

One Way Filament Guide



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Summary

When using multiple colors single extruder setups like ROME, this guide will prevent filament de-spooling..

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When using two color single extruder setups like ROME, during color changes you can have the filament de-spool during large retractions, leading to tangling and failed prints. This guide is placed between the feeder extruders and the spools and maintains tension between the one way filament guide and the spool, regardless of feeder extruder direction, to prevent de-spooling.

You'll need two 3mm heat sets inserts per guide intended for 5.06mm holes 3.8mm deep and two 3mmx8 screws. You'll also need a length of ptfе tube 4mm OD x2mm ID. Also 3030 tnut and 6mmx12 screw to mount the guide to the rail.

Print the guide in a hard plastic of your choice, and the grip in Ninjabflex or TPU

Be sure to leave enough space between the feeder extruders and the guides so the filament has room to bend without kinking during large retractions.

If you feel the grip is too strong scale it thinner, or if too weak scale it thicker.

I've added the step files for those who want to make changes.

Model files



vcore3-500_rome_filament_guide_antibackup.stl



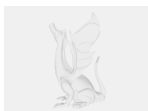
vcore3-500_rome_filament_guide_antibackup_extended.stl



vcore3-500_rome_filament_guide_antibackup_grip.stl



vcore3-500_rome_filament_guide_antibackup.stp



vcore3-500_rome_filament_guide_antibackup_extended.stp

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