Hall’s Angled Grip (HAG) Assembly Guide

By Ethan Hall

Materials

For this build you will need:

- 1X 8/32 x 1in screw
- 1X 8/32 nut

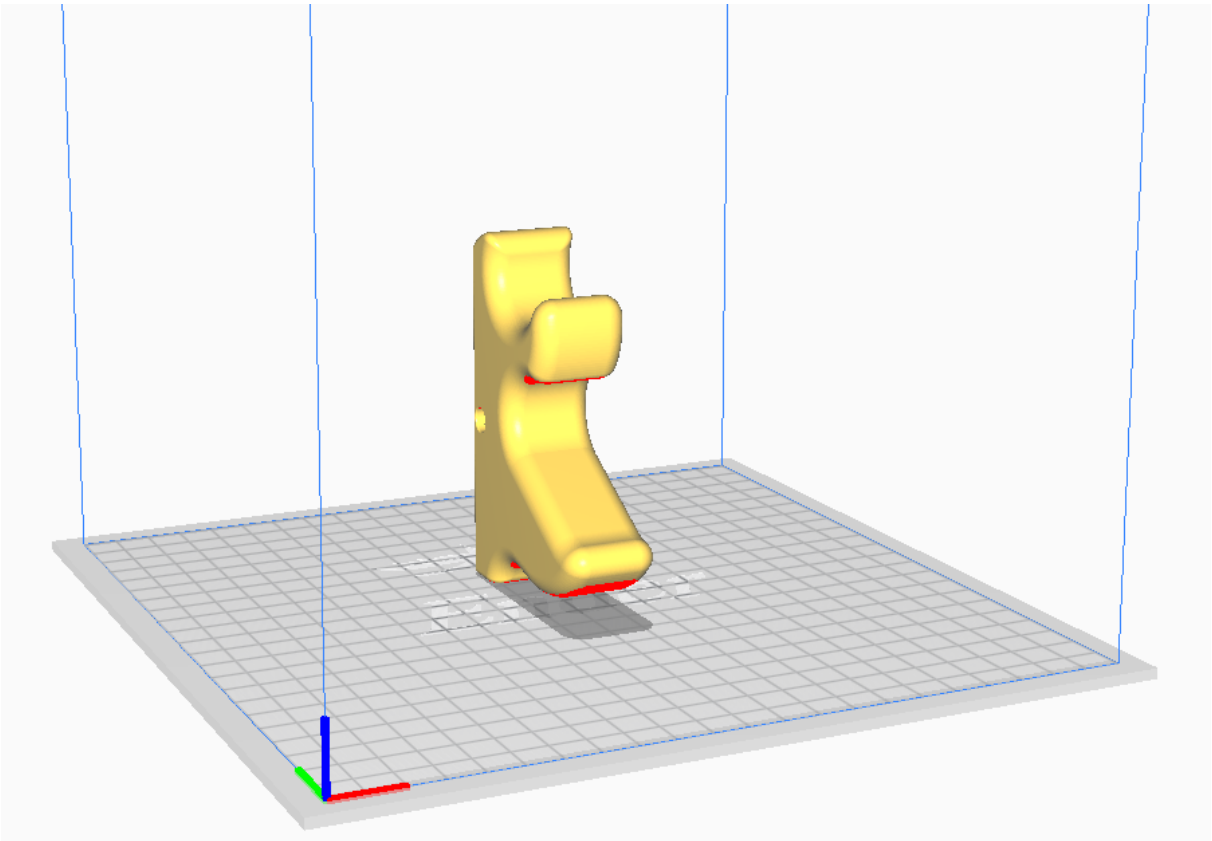
If metric is more your thing, M4 x 25mm can be used instead.

Not required, but I would recommend that you also have the following on hand:

- Files/sandpaper
- 2 in 1 fill and sand primer
- Paint

Slicer Settings

The model should open in the proper orientation:



This is important to make sure the lips are strong enough.

While there are many settings that affect the quality of the print, these are the only ones we care about:

- Wall Line Count - 6+
- Printing temperature - 210 degrees
- Infill - 30%+
- Supports - enabled
    - Support placement - everywhere
    - Support overhang angle - 50 degrees

Layer height doesn't matter too much here, larger numbers will print faster, but smaller numbers means less sanding if you choose to do so. Support type doesn't matter, but I would recommend normal.

Printing and Clean Up

The printer should take care of this step, assuming you take care of your printer. Make sure the bed is level and your printer is dialed in and accurate. If you are off in x or y axis the grip might not fit on the rails. It's a good idea to watch the first layer go down to make sure the print won't fail. After this grab a beer or something and wait for it to finish.

Once it finishes it is time to remove the supports.

Now time to finish it. You are welcome to skip to assembly, however I recommend giving it a quick sanding, giving it a coat of 2 in 1 fill and sand, then sanding it again once dry. That should leave it nice and smooth. You can now paint it to match your build, or what I recommend, spray on truck bed liner. This gives it a nice textured grip.

Assembly

Slide the grip onto the rail. The finger hook should be facing forward.

Position it close to where you want it to be, then look through the little hole. Move it so you can see between the raised sections of pic rail.

Slide the nut into the hexagon hole,

Flip it,

and thread your screw into the nut. Tighten it to point it where it won't move. If you hear plastic cracking, you've tightened it too much.

Final Notes

You were probably wondering why this grip is as smooth as my brain. Yes, I know how to stipple. Do you? This model was made for 2 reasons. 1, to have a printed knockoff of the diamondback angled foregrip. And 2, to give people new to cad a functional brick of plastic to practice adding texture, or other simple modifications. Checker it, draw a bunch of dicks on it, do your worst. I’m looking forward to seeing what you guys do with this. I figured the accessories page on the gatalog would be the biggest, but it's actually quite small. Let’s fix that.