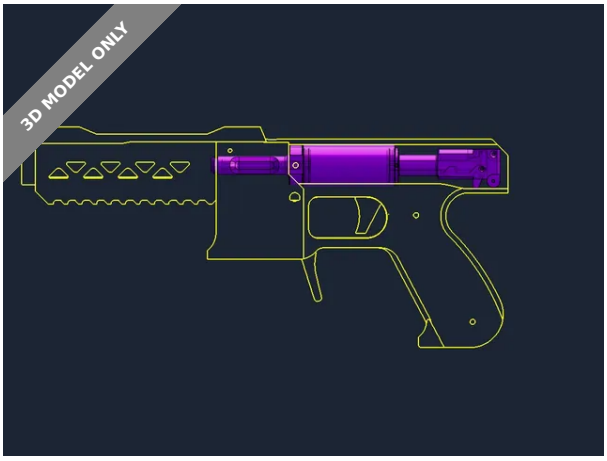

Sturdy Printable Plunger Tube Set - SIGNET v3 Blaster - Nerf

Corvus

VIEW IN BROWSER

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Summary

Sturdy 2mm wall-thickness printable plunger tube with matching plunger head, pusher, and rear block for SIGNET v3.

Toys & Games > Outdoor Toys

Tags: toy dart barrel spin iron blaster adventure speed front t bee nerf accessory cylinder force half pro tube bolt pull side slide flywheel rail mega optic xl action scope prime shell sight foamdart x picatinny shot tactical loader revolver worker elite rear plunger gecko speedloader long buzz zone foam sights break spielzeug rival pusher optics visier short jolt pica signet fiberoptic spamf v3 ironsights dartzone xshot adventureforce longshot buzzbee korn falconfire excel

tpull n1 kimme foamflinging thrasher hvz airpocket longshot2 plungertube spinshot breakbarrel

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The stock printable plunger tube included in the original files has a wall thickness of only ~0.4 mm (approx. 1 wall loop), which is quite fragile for a functional 3D-printed component.
I made this mod to make self-sourcing much easier without needing a full hardware kit - just pair this plunger tube set with my 3D-printable barrels!
For the Sturdy Printed Plunger Tube Set, **I recommend one of the 100mm barrel versions** marked with a green bullet point.
Because of the reduced inner diameter, the internal core components have been scaled and adapted accordingly.

Included Components & Modifications:

- **Sturdy Plunger Tube:** 2 mm wall thickness (5 walls) for high stability.
- **Adapted Plunger Head:** Scaled down to fit the thicker tube wall.
- **Optimized Pusher:** Resized for the new tube ID, with reduced dead space (removed the internal funnel).
- **Modified Rear Block:** Adjusted dimensions so the plunger tube fits smoothly over it during priming.
  Just print these 4 modified STL files in place of the original SIGNET v3 ones.
  Every other STL from the original build is kept exactly as it is!

Performance Note:

- Despite the minor decrease in air volume due to the thicker walls, the remaining volume is enough to efficiently supply the short SIGNET v3 barrel (100mm) with optimal pressure.

O-Ring Fitment Note:

- You may need to experiment with slightly smaller O-rings (smaller inner diameter) than listed in the original BOM to ensure a perfect air seal inside the reduced tube diameter.

Padding recommended:

- I recommend sticking a small foam pad (like a EVA foam pad or crafting foam) onto the plunger head. While it works fine without one, it reduces wear on both the plunger head

and pusher, while significantly dampening the noise for a surprisingly quiet shot.

Lightly sand the inside of the printed plunger tube with a rolled-up piece of sandpaper.

The files are already pre-oriented.

My print settings for PLA:
0.2 mm layer height
6 walls
40 % gyroid or cubic infill
10 top and bottom shell layers
Wall Generator: Arachne
Scarf Seams
Supports needed!

Use an outer brim if you have poor print bed adhesion!

Check out my SIGNET v3 Collection:
Find all my matching mods for the SIGNET v3 in one place.

Thanks to Acorn Armaments for the files I could use for this remix.

This remix is based on

Signet v3 - Modular Dart Blaster
by Acorn Armaments

Modular Handguards for Acorn Armaments Blasters
by Acorn Armaments

Model files

sturdy_printable_plunger_tube.stl

plunger_head_sturdy_printable_plunger_tube.stl

pusher_sturdy_printable_plunger_tube.stl

rear-block_sturdy_printable_plunger_tube.stl

optional_spring_spacer_2mm.stl

☐ Slide 1 or 2 of them onto the rear block for a few more fps. It doesn't work with every spring!

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