



# Linear Carriage Assembly Instructions

v2020Q4.2

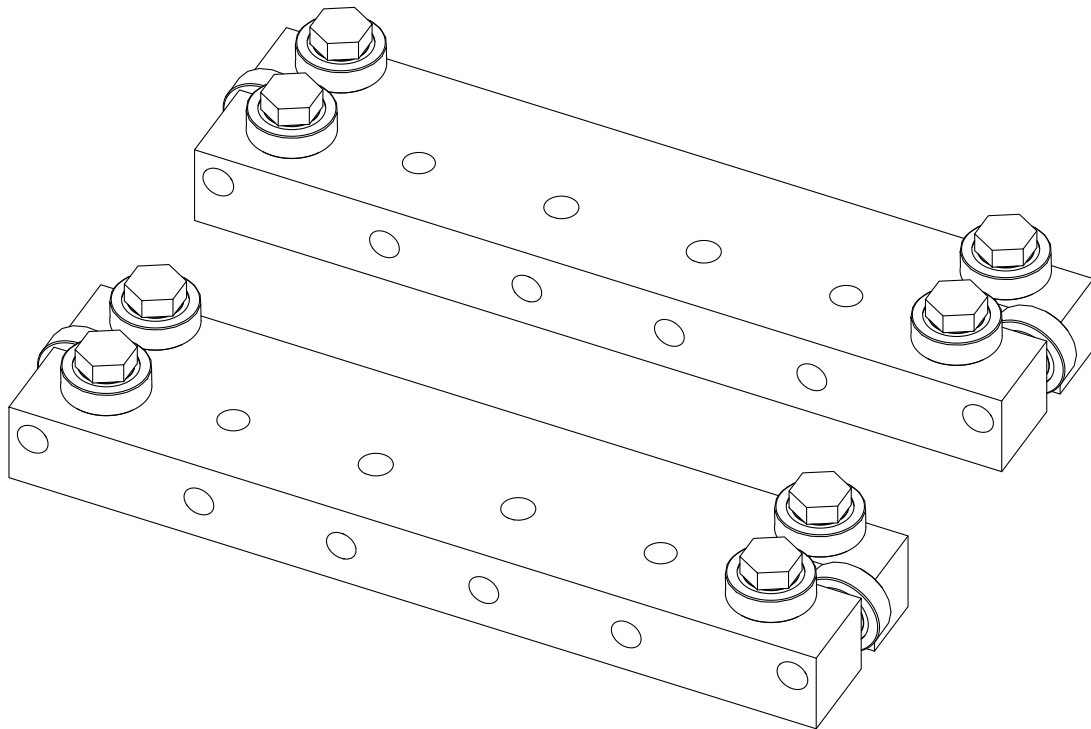
# Tools List

*Required tools for assembly and installation of Standard Linear Carriages:*

- Imperial Allen Wrench Set
  - 3/32", 5/32", 3/16", 1/4"
- Metric Allen Wrench Set
  - 4mm, 6mm
- 13mm Combination Wrench
- Tape Measure

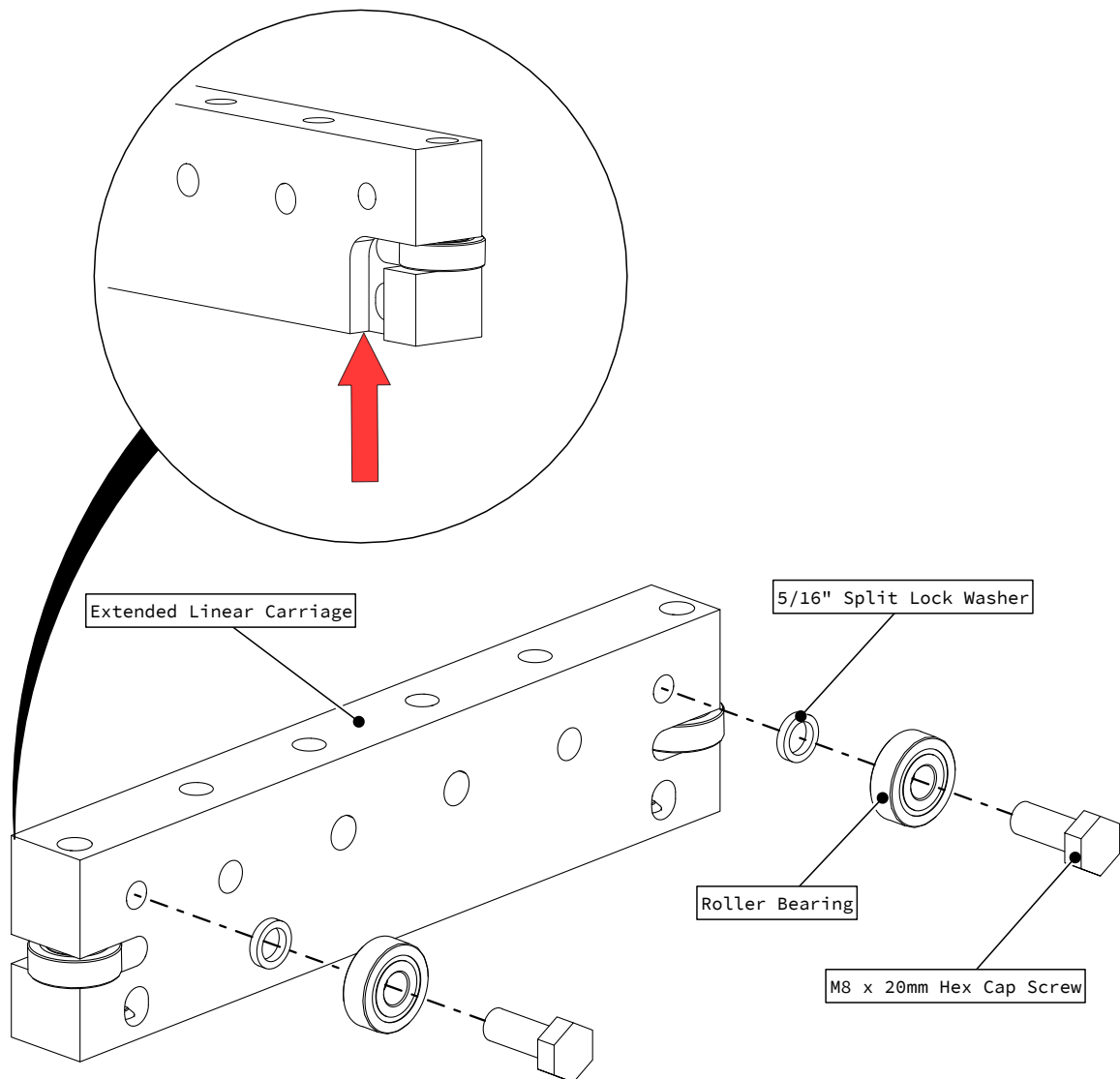


# Section 1: Linear Carriage Assembly



 **Note**

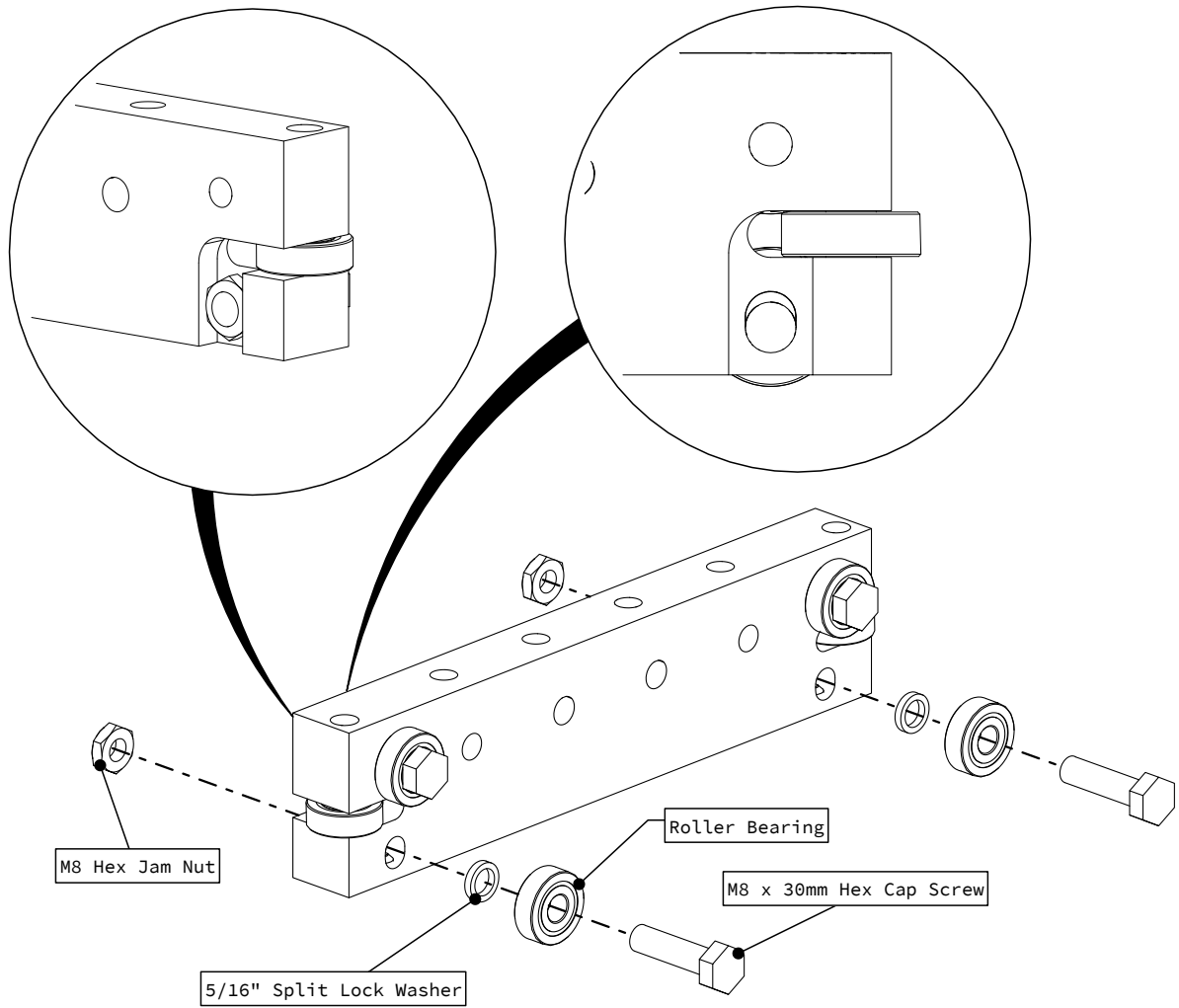
These instructions can be used for both standard and extended linear carriages.



- Orient the Linear Carriage body as shown.
- Install upper bearings as indicated and tighten fasteners.

#### Assembly Note

In the correct orientation, the nut slots will be located on the back side of the extended linear carriage.

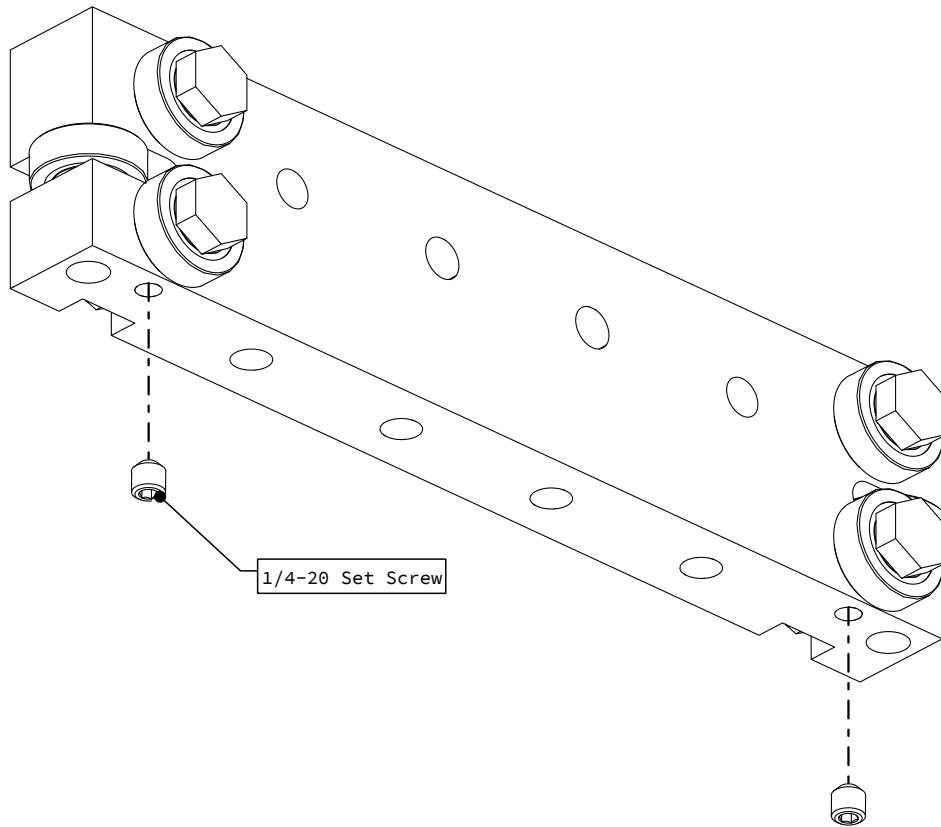


- Install bearings into the lower slots on the linear carriage as indicated.
- The M8 jam nuts will reside within the nuts slots as shown.

#### Assembly Note

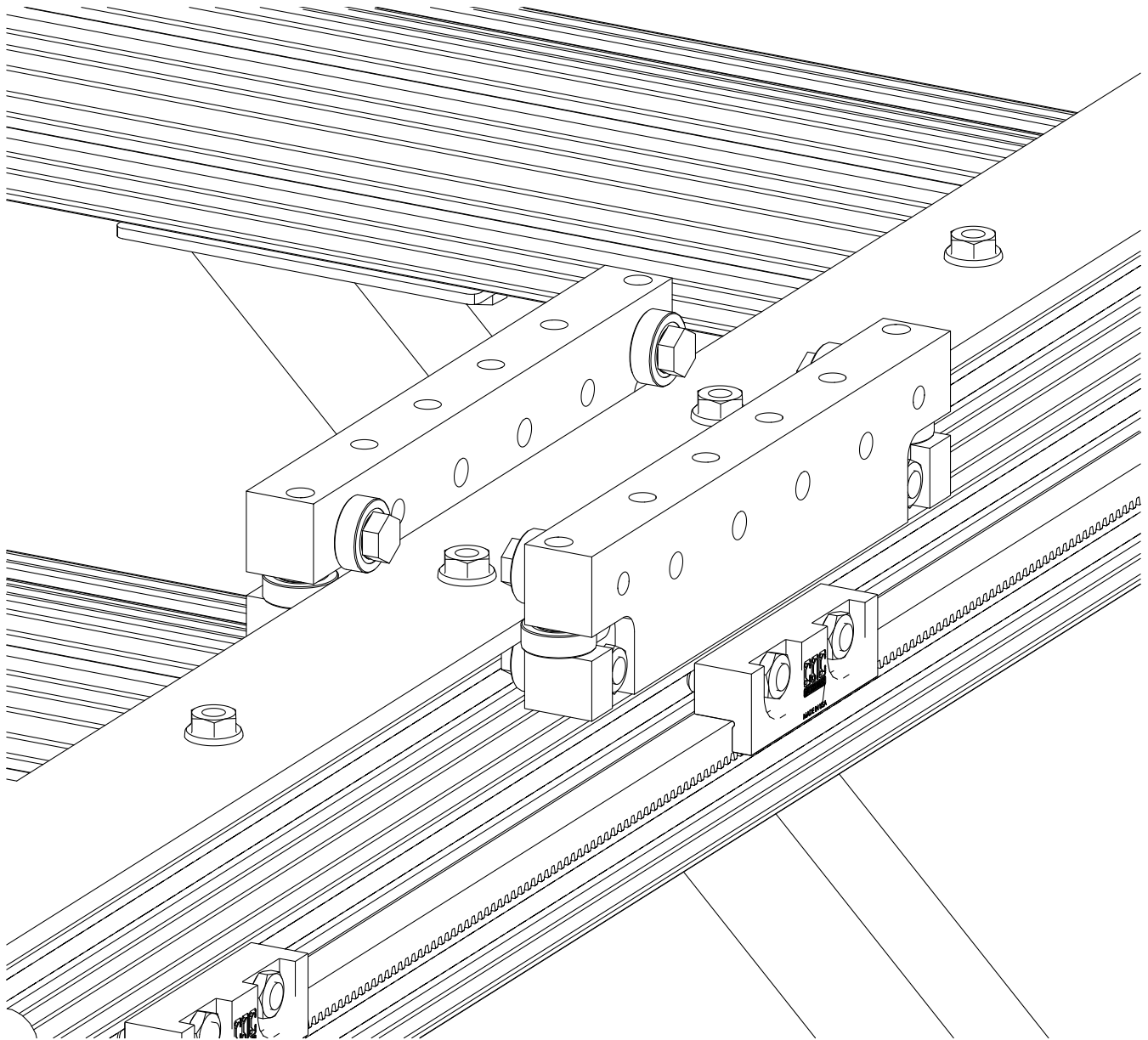
Position the M8 x 30mm Hex Cap Bolts in the lowest possible position within the slots before fully tightening fasteners.

### 1.3



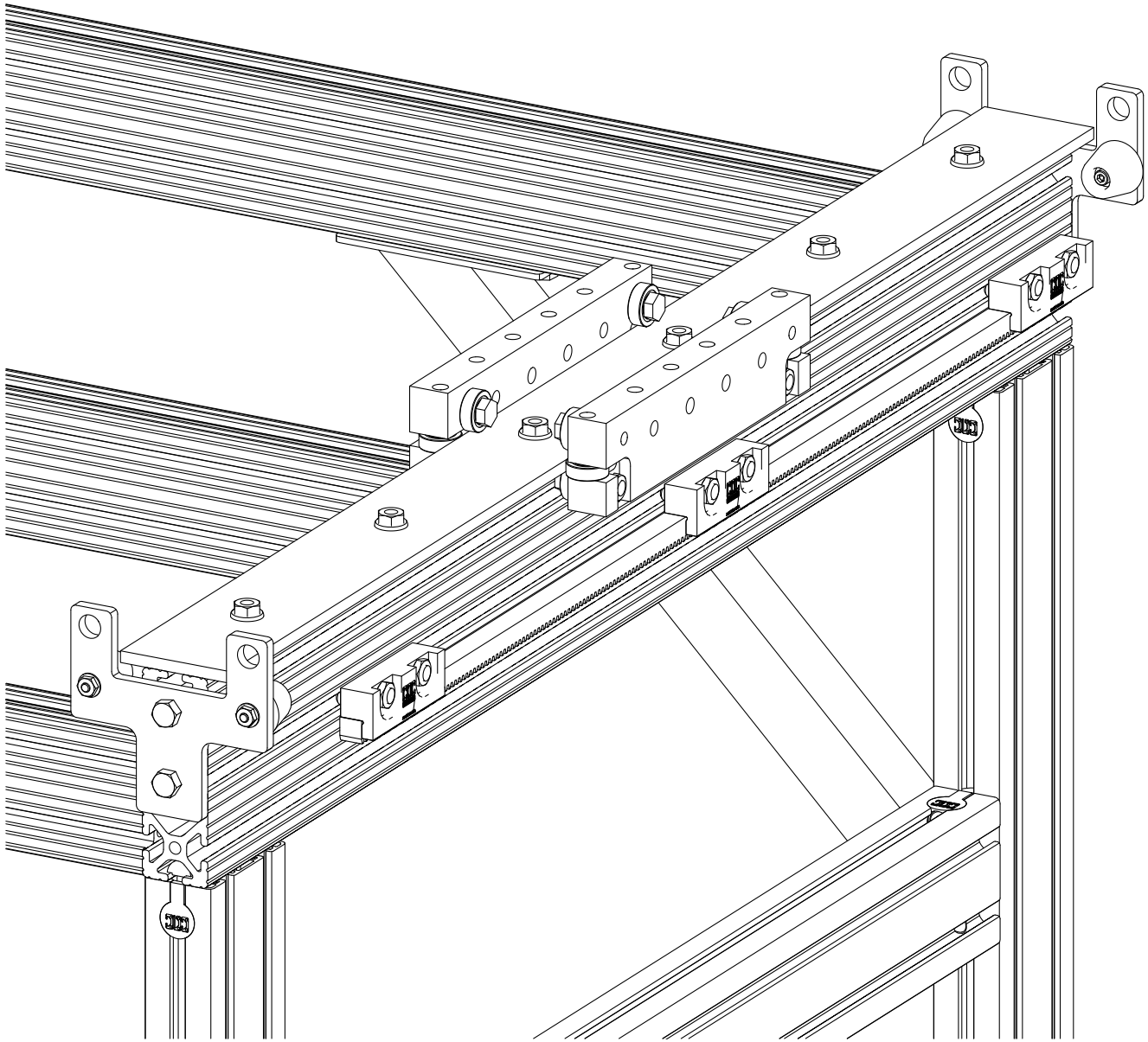
- Partially thread in 1/4-20 set screws as indicated.

## Section 2: Linear Carriage Installation



### **i** Section Note

The following instructions depict installing linear carriages on a Standard CNC machine. The same procedures can be used for installation in other applications as well.

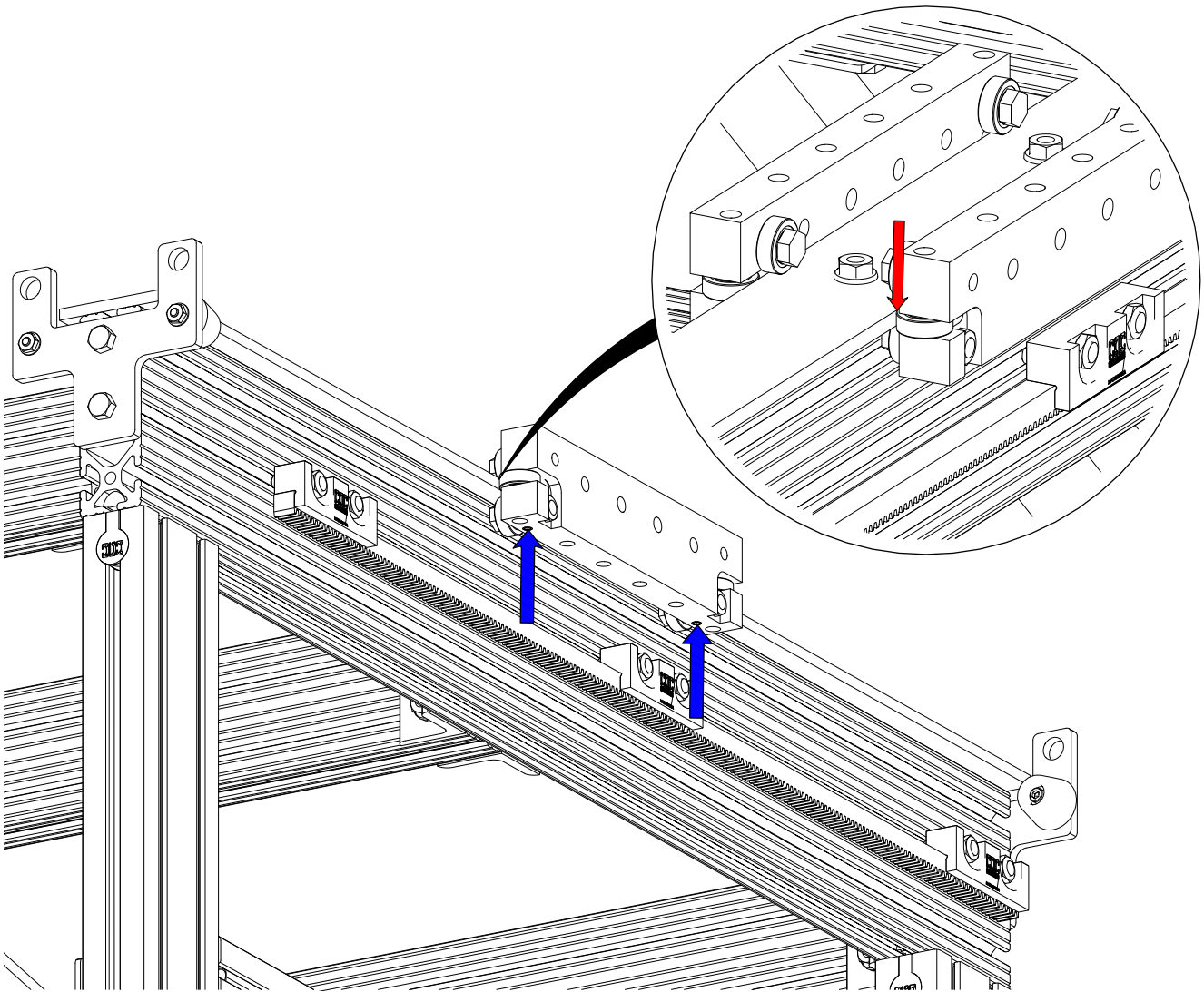


- Position the linear carriages on the steel rails as indicated.

**Assembly Note**

Position the linear carriages to allow future access to the set screws. In this configuration, the set screws are facing down.

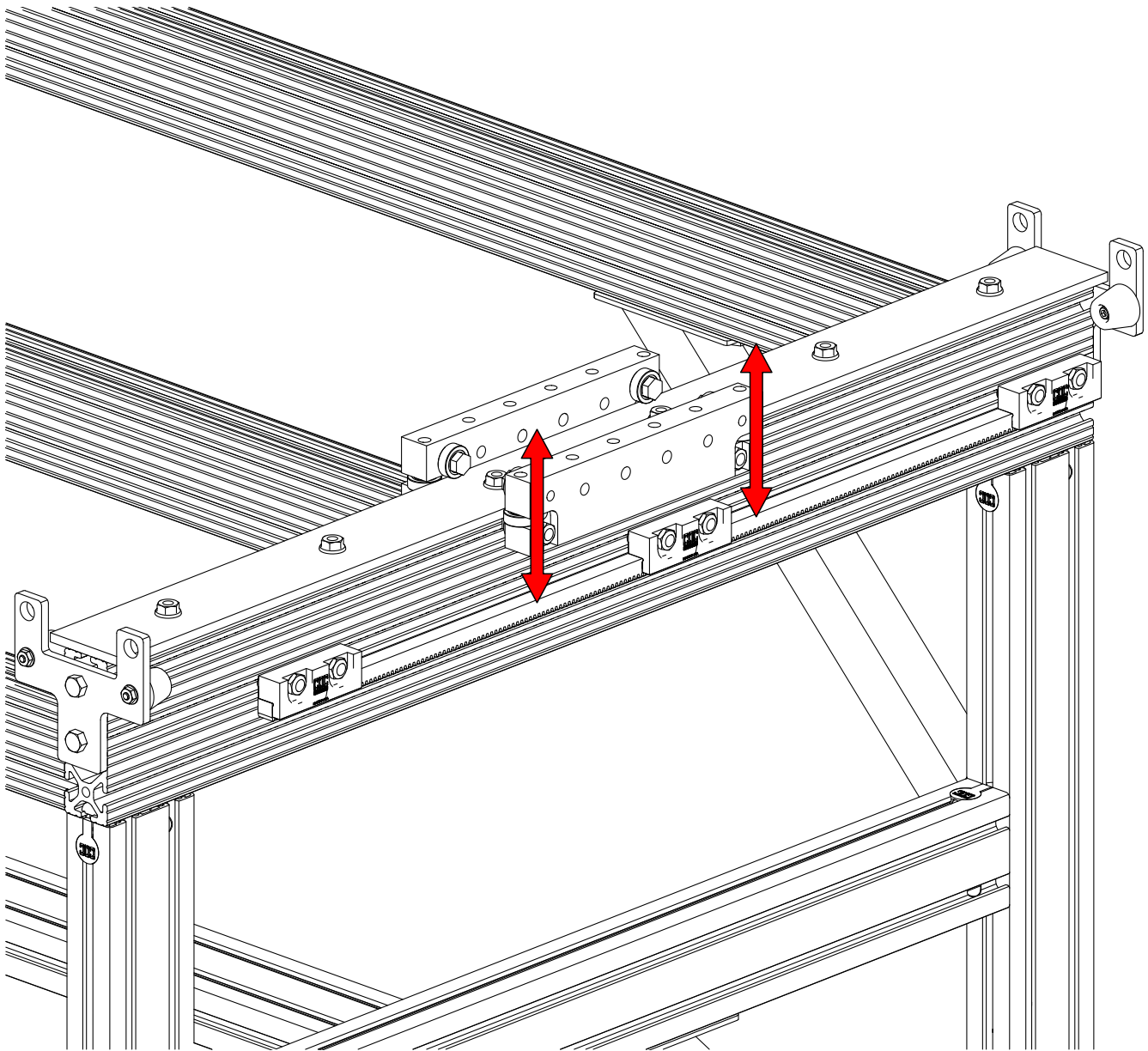




- Partially tighten the set screws (*blue arrows*) to bring the lower roller bearings in contact with the steel rail.

**Assembly Note**

Ensure the horizontal roller bearings are in contact with the edges of the steel rails.



- Continue tightening each set screw until no vertical movement is possible at either end of the linear carriage.
- Ensure the linear carriage is still able to freely move along the steel rail.

#### Assembly Note

If the linear carriage does not move freely on the steel rail, adjust the set screw. When properly adjusted, the linear carriages will have no vertical movement and freely slide along the steel rail. While adjusting the set screws, ensure the horizontal roller bearings remain in contact with the edge of the steel rail.