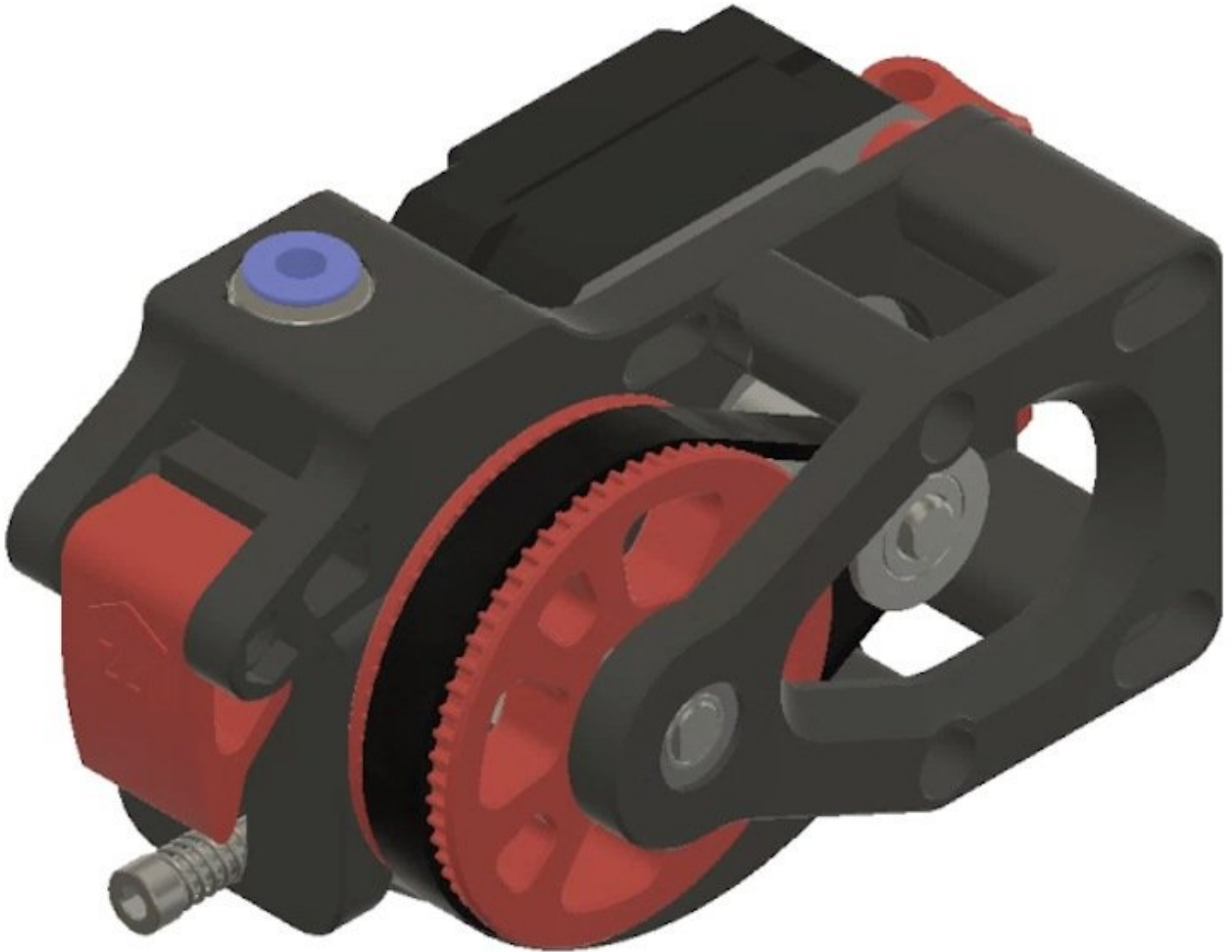


Voron Design

Installation

Brief explanation of Jetpack installation on a Voron 2 printer.

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INTRODUCTION

To install the Jetpack (JP) on a Voron 2, you will need two M5x16 SHCS mounting screws and t-nuts to attach the JP to the back side of the X- rail. Before making this attachment, move the rail to the back of the printer (Y=MaxMillimeters, e.g., 300mm). Position the JP by eye to determine a horizontal location that will clear all cables and plastic mounting parts. If there are wire-hiding covers on the back rail of the gantry, remove them, as the JP will be moving over that rail when the machine is homing. Clearances are small. Once a clear position is determined, mark it, and move the X-rail to the front. Do not install the JP to the X-rail, yet.

The JP is fed by a so-called reverse Bowden tube. It follows the same path as the Mobius filament feeder's Bowden tube, through the chamber vent. Filament will be fed into this tube from outside the Voron, and into the JP. This tube must be installed into the JP through the input guide, and into the curved bore in the JP main body.

Carefully route the tube through the input bracket and up to the entry point of the tube into the main body. Using a finger on the bottom of the tube's end, coax the tube into the curved bore. Once the tube is inserted a few millimeters, it can be more forcefully pushed into the JP and along the bore's curve. Be careful not to kink the tube during this process. Use of polyurethane coated gloves may aid in getting a better grip on the tube while pushing. The tube must be pushed in until it butts against the bore's internal tube seat just before the drive gears. Failure to properly seat the tube in the main body will make filament loading difficult, or impossible.

Once the input tube is in place, install the JP on the X-rail at the previously marked location.

After routing the input tube through the vent hole at the top of the printer, use a spare collet on the back side to keep the tube from wandering back into the printer. Also, if you make the length of that tube to reach to just over the top of the filament spool, it helps to keep the filament from trying flip off the side of the spool, and greatly reduces any slack.

On the JP output side, cut a length of 2mm ID Bowden tube that is just long enough to reach in an arch from the JP to the toolhead. The ends of the arc should be close to vertical when installing into the respective Bowden couplers (collets). Install tube in JP and toolhead. Check that throughout the toolhead's travel there is no binding or tension at the connections,

and that the tube spins freely in the JP outlet collet assembly. Install collet clip on the Bowden connection. Make sure the clip does not impede the collet's rotation. If so, leave it off.

Wire up the stepper motor according to the Voron wiring diagrams, routing the wire in the groove on the main body of the JP up to the X cable management (zip chain, drag chain, tape chain, what have you).

Note: Starting value for stepper motor's current is 0.5 amps. Adjust from there.

