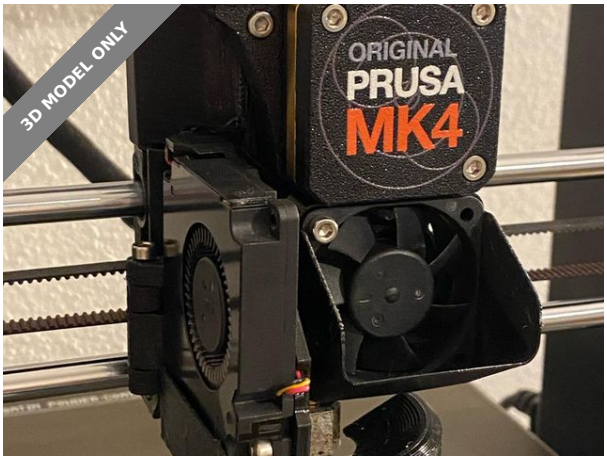

MK4 Hotend Fan Shield - eliminates turbulence / drafts at the nozzle caused by the hotend fan - Fan shroud - REMIX

daytrader

VIEW IN BROWSER

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Summary

Clip-on mounting Fan draft shroud for PRUSA MK4 Fast & easy print & simple clip-on mounting -> Easy Upgrade

3D Printers > Prusa Parts & Upgrades

Tags: prusa cooling fanduct shroud fanshroud fancover mk4

Re-mix of the same concept from David - but with Clip-on mounting and it prints easier / lower warpage.

- Clip-on mounting Shroud
- Easy on / off without removing screws
- No supports needed
- Smooth bottom
- No airflow restriction
- only 3.6g / light weight

- keeps also strings from getting into the fan

V2
lighter & tighter :-)

- -15% in weight (0.7 instead of 0.8mm walls)
- fits a bit tighter (-0,05 inner diameter)
- added a outer 0.2 skirt for better bed adhesion

V3
even lighter :-)

- optimised design
- only 3g

V3 with thicker walls:

Some complain that it is not sturdy enough and a little bit delicate.
This version is not the lightest, because wall thickness increased.
(Maybe you have to loosen the fans screws to get enough clearance between planetary rotor box and fan - Comment from a maker)

- 0.9 instead of 0.7mm walls
- 3.9g

V3 slim design
→ latest version and my favourite :-)

- slim design version - same angle as MK4 fan holder
- only 2.8g

If you like you can combine this shroud with my snapon grill:
https://www.printables.com/de/model/641341-snapon-hotend-fan-guard-for-mk4

Installation:

Simply slip over the fan.
Please push until the Fanduct Frame is flush with the fan housing.
(See also photos of other makes)

Make sure you snap it all the way into place.
It may seem like it's seated, but make sure it is all the way in.
Mine made a nice click when it fully seated.

Printed on a MK4 in PETG with 0.6 nozzle / 0.15 or 0.2 Quality / no supports

MK4 part cooling is inconsistent - this Shroud prevents this.

This Fan Shield / Cover has noticeable positive affect when printing materials and geometries that are sensitive to overcooling.

Also this modification ensures that the hotend fan gets cooler air.

Recommended / suitable fan duct:
https://www.printables.com/de/model/621536-improved-mk4-fan-duct

Recommended MK4 Extruder Fan Duct:
https://www.printables.com/de/model/692672-mk4-extruder-fan-duct-tweaked-version

Description from Davids Original Design:
“When dialing in my MK4 printer to match the print quality of my Mk3S+'s, I noticed that the MK4 part cooling was inconsistent. Upon further examination, it became clear that the positioning of the MK4 hotend fan was creating turbulence/drafts at the nozzle and affecting part cooling. ”

Discussion in the PRUSA Forum:
https://forum.prusa3d.com/forum/english-forum-original-prusa-i3-mk4-general-discussion-announcements-and-releases/heatbreak-fan-might-be-causing-asa-abs-warping/

This remix is based on

Hotend Fan Shield for Prusa MK4 - Eliminates turbulence/drafts at the nozzle caused by the hotend fan

by David

Model files

fan_shroud.stl

V1 - first version - 3.6g

fan_shroud_v2.stl

V2 - lighter & tighter - 3.2g

fan_shroud_v3.stl

V3 - optimised design / only 3g

fan_shroud_v3_thicker_walls.stl

V3 with thicker walls / 3.9g - see cons in description

fan_shroud_v3_slim_design.stl

V3 with slim design - only 2.8g - my favourite version

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