M3 Screw 25mm Lg

M3 Smooth Idler

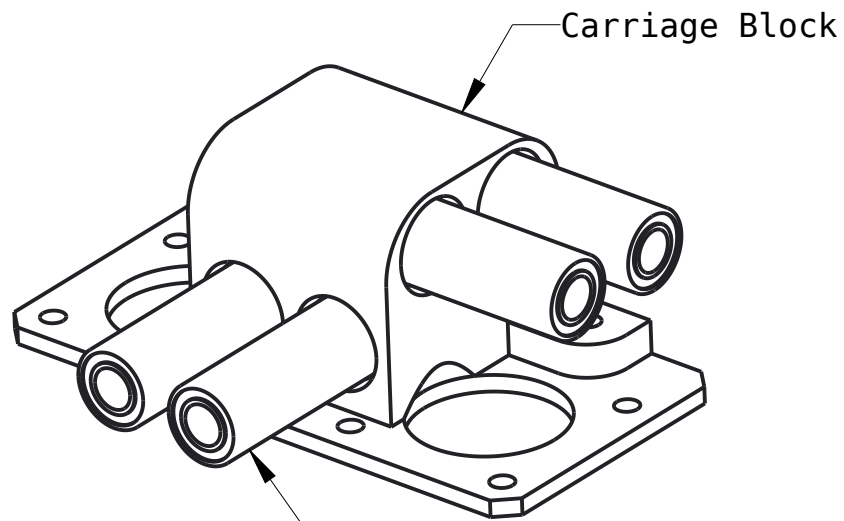M3 Flatwasher

Right Foot

Rubber Foot (2)

M3 Nylon Insert Nut

Foot Assembly:
- Build both the left and right foot assemblies as shown.
- If Nut is difficult to start, try using the screw to pull it in
  without the pulley to get it into the pocket.
- Tighten the screw firmly, then back it off about 1/4 turn. Pulley
  will bind if too tight. It is best to use a locking nut since it
  cannot be fully tightened.

M3 Screw 18mm Lg (2)

M3 Smooth Idler
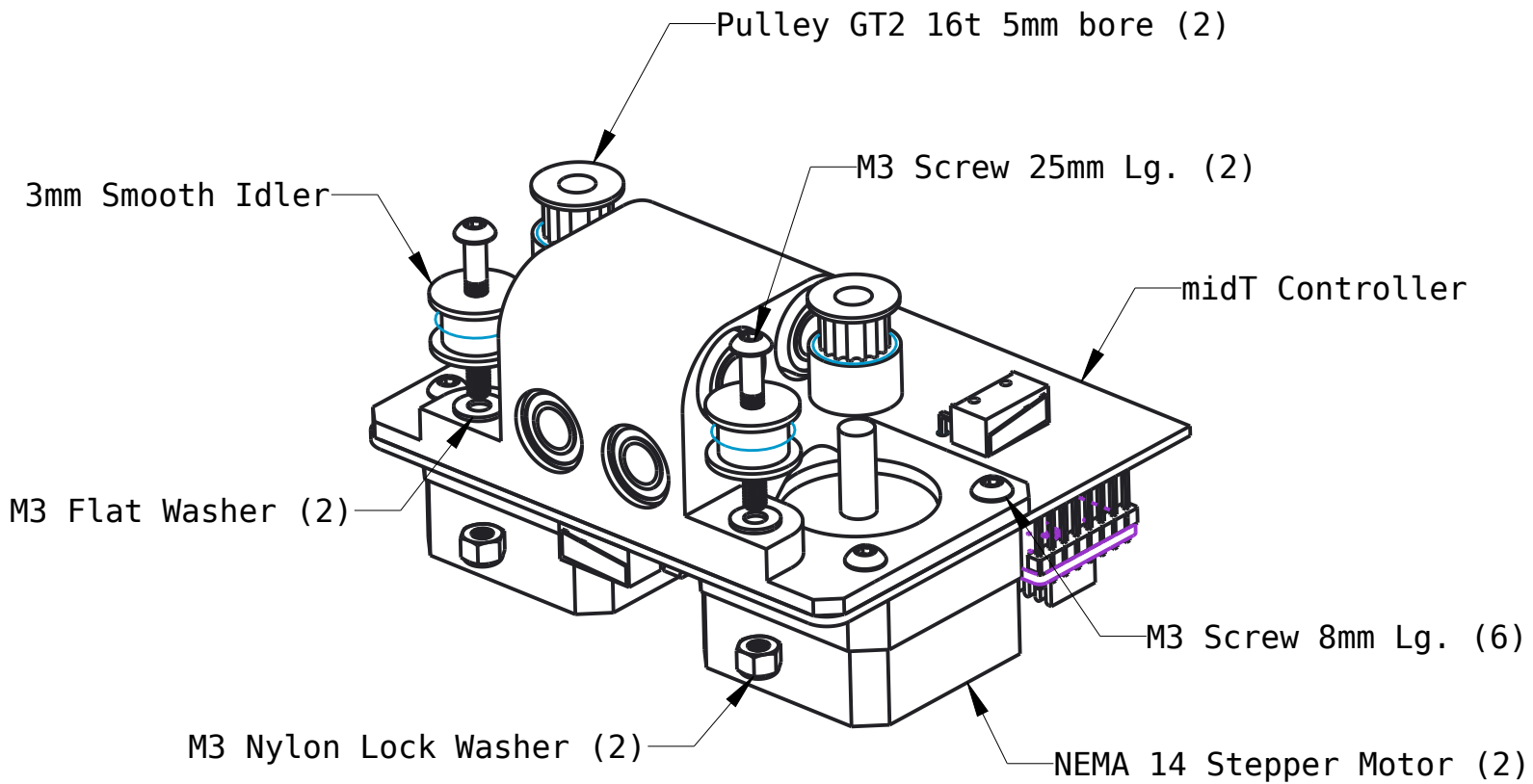
Tailblock

M3 Flat Washer (2)

M3 Nylon Locking Nut (2)
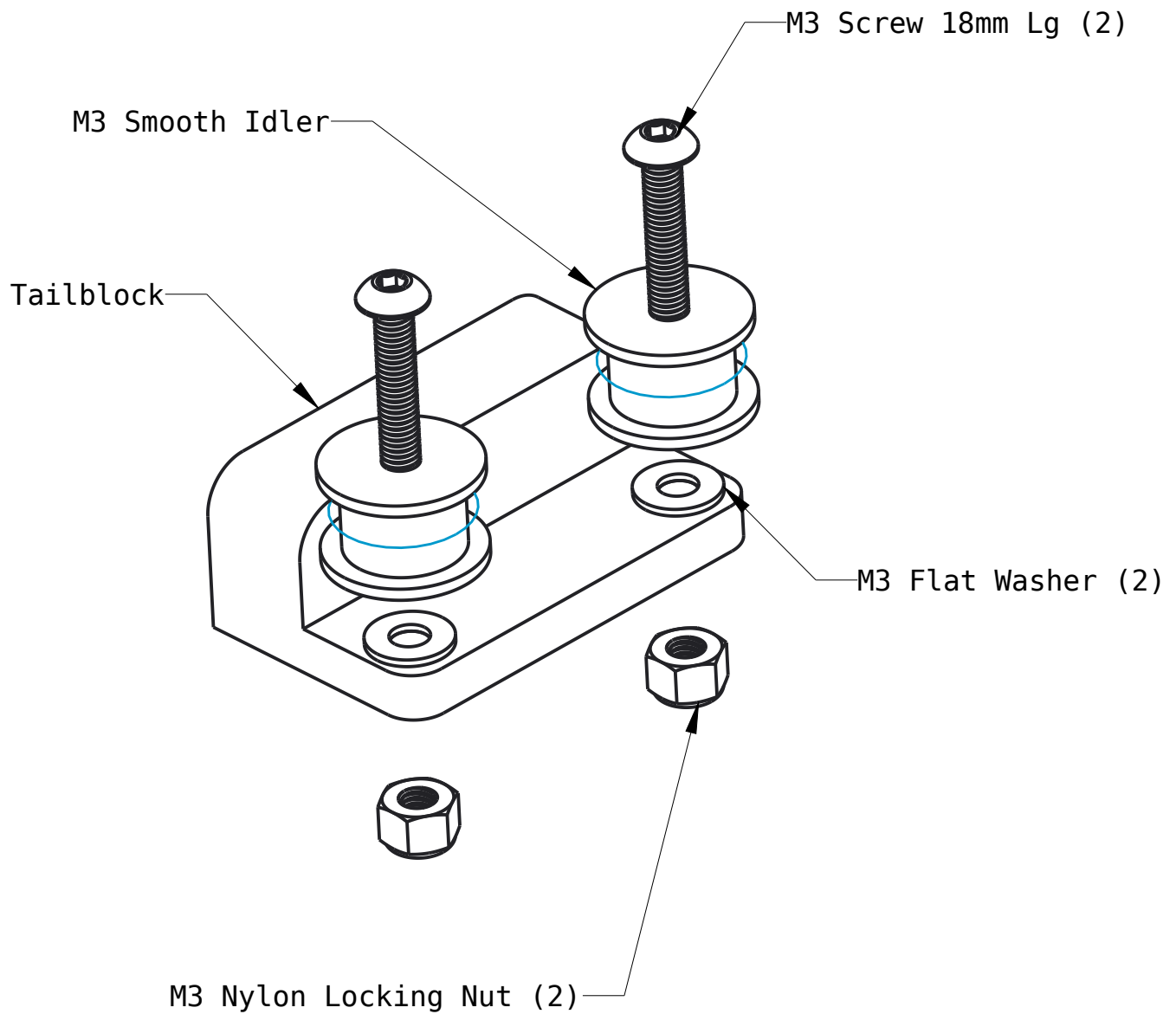
Tailblock Assembly:

- Tighten the screws firmly, then back off about 1/4 turn. Pulley
  will bind if too tight. It is best to use a locking nut since it
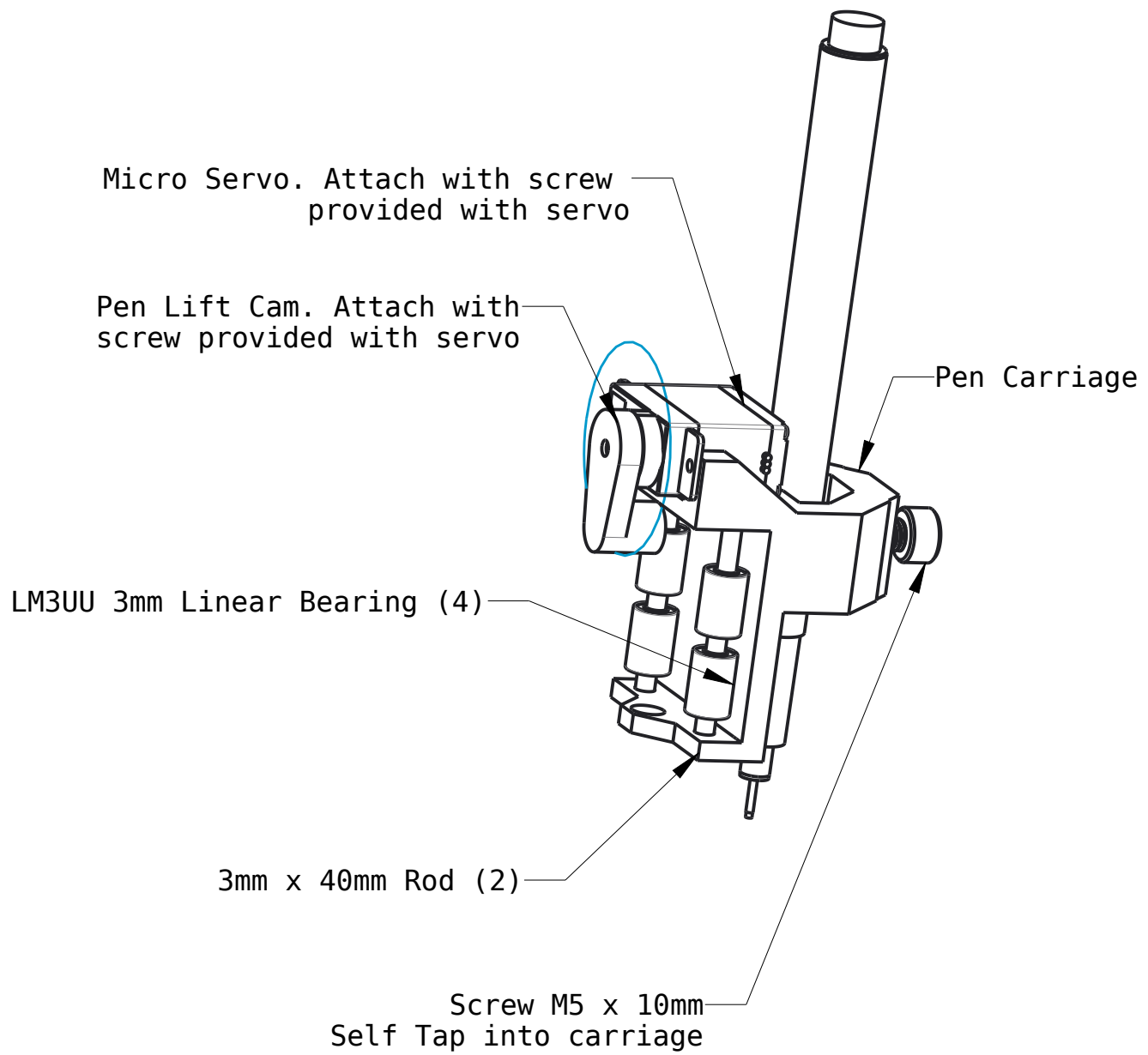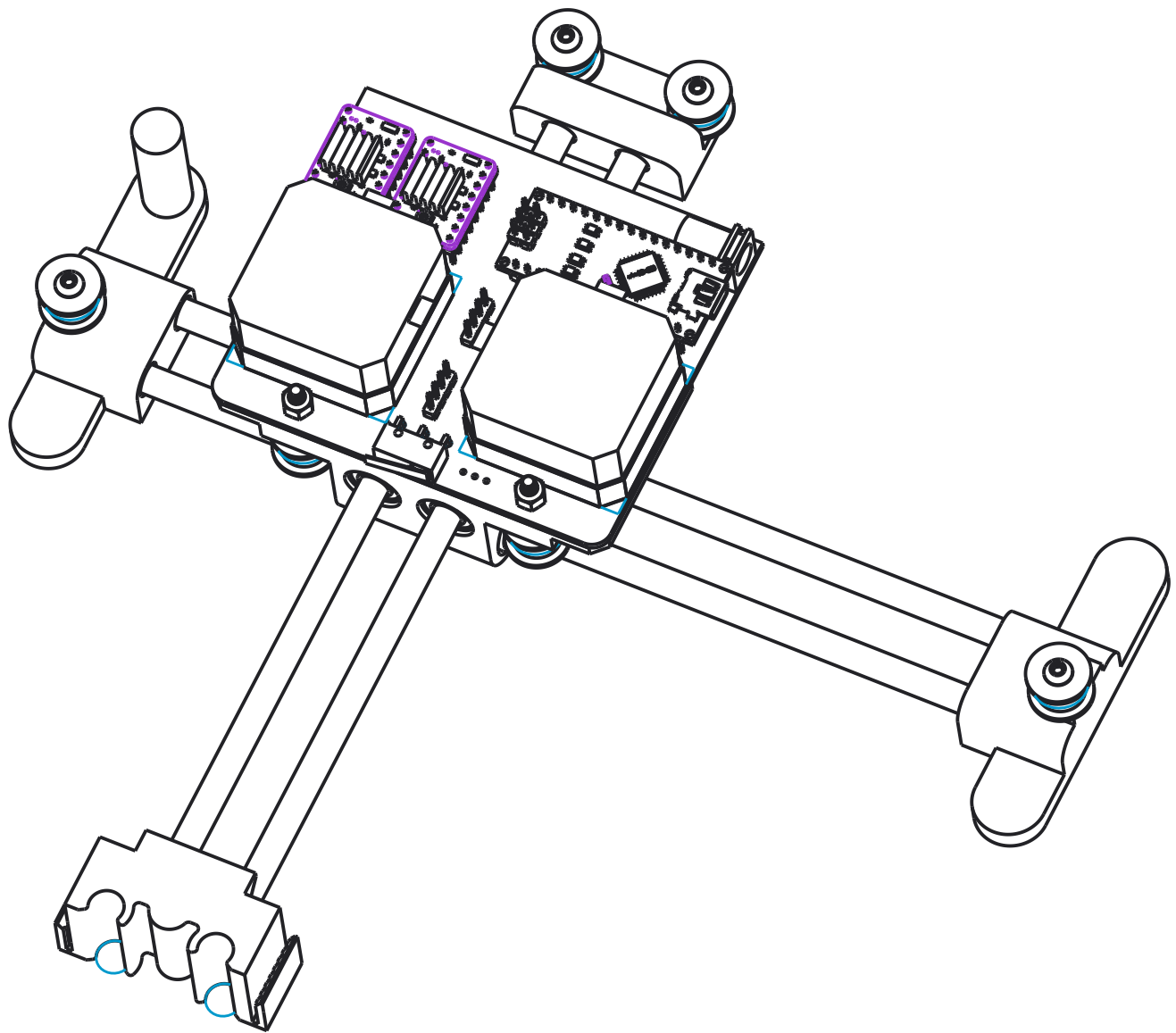 cannot be fully tightened. Make sure they turn smoothly.

Carriage Block

LM6LUU Long M6 Linear Bearing (4)

Pulley GT2 16t 5mm bore (2)

3mm Smooth Idler

M3 Screw 25mm Lg. (2)

midT Controller

M3 Flat Washer (2)

M3 Screw 8mm Lg. (6)

M3 Nylon Lock Washer (2)

NEMA 14 Stepper Motor (2)

Carriage Assembly:

- Press bearings into carriage block
- Screw on remaining parts.
- Be sure smooth idler pulley turn freely
- Align GT2 pulley with assmebled smooth idler pulleys

Micro Servo. Attach with screw
provided with servo

Pen Lift Cam. Attach with
screw provided with servo

Pen Carriage

LM3UU 3mm Linear Bearing (4)

3mm x 40mm Rod (2)

Screw M5 x 10mm
Self Tap into carriage

Bearing Rod Installation:
- Test fit rods into the end pieces. Fit should be tight and
  not wiggle. Belt will keep all the pieces together.
- Install 2 rods into one the foot assemlies. Slide them through
  the bearings in the middle carriage and attach the other foot.
- Install 2 rods into the tail block assembly. Slide them through
  the bearings in the midle carriage and attach the head block.

Start Here

Belt Installation
- Use a long piece of GT2 belt
- Start on one end with belt flush with the front of the
  headblock. Slide it into the belt retaining slot.
- Thread the belt through the pulleys as shown.
- Pull the belt tight and slide it into the other headblock slot.
- Trim the belt. Left about 12mm exposed on one side. This will
  allow you to reinstall the belt if required.
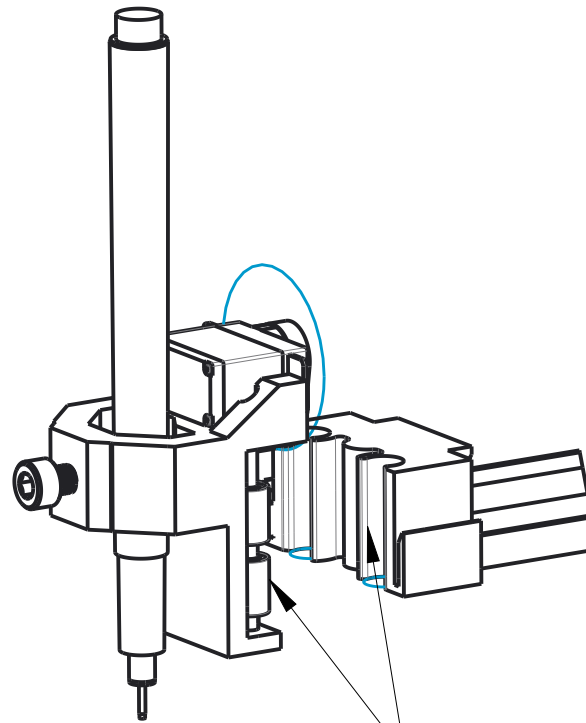
Snap Pen Carriage Assembly
on to head block