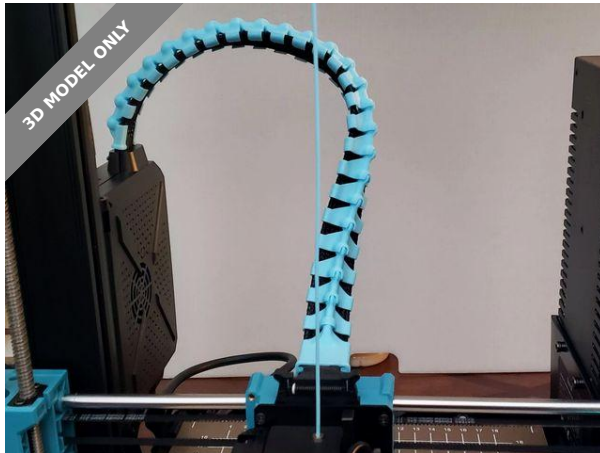




Cable Chain (SPINE) for SOVOL SV06 3d printer extruder cable



rogerquin

[VIEW IN BROWSER](#)

updated 7. 8. 2023 | published 7. 8. 2023

Summary

This cable chain (SPINE) supports the extruder ribbon cable on the Sovol SV06 3d printer and stops it from sagging.

[3D Printers](#) > [3D Printers - Upgrades](#)

Tags: [articulated](#) [articulation](#) [cablemanagement](#) [ballandsocket](#)
[articulate](#) [cablechain](#) [sovol](#) [cablespine](#) [sovol3d](#) [sv06](#)
[sovolsv06](#) [sv06sovol](#)

This cable chain (SPINE) supports the extruder ribbon cable on the Sovol SV06 3d printer and stops it from sagging on taller prints. There are three special pieces for the ends of the spine. Refer to the pictures for correct placement, orientation, and total piece count. For easy installation, start building the spine piece by piece from both ends and finish at the center. The spine is designed to bend in one direction only and can twist 180° in a 200mm section assembly. This range of motion allows the ribbon cable to move freely at different heights along the X-Axis. Please post your makes

Please note: This design prints without supports, and benefits from a well-calibrated printer using 0.4 to 0.42mm perimeter shells. A resolution of 0.2mm layer height or better, works best.

Update: 06/22/23

Added "Wall_Calibration.stl" file.

Some users have reported that their prints are stiff and don't have the same flex as shown in the video. Before you commit to printing the spine, I recommend that you first print the wall calibration file with the suggested settings below.

The dimensions for the wall calibration file are 20mm OD on the XYZ, and the wall thickness is 1.2mm on all walls including curves. If your measurements are not within 0.02mm of the given dimensions, I recommend doing a printer calibration. Assuming you are using a .4 nozzle. Set your print settings to 0.2mm layer height for all layers, including the first layer (if you're using a percentage, make sure it matches the rest of the layers). Set the flow rate at the same value for all layers including the first layer. Now, print the wall calibration STL, and check the dimensions. Again, it should measure 20mm OD on the XYZ. The most critical dimension is the wall thickness. The wall thickness is 1.2mm on all walls including the curved wall. Obviously, you want to have minimal to zero first-layer squish. If you're within 0.02mm of the cube dimensions, you should be good to go, otherwise, calibration is necessary. Hope this helps.

Please watch the video and compare the spine behavior before installing. If your SV06 cable chain is stiff and with restricted movement, then printer calibration is recommended. The spine should be very flexible and should behave like a very loose rope as shown in the video. The dimension for the cable clips is 1.2mm exact.

Model files



sv06_extruder_cable_chain_v1.stl



sv06_extruder_cable_chain_ends_v1.stl



wall_calibration.stl

License ©

This work is licensed under a
[Creative Commons \(4.0 International License\)](#)



Attribution—Noncommercial—Share Alike

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✗ | Commercial Use
- ✗ | Free Cultural Works
- ✗ | Meets Open Definition