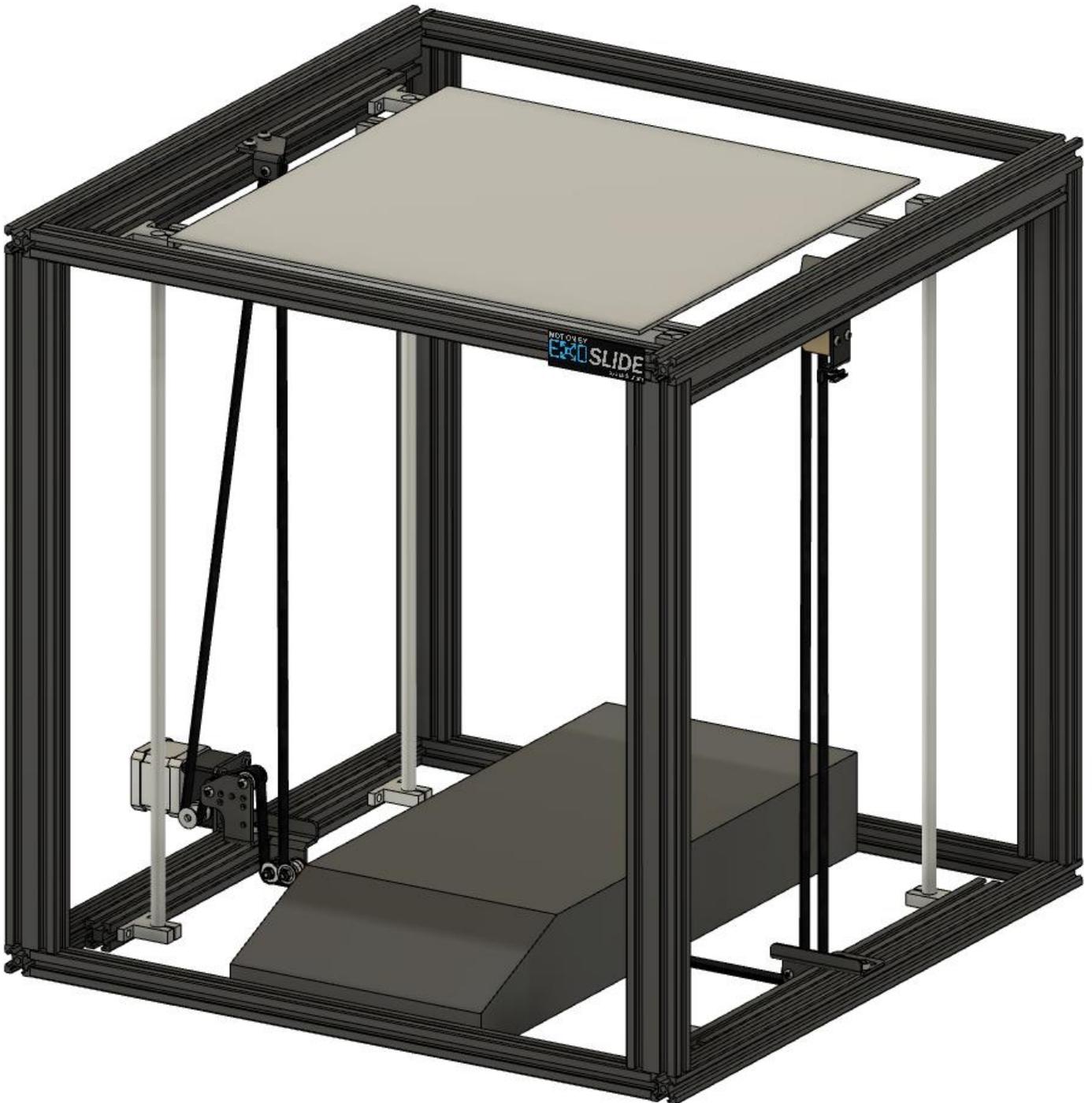


BUILD GUIDE – ENDER 5 PLUS Z BELT MOTION KIT

11/28/2022



www.exoslide.com

0. Remove Stock Z Drive
 - Remove the Z motors
 - Remove Z motor brackets
 - Remove lead-screw + motor couplers
 - Remove lead-screw nuts

Note, this is easiest done with the printer resting on its back!

1. Top Idler Brackets

A: With ExoSlide XY Kit Installed

Parts Needed:

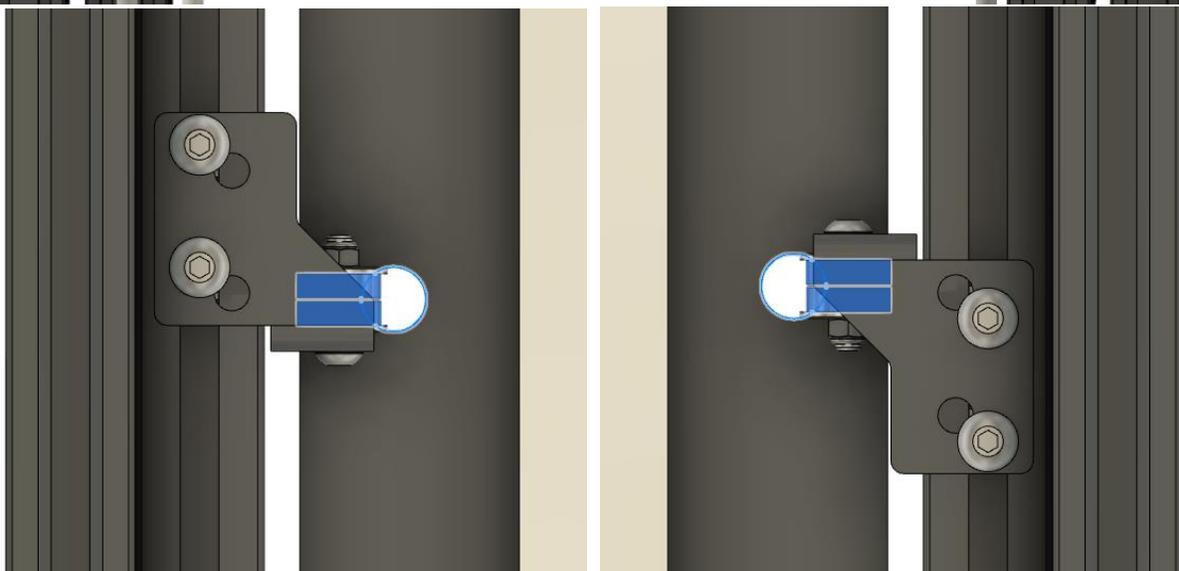
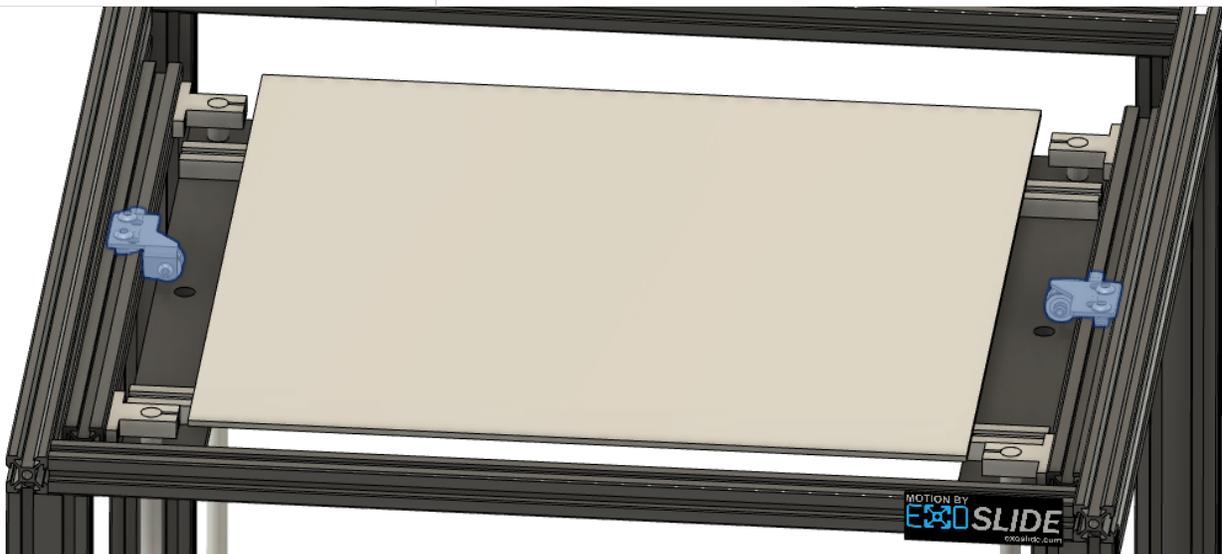
Top Idler bracket assemblies, 2x

M5x8 bolt, 4x

M5 T-nut, 4x



2X

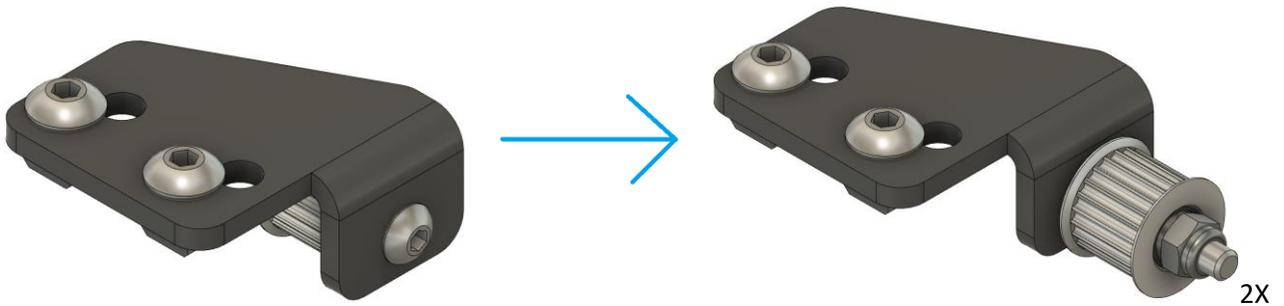


Top View

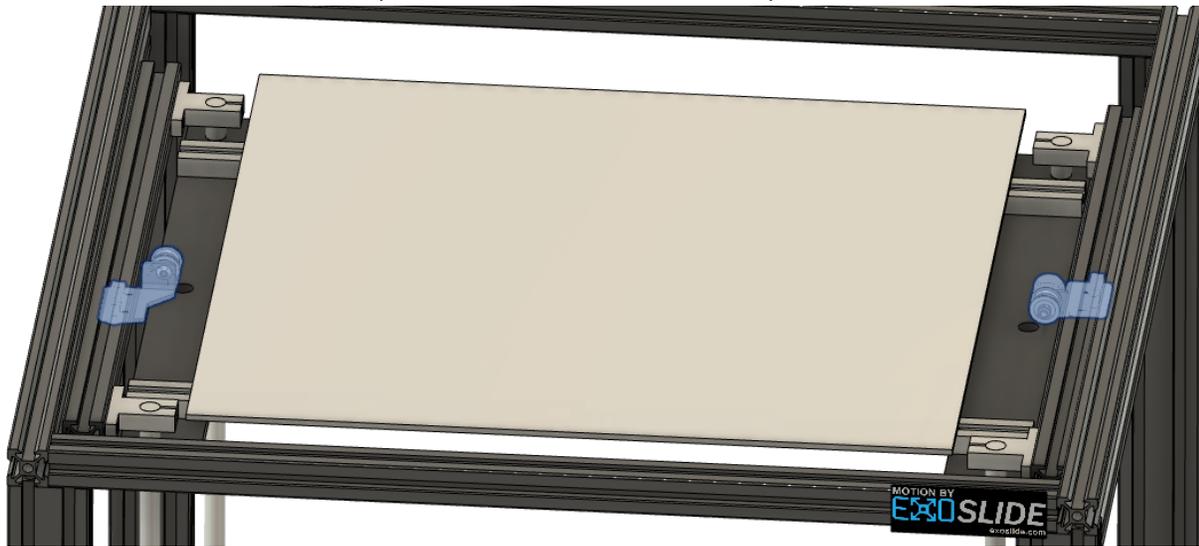
Note: Align the bearing races with the stock Z rod through holes

B: With Stock XY V-Wheels Installed

Switch the bearings + pulley + M4x25 bolt + washers + nut on both the idler brackets (2X)



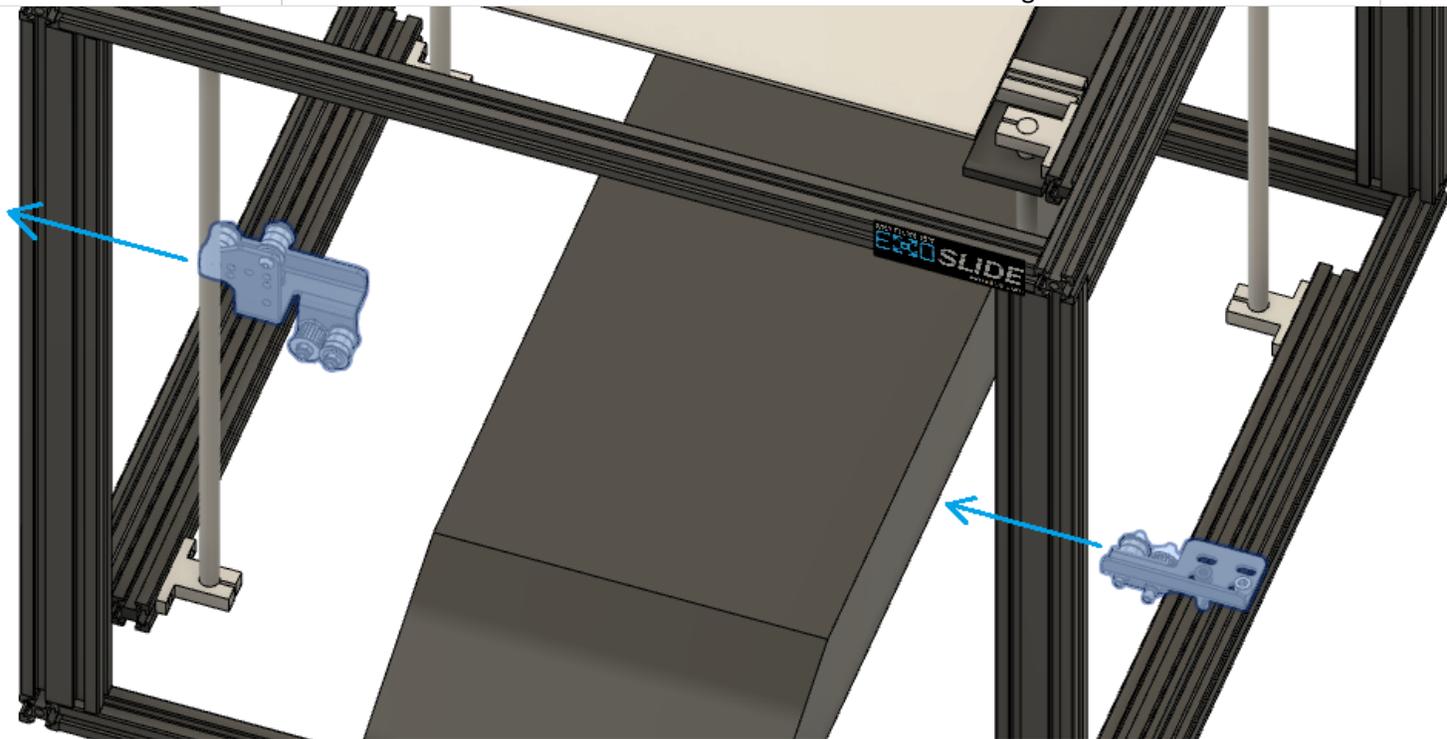
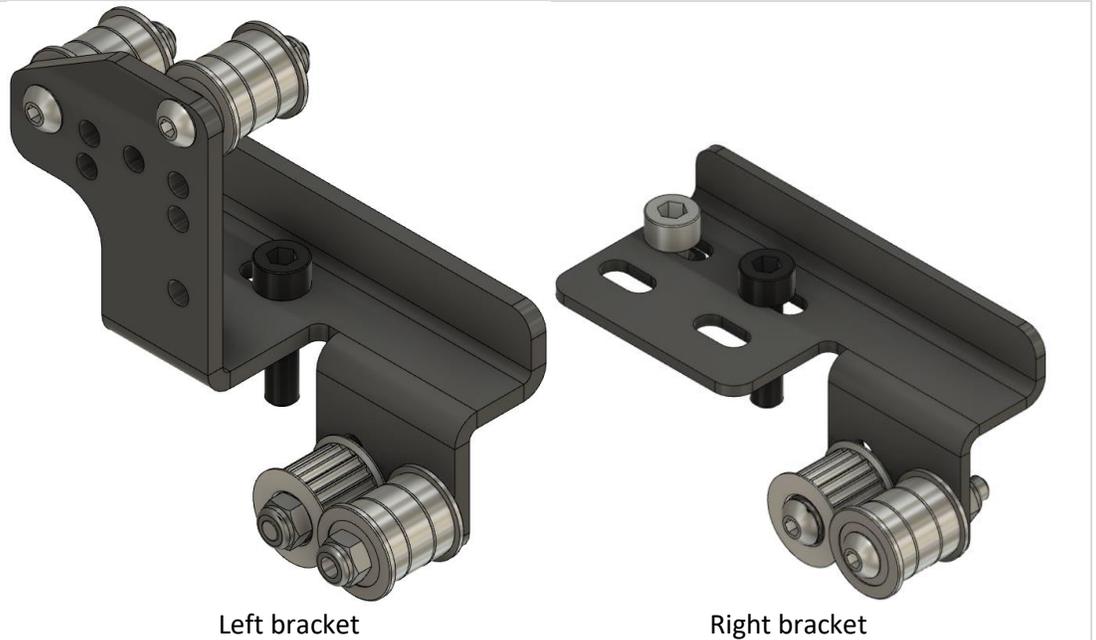
Mount to the underside instead (needed to clear the XY V-wheels)



2. Side Z Brackets

Parts Needed:
Bottom Idler bracket assemblies, 2x
M5x8 bolt, 2x
M5 T-nut, 2x

Re-use:
M5x20 bolt, 2x



Notes:

- If you received an update kit (orders prior to November 25), swap out the pulleys on the right bracket for the included pulley + bolt + nut combinations. Make sure the pulleys spin smoothly afterwards.
- Re-use two M5x20 bolts, at the inner mounting slot on each bracket to help locate the brackets.
- Mount both brackets towards the left as possible (blue arrow direction) in preparation for belt routing. The left bracket can be mounted to the center if more belt tension is needed, but mounting to the outside helps belt wrap on the motor pulley.
- Lower the bed and ensure the bearing races are aligned with the stock Z rod through holes

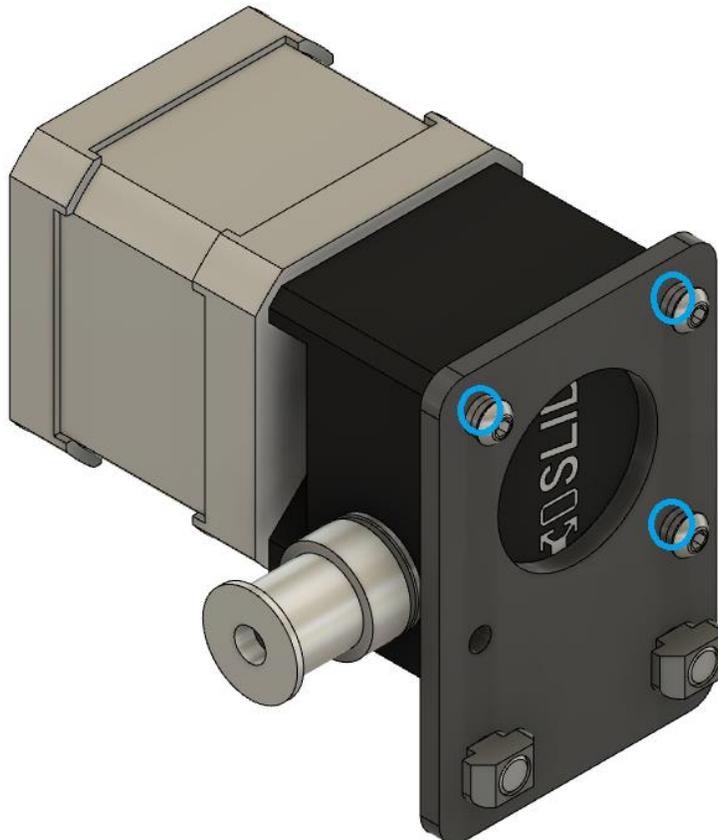
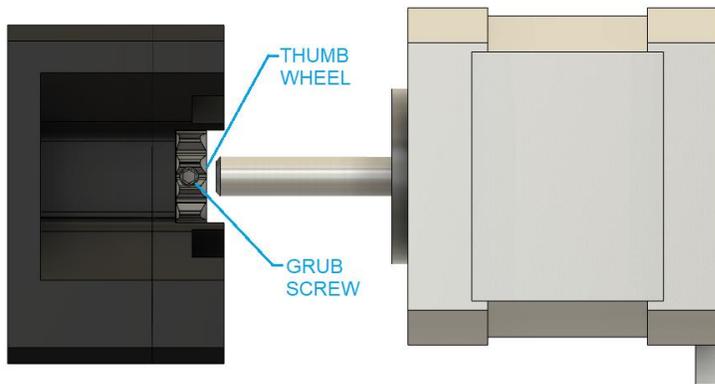
3. Gearbox

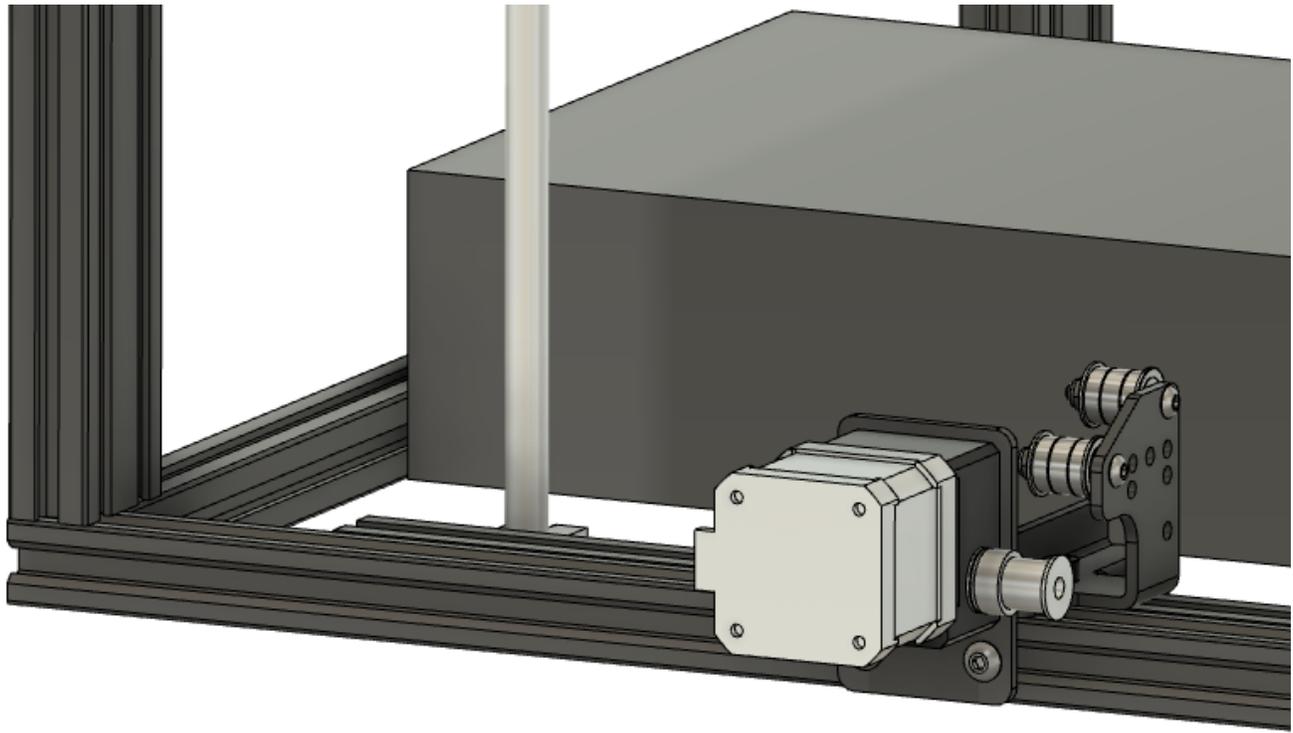
Parts Needed:

ExoSlide wormdrive gearbox, 1x
Motor bracket, 1x
Omega idler bracket, 1x
M3x35 bolt, 3x
M5x8 bolt, 2x
M5 T-nut, 2x

Re-use:

Motor bracket
M3 washers, 6x (take from lead screw nut bolts)





Notes:

- Assembly the motor to the gearbox, and tighten both gearbox grub-screws onto the motor shaft.
- Assemble the gearbox/motor & Creality motor bracket orientation shown with the motor's electrical connector facing away from the pulley.
- Ensure two M3 washers (take from lead screw nut bolts) are under each M3x35 bolt head.

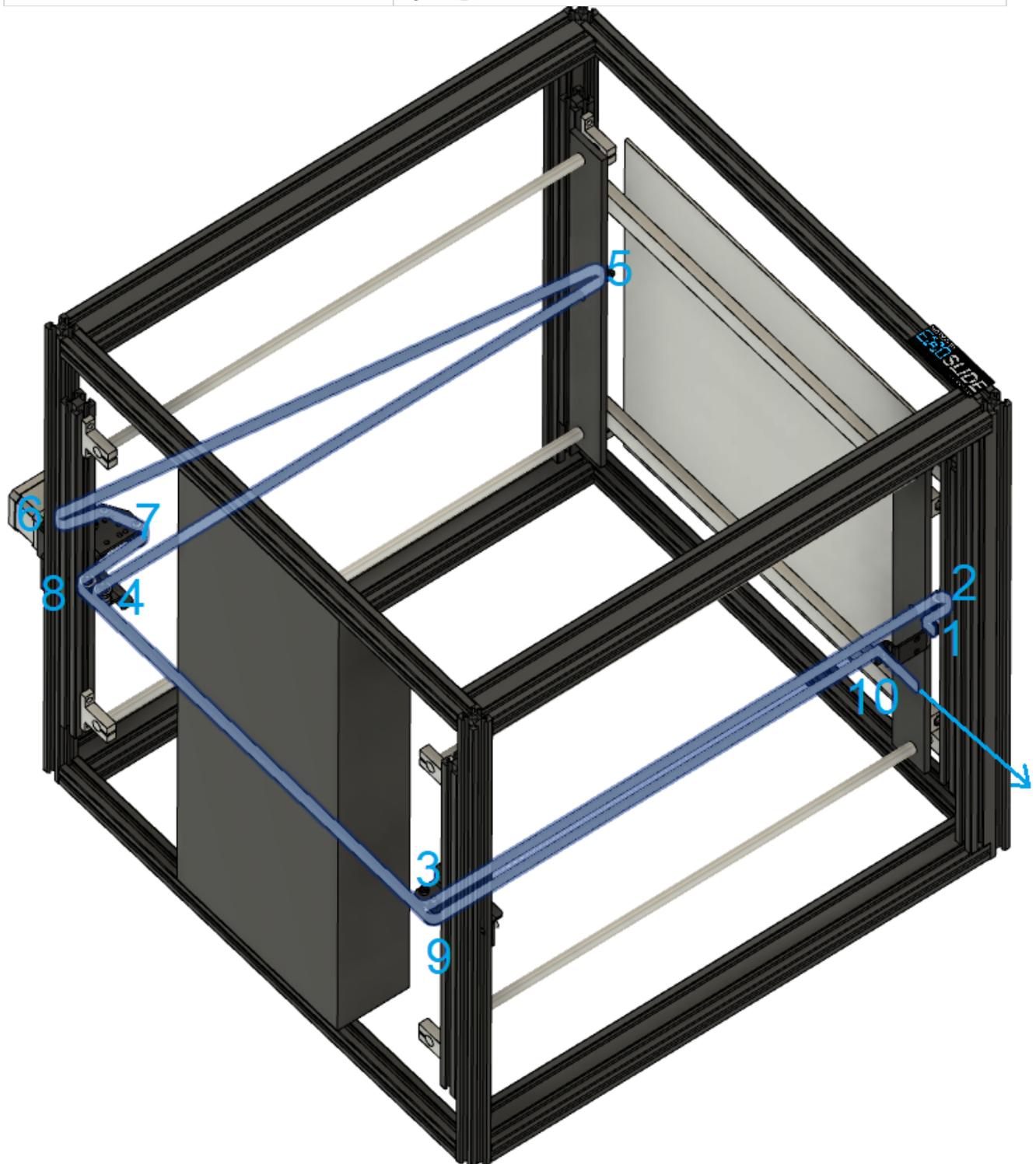
4. Belt

Parts Needed:

Metal belt bracket, 1x

GT2 belt, 1x

ExoSlide GT2 belt clips, 2x



Notes:

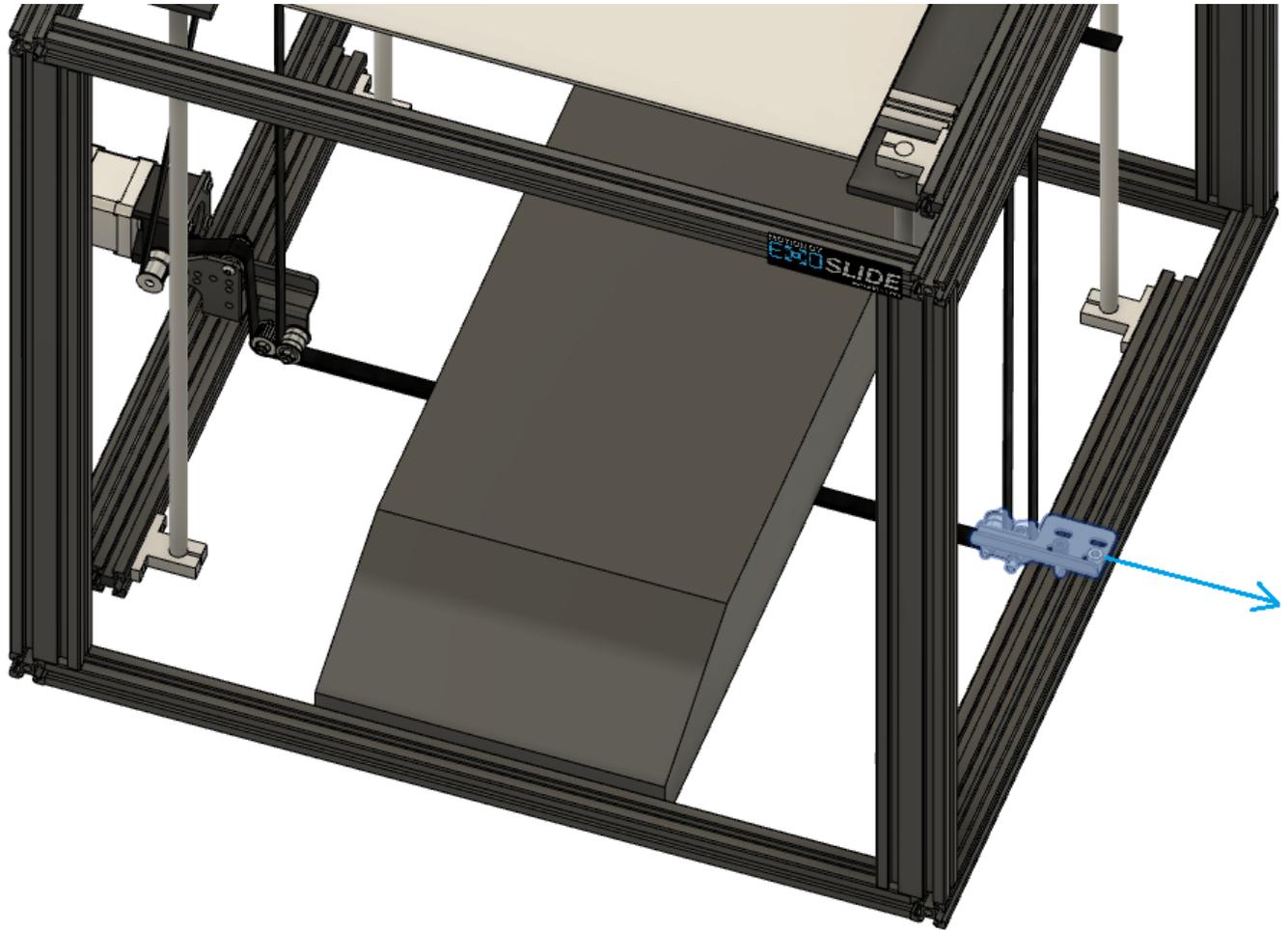
-Place the printer onto its back.

-Install a GT2 belt clip at position 1

-Run the belt in the numbered direction.

-Pull the belt tight by hand at position 10 in the direction of the blue arrow.

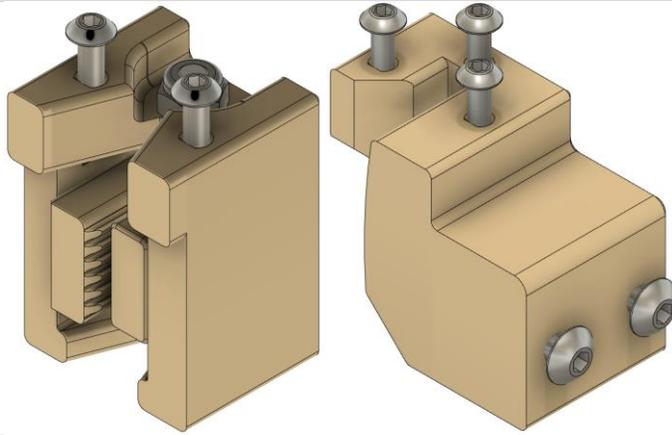
- Install the second clip with the belt pulled tight (some tension is ok, does not need to be final tight).
- Adjust the belt tension by moving the lower idler brackets outward.



5. Bed Supports

Parts Needed:

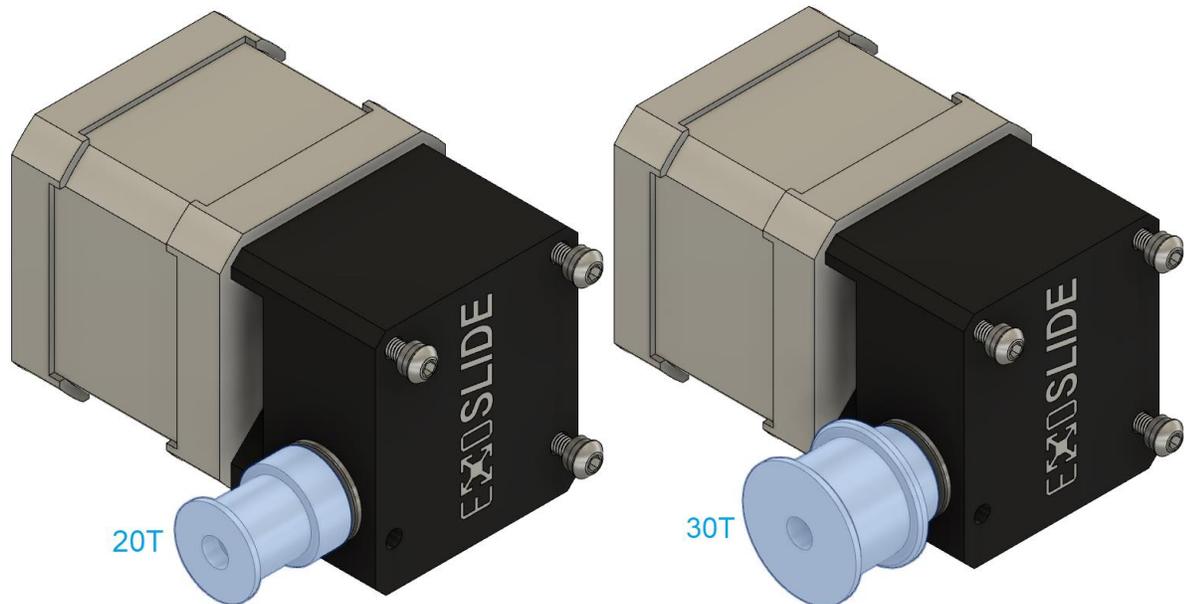
Printed adjustable belt bracket, 1x
Printed fixed belt bracket, 1x
M3x12 bolt, 5x
M4x12 bolt, 2x



Note:

-Adjust the bed level with the M4 bolt on the underside of the left bed support, which moves the belt slider up or down.

6. Firmware



A: If you received an update kit and have the 20 tooth pulley, the Z e-steps remain the same at 800.

B: If you purchased a kit from November 25th onwards and have the 30 tooth pulley, the Z e-steps needs to change to 1600 (the gearbox is also a different ratio at 30:1), by either the control interface, in firmware, or in your slicer start code

Both A & B: -Reverse the direction of the Z motor, by either reversing motor wires 1&3, in firmware, or in slicer start code (use negative e-steps value of -800 or -1600).

ExoSlide Creality Z Motion Kit BOM:

- ExoSlide wormdrive gearbox, 1x
- Steel idler bracket top assembly, 2x
- Steel idler bracket bottom assembly left, 1x
- Steel idler bracket bottom assembly right, 1x
- Printed adjustable bed bracket, 1x
- Printed fixed bed bracket, 1x
- GT2-10 Z belt, 3.3m (130"), 1x
- GT2-10 ExoSlide belt clamps, 2x
- GT2 pulley 20t or 30t, 1x
- M3x12 bolt, 5x
- M3x35 bolt, 3x
- M4x12 bolt, 2x
- M5x8 bolt, 10x
- M5 T-nut, 10x
- 1.5mm Allen key