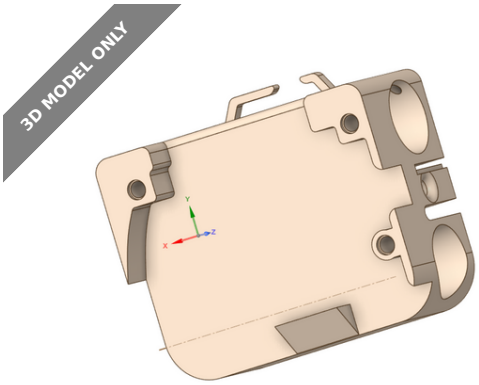


Sovol SV06 Plus MonoBlock Extruder Mount

SmittyForge

VIEW IN BROWSER

updated 11. 2. 2024 | published 11. 2. 2024

Summary

BETA model, based on Sovol STEP files and Igus Drylin spec sheet

3D Printers > Other Printer Parts & Upgrades

Tags: sovol sv06plus

Update 2/10/24

If you guys need anythingspecific, please message me. Leaving it in comments doesn't notify me at all for some reason. If you message me, I get an email and I will respond much sooner.

STP file added.

Update 12/12/23

I added a file where the bearing cavities are exactly 19mm, and a step file for you guys to remix. I named the files with the word carrier to differentiate them further.

Please make sure what you remix is functional, as this is still a beta...but it is still good practice imo. And post your makes too, please.

THIS IS A BETA MODEL AND UNTESTED. PLEASE DO NOT LEAVE A BAD REVIEW

This model was made by request for several users who need to replace their broken, cracked, wobbly stock X axis extruder mount / bearing carrier.

You will need:

3 Rj4JP-01-10 bushings

5 m3x6(long) ruthex heat set inserts, 3 for the extruder mount, and 2 for the belt retention screws

6 m3x3 or m3x4 grub screws (set screws) for bushing retention holes (to be threaded by hand into the plastic)

3 m3x8 or m3x10 counter sunk screws for the extruder

There are more instructions if you click my profile and click on the MonoBlock for the original SV06 in which most applies to this model since they are very similar.

Between the SV06 and the Plus, the differences are much less than I expected. It appears to be the same extruder (with a different hot end) and the same mounting plate/breakout board. So, they just made the holes larger on the same carrier to accommodate the larger 10mm bearings which is why so many are broken...

As such, there is much less room for the belt than I would like to have seen. This makes the belt retension area not as robust as I would like. If I had to guess, I would say this will need to be addressed in future updates.

The bushing retention screws are all on the back of the model now for easier printing. They interface with the channels in the Drylin bushings and keep the bushings in place and can put some pressure on the bushing itself, if needed.

Pictured in the gallery are the 2 areas **you need to block supports**. I would print with the following settings:

PETG or ABS or Nylon if you're feeling spendy

.2 layer height, .4 nozzle, inner walls before outer, 70-75 degree overhang angle for supports. I use 3 walls minimum (I alternate extra wall in Cura too), 20-30 percent infill, full overlapping infill pattern (grid or triangles etc)

You will need 3 RJ4JP-1-10 Igus Drylin bushings.

I am counting on you guys keeping me informed as to fitment and any other issues you run into. Message me for changes needed. I also sized the bushing holes at 19.1mm which should print perfect for most of you. If you need to enlarge the holes further, a Dremel with a sanding wheel or a large stone should make short work of that. You want a bit of resistance when pushing the bushings in, but not too much. The retention screws on the back can put a little pretension on the bushing as well.

The printer will print approximately 2mm further forward than from the factory.

Changelog

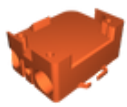
12/07/23: moved the belt mounting screw hole 1.2mm towards the back of the mount and added a connecting wall to the mounting area.

There is also another file now with larger bushing cavities @19.3mm

Model files

sv06-plus-monoblock-extruder-mount-191mm2.stl

sv06-plus-monoblock-extruder-mount-193mm.stl



sv06-plus-monoblock-carrier-19mm.stl

sv06-plus-monoblock-carrier-19mm.stl

step-sv06-plus-monoblock-carrier-19mm.stp

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