motor-bracket
- 2 Z-motor-braces

Assemble the first Z motor bracket using the above components. Take care not to overtighten the screws.

### Components:

- 2 M3x16 Screws
- 2 M3 Spring Washers
- 2 M3 Hex Nuts
- 1 Z-motor-bracket
- 2 Z-motor-braces

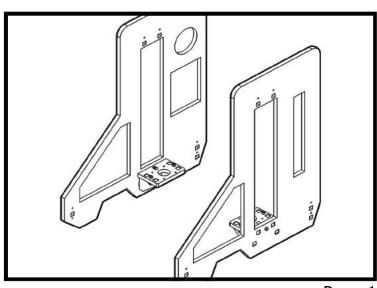
Repeat for the second Z motor bracket. The acrylic components have no orientation and are interchangeable.

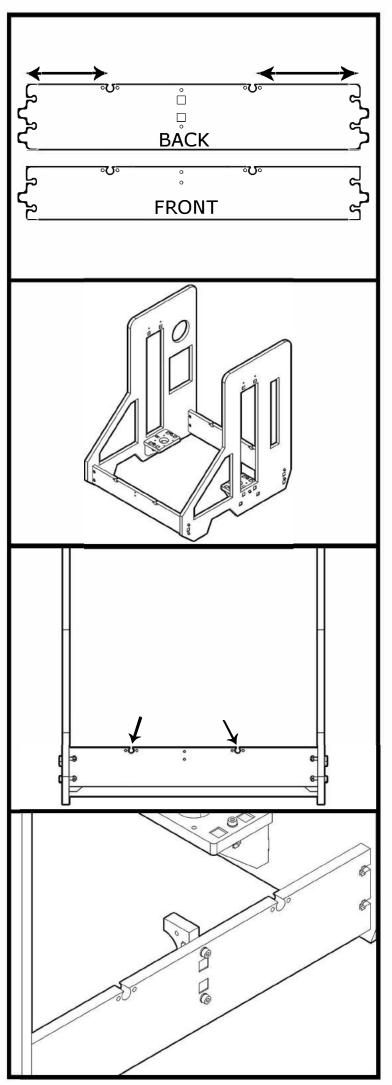
# Components:

- 2 M3x16 Screws
- 2 M3 Spring Washers
- 2 M3 Hex Nuts
- Assembled Z brackets
- Acrylic Side Panels

Attach the assembled motor brackets to the acrylic side pieces of the frame.

See the below images for orientation.





y-front-panel

y-rear-panel

Find and align the two acrylic pieces that hold the y-axis rods.

The left side of the panels should be the "shorter" side.

### Components:

Frame

Y panels

8 M3x16 Screws

8 M3 Spring Washers

8 M3 Hex Nuts

Fix both Y panel pieces in place, taking care that the shorter side of each is to the left of the frame.

Ensure that the holes for the smooth-rods align for both the front and back pieces.

# Components:

Frame

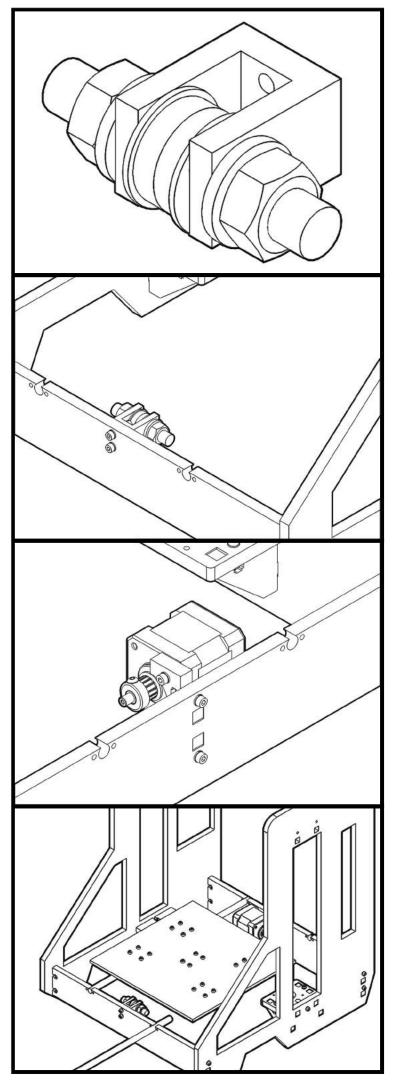
y-motor-bracket

2 M3x10 Screws

2 M3 Spring Washers

2 M3 Hex Nuts

Install the bracket for the Y motor. The bracket should be oriented so that the motor sits near the top.



Components:

y-idler (plastic part)

M8 Rod (small)

2 Flanged Bearings

2 M8 Washers

2 M8 Hex Nuts

Fit the flanged bearings into the y-idler as shown.

The plastic part may need to be cleaned/drilled out.

#### Components:

Frame

y-idler

2 M3x16 Screws

2 M3 Spring Washers

2 M3 Hex Nuts

Attach the y-idler to the front y-plate of the frame. The screws and nuts should not interfere with the bearings.

### Components:

Frame

Stepper Motor (long shaft)

2 M3x12 Screws

2 M3 Spring Washers

Check the two stepper motors with attached pulleys. In some kits, one motor has a longer shaft. If this is the case, use this motor.

Fix this motor to the Y motor mount. Components:

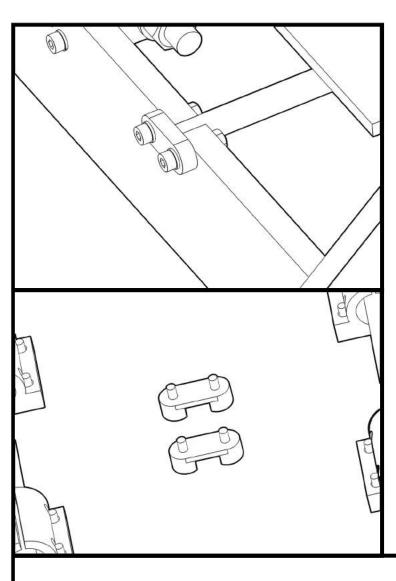
Bed Support Plate

Y Bearing Holders (attached to above)

2 8mm Smooth Rods (~ 345mm)

Slide the smooth rods through the front Y-plate, then through the Y bearing holders (and bearings) and finally through the rear Y-plate.

Check that the bed can move along the rods.



Frame

4 Smoothrod-caps

8 M3x16 Screws

8 M3 Spring Washers

8 M3 Hex Nuts

Install the small acrylic cap pieces at each end of both smooth-rods.

Components:

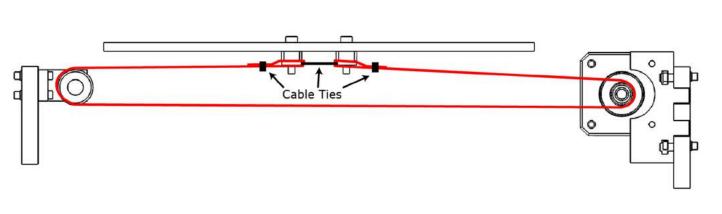
Frame

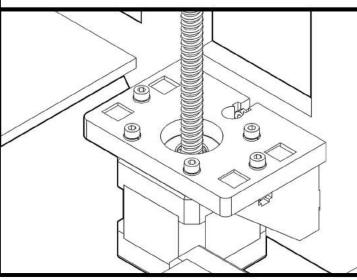
GT2 Belt (~ 0.8m)

Arrange the belt as shown in the diagram below.

Use a cable tie between the two ends of the belt to pull it taut.

Verify that the bed can move freely.





Components:

Frame

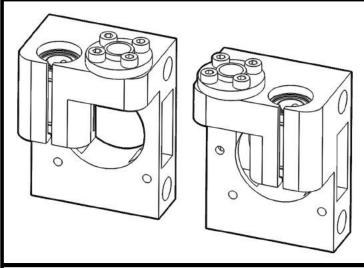
2 Z motors (with leadscrew)

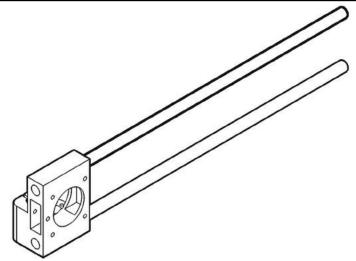
8 M3x14 Screws

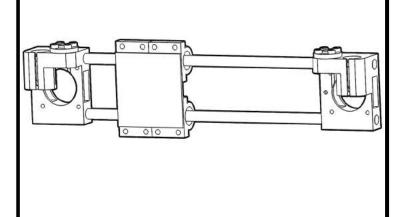
8 M3 Spring Washers

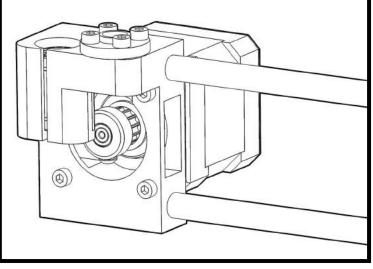
Fix each Z motor to one of the Z motor brackets.

Remove the carriage-nut from each leadscrew.









- 2 Carriage Nuts
- X Motor Mount
- X Idler
- 8 M3 Screws

Install a carraige nut on both the plastic parts as shown.

### Components:

- X Motor Mount
- X Idler Mount
- 2 8mm Smooth Rods (~300mm)

Press both smooth rods into the X Motor Mount. The plastic may need to be drilled slightly to allow the rod to fit.

The fit should be firm enough to prevent the rods from moving freely.

# Components:

X Carriage

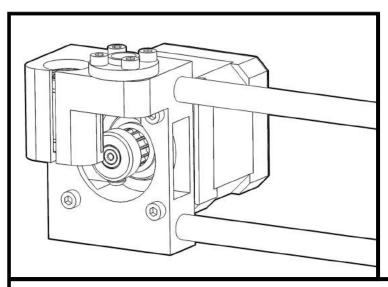
Slide the X Carriage (attached to the extruder) onto the X axis smooth rods.

Press the smooth rods into the X Idler. If neccessary, carefully hammer the Idler into place.

## Components:

- X Carriage
- X Motor (short shaft)
- 3 M3x14 Screws
- 3 M3 Spring Washers

Attach the X motor to the mount as shown.

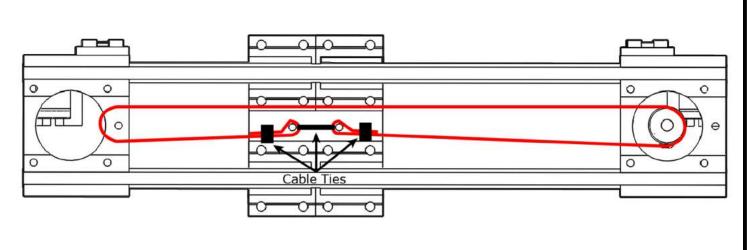


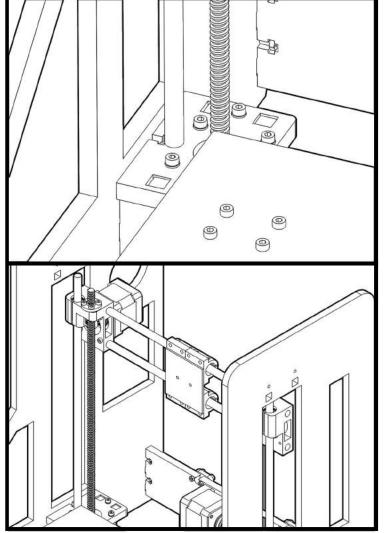
Components: GT2 Belt (~0.8m)

Cable Ties

Install the GT2 belt on the X axis as shown in the below diagram. (Diagram is reverse view, motor on right)

Use the center cable tie to tension the belt.





### Components:

Frame

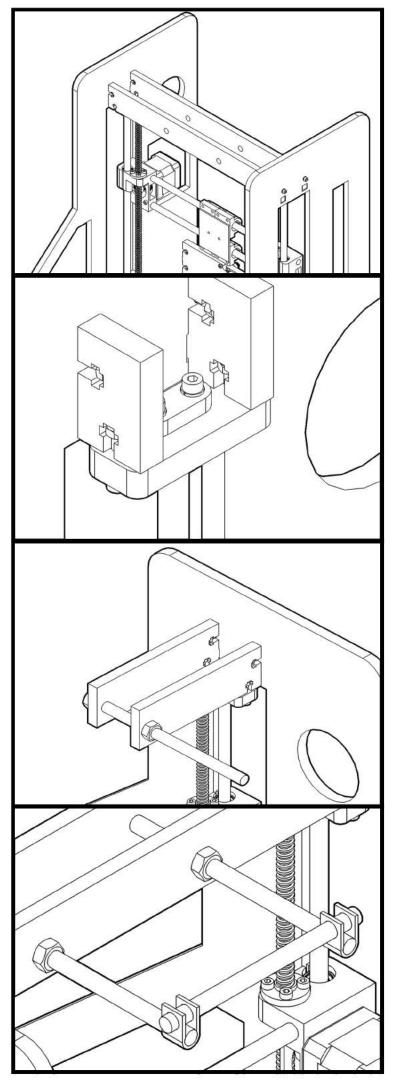
2 8mm Smooth Rods (~320mm)

Insert the Z-axis smooth rods into the cutouts in the Z motor brackets. The smooth rods should sit on the Z-motors. The screw holding the Z-motor brackets in place may need to be loosened slightly.

Slide the X-axis onto the Z-axis smooth rods. Turn the leadscrew rods by hand to lower the X-axis.

Manually move the X-axis down. Check that it can reach down to the bed without issue.

Check the distance between the X-motor mount and X-idler if problems occur.



Frame

- 2 Frame-top-bars
- 4 M3x16 Screws
- 4 M3 Spring Washers
- 4 M3 Hex Nuts

Install the two acrylic top-bar pieces onto the frame.

### Components:

Frame

- 2 Z-smoothrod-caps
- 2 Smoothrod-caps
- 4 M3x16 Screws
- 4 M3 Spring Washers
- 4 M3 Hex Nuts

Fit the caps that hold the Z-smoothrods in place.

### Components:

Frame

- 3 M8 Threaded Rods
- 4 M8 Nuts
- 2 Plasic Spool Clips

Slide the two longer threaded rods through the cutouts in the top pieces of the frame, then fix them in place with the M8 nuts.

Push the plastic clips onto the end of each threaded rod.

Slide the third threaded rod through the first plastic clip.

If you have a spool of filament ready, place it between the clips now.

Push the rod through the spool and into the other plastic clip.