

HKBay.com

C - Top Frame Assembly

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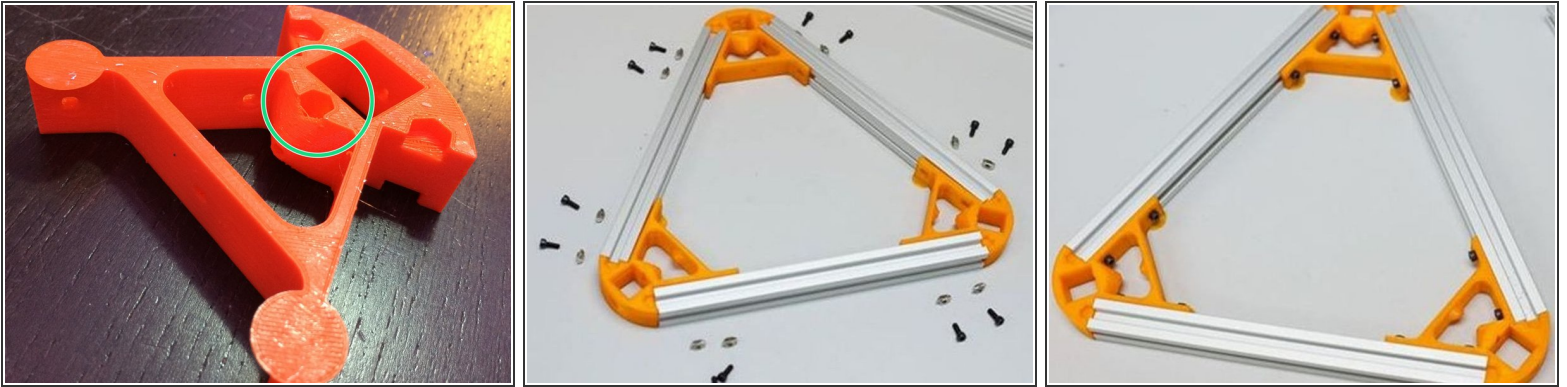
**TOOLS:**

- Hex key; ball ended, long arm, 2.5mm (1)
- Needle-nose pliers, small (1)

**PARTS:**

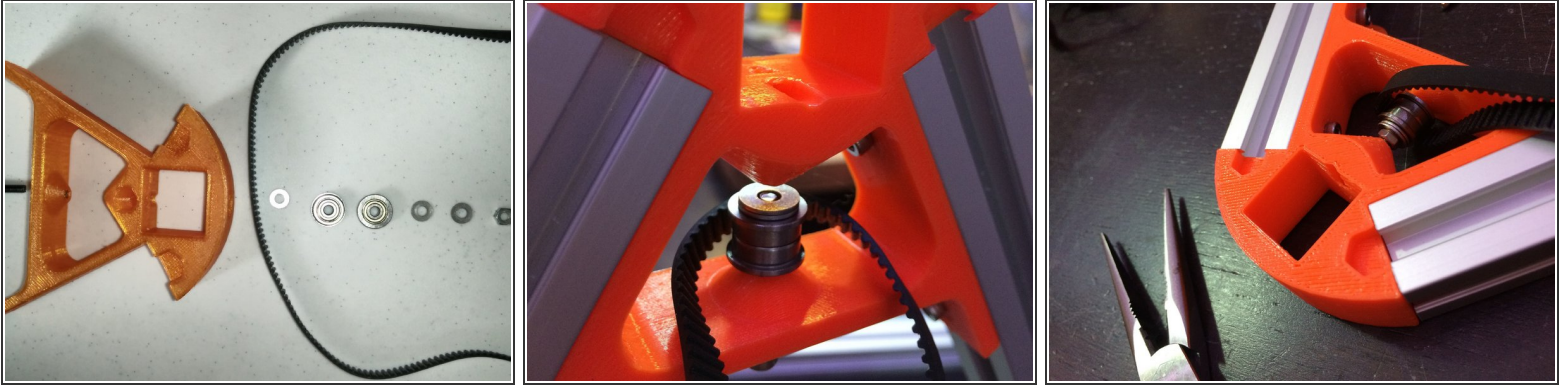
- top brackets (3)
- short Alu frame profiles (3)
- M3x8 screws (12)
- t-slot nuts (12)
- M3x25 screws (3)
- M3 washers (small inner diameter) (9)
- F623ZZ flanged bearings (6)
- M3 standard nuts (NOT nyloc nuts) (3)
- belts (3)

Step 1 — Fit profiles to brackets



- i** Unlike the lower brackets, the upper brackets have a face-up/down position, indicated by the hexagon nut-hole in the center of the bracket. When assembling the upper frame, make sure that all 3 hexagon holes are facing the same direction!
- This is in essence a repeat of the procedure for assembling the base: Add all 12 M3x8 screws and t-slot nuts finger-tight to the 3 brackets. Make sure they are in correct position, i.e. nuts facing outwards, so that profiles can be added later.
- Then align one of the profiles with the two nuts of one of the brackets. Always starting with the outer screw first, loosen the screw 5 full turns, then tighten it 2-3 full turns until the profile is held tightly against the bracket.
- ⚠ Check that the outer t-slot nut connected properly with the groove in the profile, only then repeat with the inner screw/nut. The inner t-slot nut can be checked visually.**
- After both nuts connected properly, add a second bracket to the other end of the profile. Then add third profile to one of the brackets, then add the third bracket and lastly, add the last profile to two brackets in order to complete the triangle.
- ⚠ Make again sure that all the t-slot nuts have connected properly with the profiles. This is crucial for the future stability and rigidity of your printer!**

Step 2 — Top idler assembly



- Fit the M3x25 screw through the one of the brackets and progressively add in this sequence: washer (shiny side towards bearing), first bearing (flange right), second bearing (flange left), belt, second washer (shiny side towards bearing), third washer (shiny side towards nut) and finally the standard nut.

⚠ Do not forget to insert one of the closed belts!

- i** You will probably need to hold the nut with needle-nosed pliers as you do up the bolt. Tighten the nut against the bearings but make sure that the bearings can still turn freely!
- ➡** Repeat for the other 2 brackets. Set aside the top frame while you get on with the next stage.