



Sovol SV06 Plus Heat Bed Cable Support Bundle for tight spaces (now V2!)



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Summary

This is a two-piece heat bed cable support set for the Sovol SV06 Plus when placed near a wall

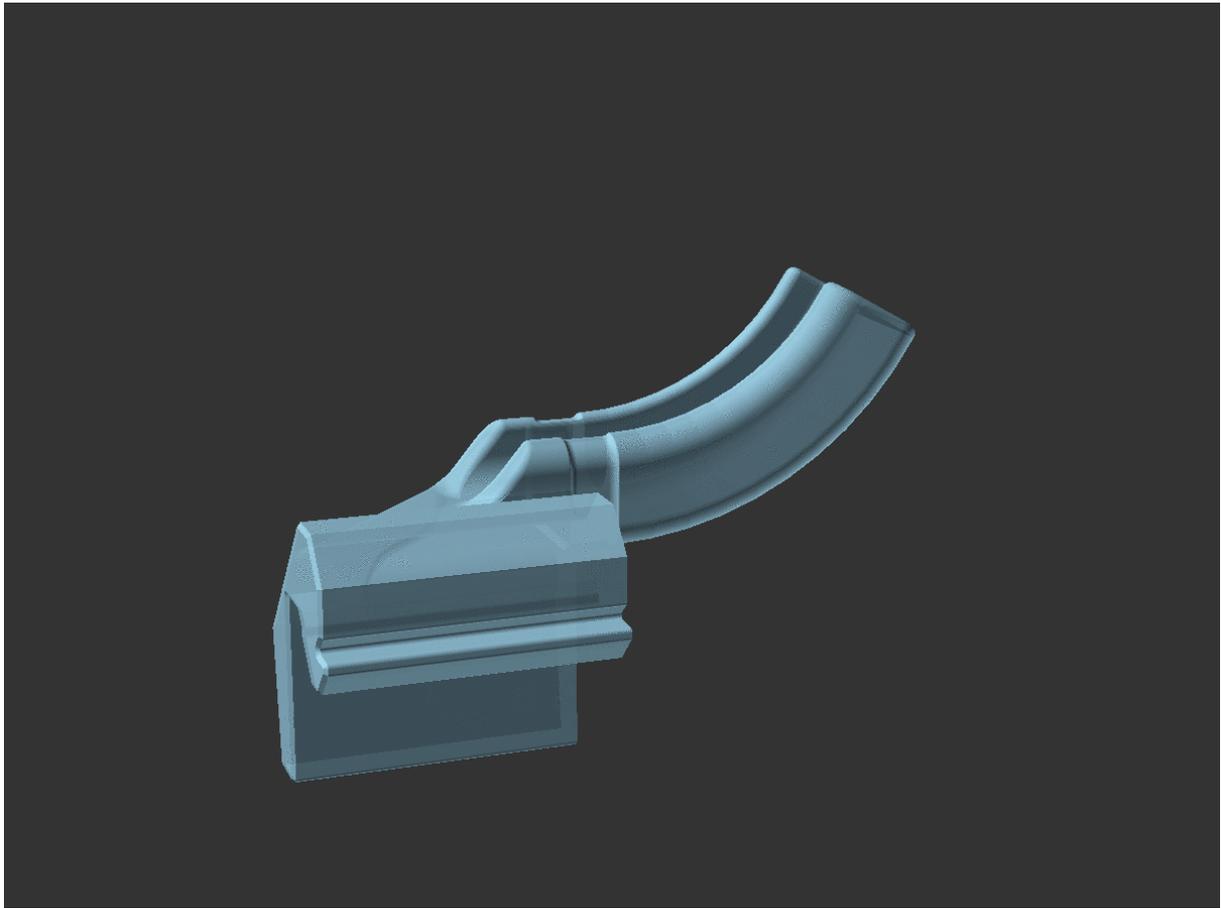
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[VIEW CODE ON GITHUB](#)

Update! -- November 29, 2023

I have recreated my remixed frame strain relief support model from [rogerquin's original model](#) using [OpenSCAD](#)! By default, the recreated frame support is the same as before. However, the OpenSCAD model recreation makes the bend angle parametric.



Version 2 -- November 14, 2023

Heat bed strain relief support V2 is here!

I've been printing with the original bed strain relief support clip since I published it a few months ago. The printer's original bed strain relief cover that this fits onto is slightly wobbly. Once in a while, the bottom of the looped zip tie would catch on the printer frame while moving to home, preventing the bed from moving all the way back.

I redesigned this part from scratch to attach through the printer's strain relief cover holes for a more stable fit!

Overview

In making an enclosure for my Sovol SV06 Plus, the heat bed cable would get squashed against the rear wall when the bed moved to the far back (such as when moving to home). I wanted the cable to be held upright without restricting the motion of the bed.

To accomplish this, I modified [rogerquin's Heatbed Cable Support for SOVOL SV06 / SV06+ 3d printer](#) and added a support clip to fit over the heat bed cable strain relief cover.

In exploring solutions, I've learned the hot bed cable and strain relief included with the SV06 Plus differs from those on the SV06, so these pieces may not work on the SV06. The [OpenSCAD](#) source model and STL parts are included for remixing.

Hardware

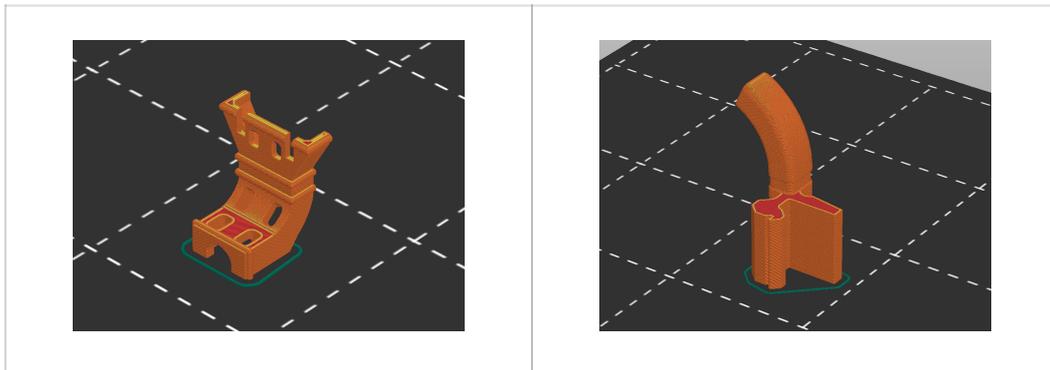
You'll need 3 zip ties (2 of which should be small):

- 1 zip tie for the frame strain relief support clip
- Between 2 and 4 small zip ties for the bed strain relief cover support clip (I used 2)

Printing

Orientation: Both parts print oriented as rendered – the frame support clip prints upright, and the heat end bed support clip prints on its back side.

Brim (optional): A brim for one or both parts may be needed depending on your bed adhesion. The heat bed end support clip has a low bed contact surface area.



Installation

Both parts clip on and should be fastened with zip ties.

Frame strain relief support

The frame support clip tilts into the printer frame slot. Attach a zip tie to the heat bed cable on top of the clip to keep it in place.

Bed strain relief support installation steps

The heat bed strain relief support clip fits over top of the existing SV06 Plus strain relief cover. Secure it in place with a small zip ties:

- One zip tie through the top strain relief cover holes, looping around the heat bed cable on the bottom
- Another zip tie on the upright vertical heat bed cable support

If desired, zip ties can also be placed on the end of the strain relief cover overlap, and on the middle of the support curve.

Installation steps in photos:

Original Sovol strain relief cover
Fit the printed bed strain relief support on top of the original Sovol strain relief cover
View from above, with holes for zip ties visible
Thread a zip tie through one of the holes at the bed end of the frame clip
Loop the zip tie all the way down and around the heat bed cable on the bottom, and through the second hole on the bed strain relief support
Sample photo of the first zip tie looped all the way down and around (white zip tie used for contrast)
Tighten the first zip tie and remove the excess
Thread another zip tie through the top holes and around the back of the bed support cable
Tighten the second zip tie and remove the excess. All done!
(Optional) If desired, add two more zip ties as pictured.

Remixing

For further remixing, I've included the [OpenSCAD](#) source model for the both the frame and bed strain relief support clips.

The bed support source model uses the [original Sovol SV06 Plus strain relief part](#) for fit and shapes of various components.

The frame support source model uses [rogerquin's original model](#) within the remixed model code.

To use either of these OpenSCAD models, place all of the source files in the same directory. Then, open either `frame-strain-relief-support-v2.scad` or `bed-strain-relief-support-v2.scad` in OpenSCAD.

Original parts note

The included SV06 Plus strain relief cover STL files are repaired copies of Sovol's original part (also included). The original part STL produced CGAL errors in OpenSCAD.

The included copy of [rogerquin's original model](#) has been recentered to the origin on all axes.

Previous version

The first version of this model was published on September 17, 2023.

Earlier remixed versions of both the [frame support clip](#) (created using Blender) and [bed support clip](#) (created using TinkerCAD) are included in the model files, within the old-version folder.

This remix is based on



Heatbed Cable Support for SOVOL SV06 / SV06+ 3d printer

by rogerquin



GitHub - Sovol3d/SV06-PLUS: The fully open source for the SV06 Plus Includes the stl file step files, firmware source code, icon image for the SV06 Plus. please

check sovol3d repository here



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Model files



models-for-printing

5 files



frame-strain-relief-support-v2-45-degrees.stl

Bed cable support for frame, 45 degree bend. Print upright.



frame-strain-relief-support-v2-60-degrees.stl

Bed cable support for frame, 60 degree bend (pictured model). Print upright.



frame-strain-relief-support-v2-75-degrees.stl

Bed cable support for frame, 75 degree bend. Print upright.



frame-strain-relief-support-v2-90-degrees.stl

Bed cable support for frame, 90 degree bend. Print upright.



bed-strain-relief-support-v2.stl

Bed cable support for hot bed end. Fits over existing strain relief, attach with zip ties.



source

6 files



frame-strain-relief-support-v2.scad

OpenSCAD file used to create rendered frame support model



bed-strain-relief-support-v2.scad

OpenSCAD file used to create rendered bed support model



sovol-sv06plus-cover-repaired-notext.stl

Sovol SV06 Plus bed strain relief cover, repaired STL with text removed from surface



sovol-sv06plus-cover-repaired.stl

Sovol SV06 Plus bed strain relief cover, repaired STL



sovol-sv06plus-jxhsv06-01009-d-hot-bed-wire-fixing-... .stl

Original Sovol SV06 Plus bed strain relief cover, from Sovol's GitHub repository



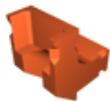
rogerquin-sv06-heatbed-cable-support-v2.stl

rogerquin's original frame support model, recentered to the origin on all axes



old-version

2 files



bed-strain-relief-support-v1.stl

V1 of support for hot bed end. Fits over existing strain relief, attach with 2 zip ties.



frame-strain-relief-support-v1.stl

V1 of support for frame. Print upright.

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