

HKBay.com

## J - Fit top frame

Written By: HKBay



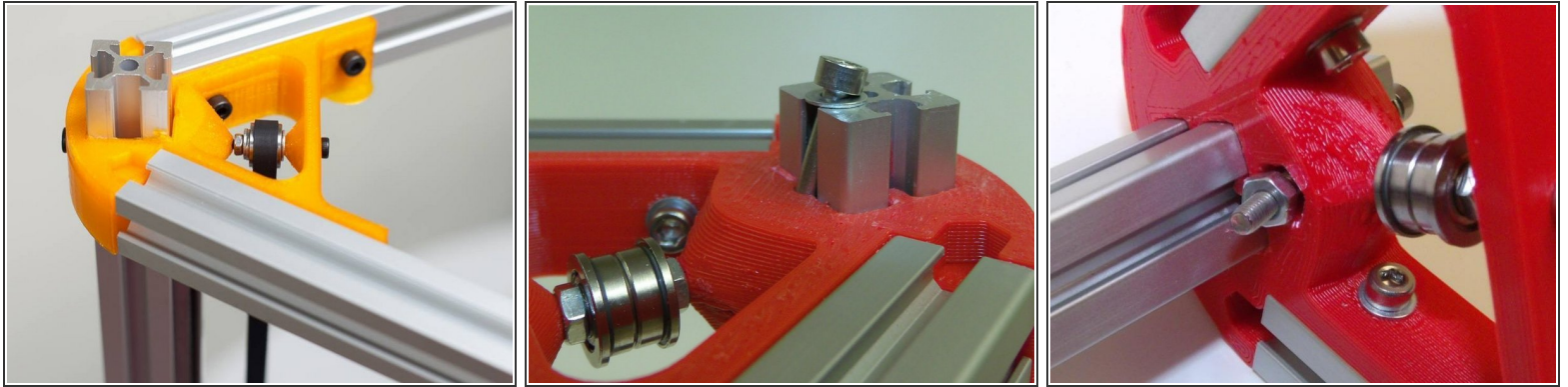
 **TOOLS:**

- Hex key; ball ended, long arm, 2.5mm (1)

 **PARTS:**

- M3x8 screws (3)
- t-slot nuts (3)
- M3x35 screws (3)
- standard nuts (3)
- washers (3)

## Step 1 — J - Fit top frame



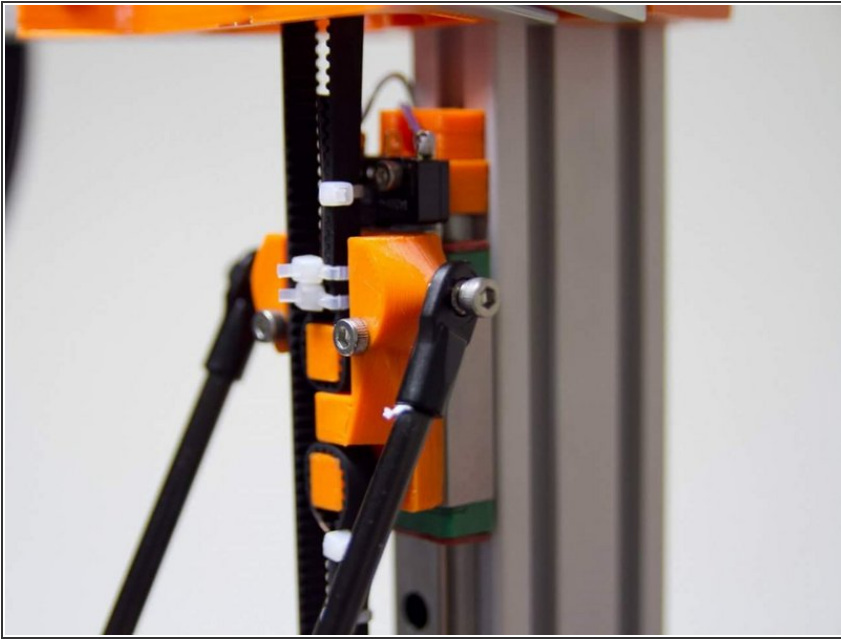
- i** You will need to place the frame base on a fairly low support to gain easy access to the top of the towers.
- Fit an M3x8 screw and t-slot nut to each top bracket loosely and slide the top frame onto the towers so that the hexagonal nut holes are facing down! Align the t-slot nuts so they slide into the channels.
- Once all 3 corners are fully onto the tower profiles, push them further down until they are flush against the endstops and 10-20mm of the profile is protruding above each bracket. Do not tighten the M3x8 screws yet!
- Fit an M3x35 bolt with washer into the angled belt tensioner hole in the top of each bracket.
- Fit an M3 nut onto each bolt from underneath and tighten just enough to draw it into the nut trap without raising the bracket on the pillar.
- !** Do NOT yet tighten any of the screws on the top frame!

## Step 2 — Timing belt



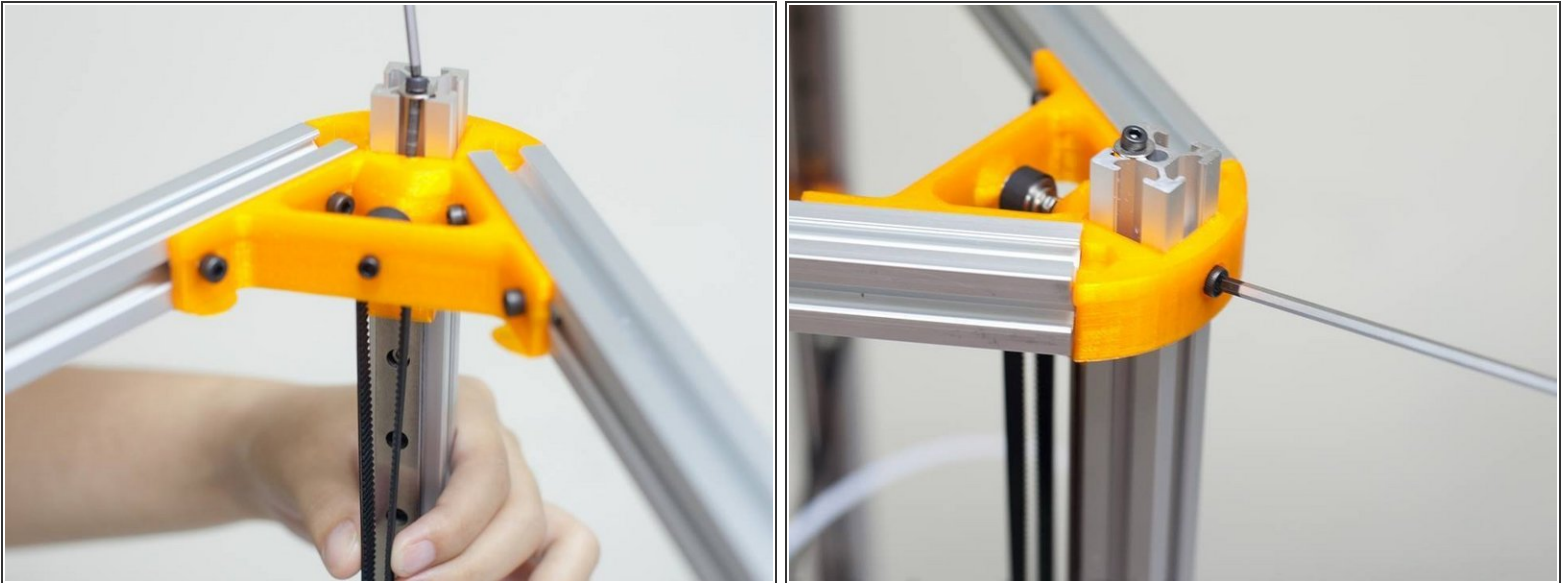
- BEFORE tightening any of the screws on the top frame, loop the three timing belts over the flanged bearings in the top frame, between a pair of rods...
- ...down and around the GT 2 pulleys in the bottom frame.
- Once the belt is loosely looped over the bearings and pulleys, pass the belt through the grooves of the carriage, around the top fixing peg on the carriage from right to left.
- ⓘ The belt should have enough slack to do so, otherwise check if the top frame is really as low as possible, but make sure you do NOT break the cables on the micro switches!

### Step 3



- i** If your kit was delivered with open timing belts (i.e. XL kit), the connection to the carriages is a bit different; loop the two ends of the belts around the upper and lower plastic plugs on the carriages, tension them a bit and then secure each of them with a zip tie (see picture).
- !** Check again that the belt is properly engaged on the motor pulley and properly looped over the top bearings, then repeat for the other 2 belts.

## Step 4 — Tension timing belts



- Make sure the M3x8 screws holding the top brackets in place are still loose on the towers! Now tighten the M3x35 belt tensioner screws until the belts are all equally tight and make a low twanging note when plucked.
- ⓘ Try to get all belts 3 as near to equally tensioned as you can!
- Once the belts are tensioned to your satisfaction, only then tighten all the M3x8 screws on the top frame.