

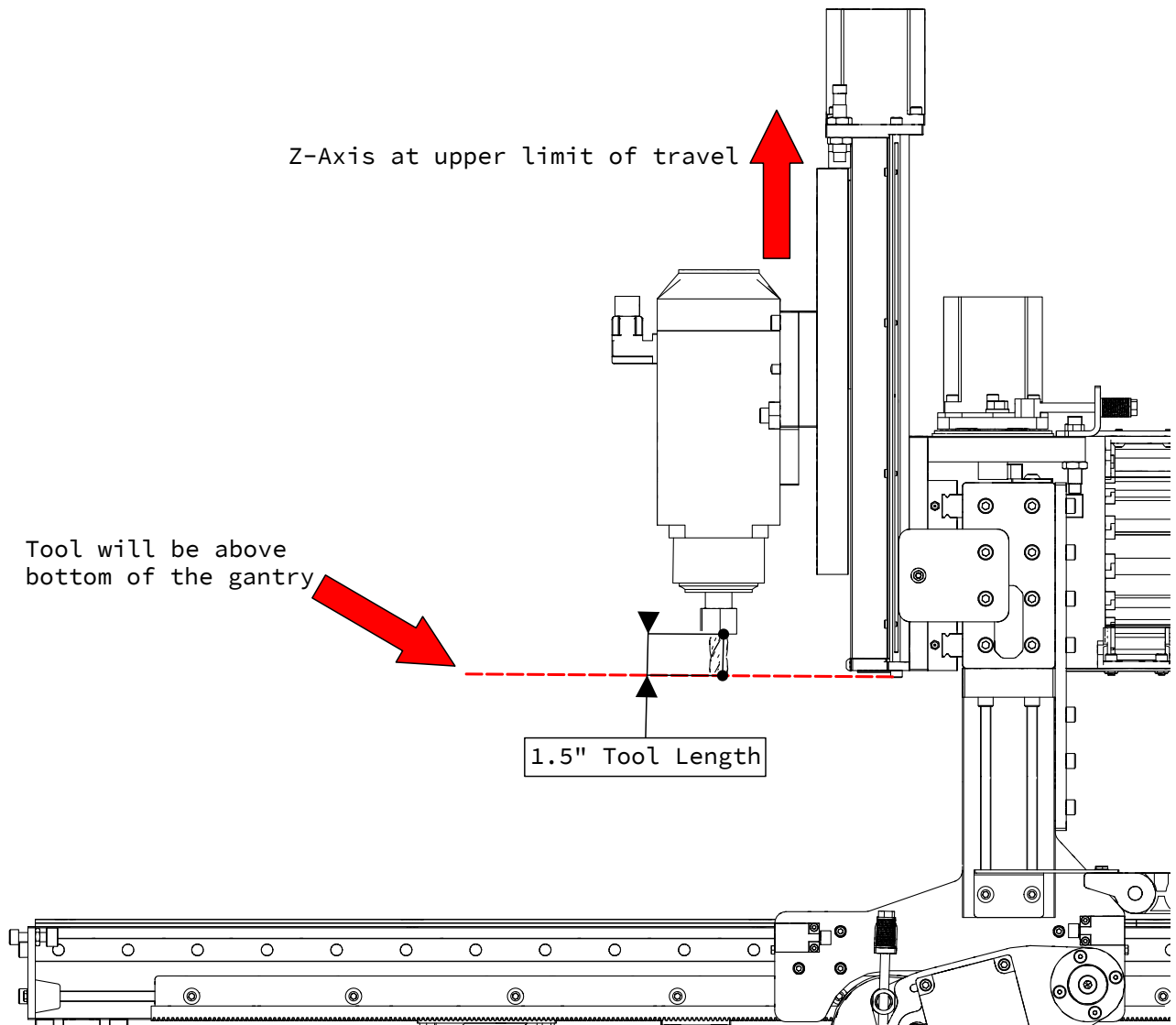


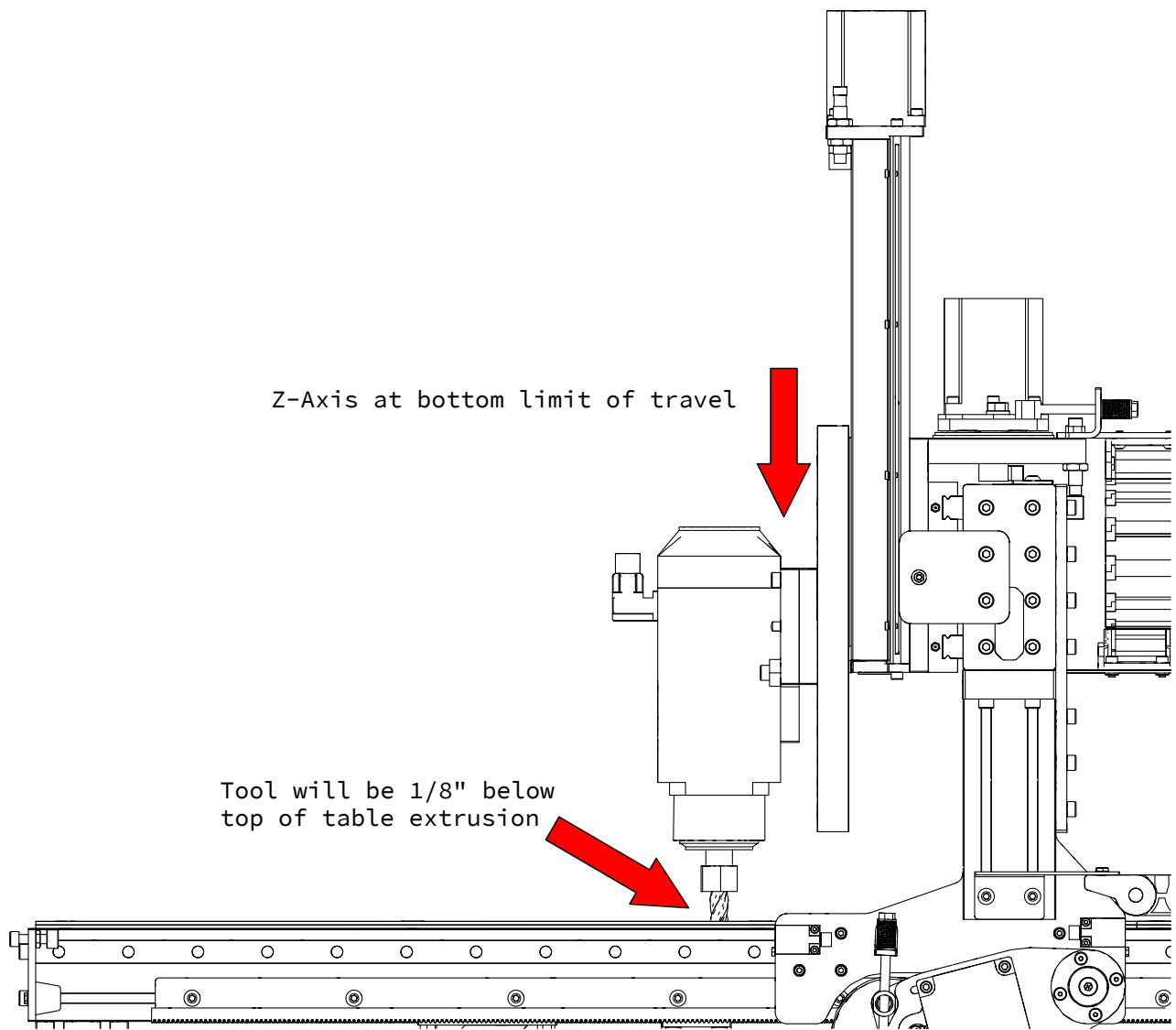
Spindle and Router Mount Assembly Instructions

v2021Q1.1

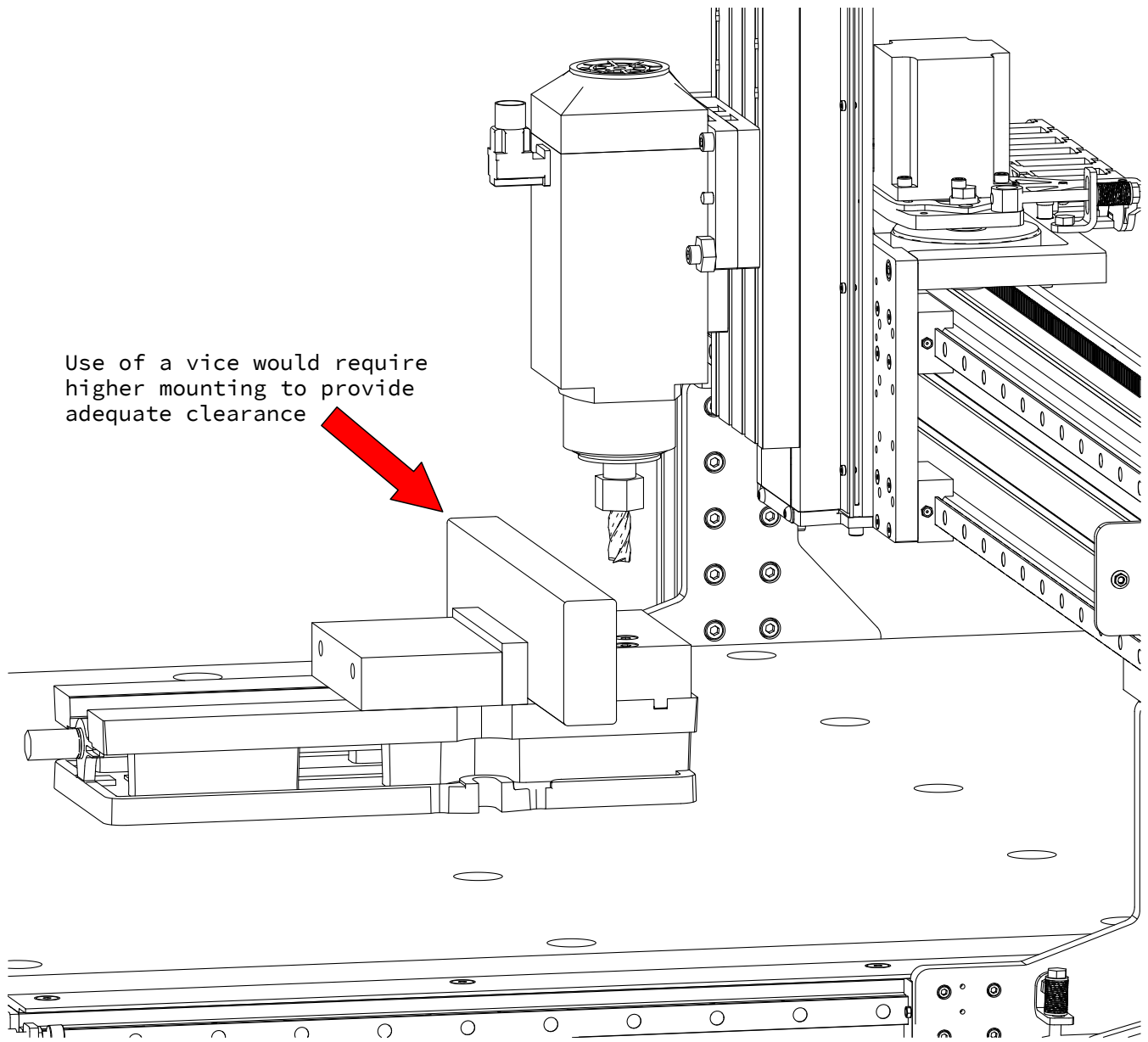
1. Installation Overview

These instructions will guide you through the process of assembling and installing your router or spindle mount. The design of our Ballscrew Z-Axis Moving Plate allows these mounts to be located at various heights to fit your particular application. The instructions specify a mounting height that will be applicable in most use cases. The figures below show the vertical range of an example tool using this mounting location.



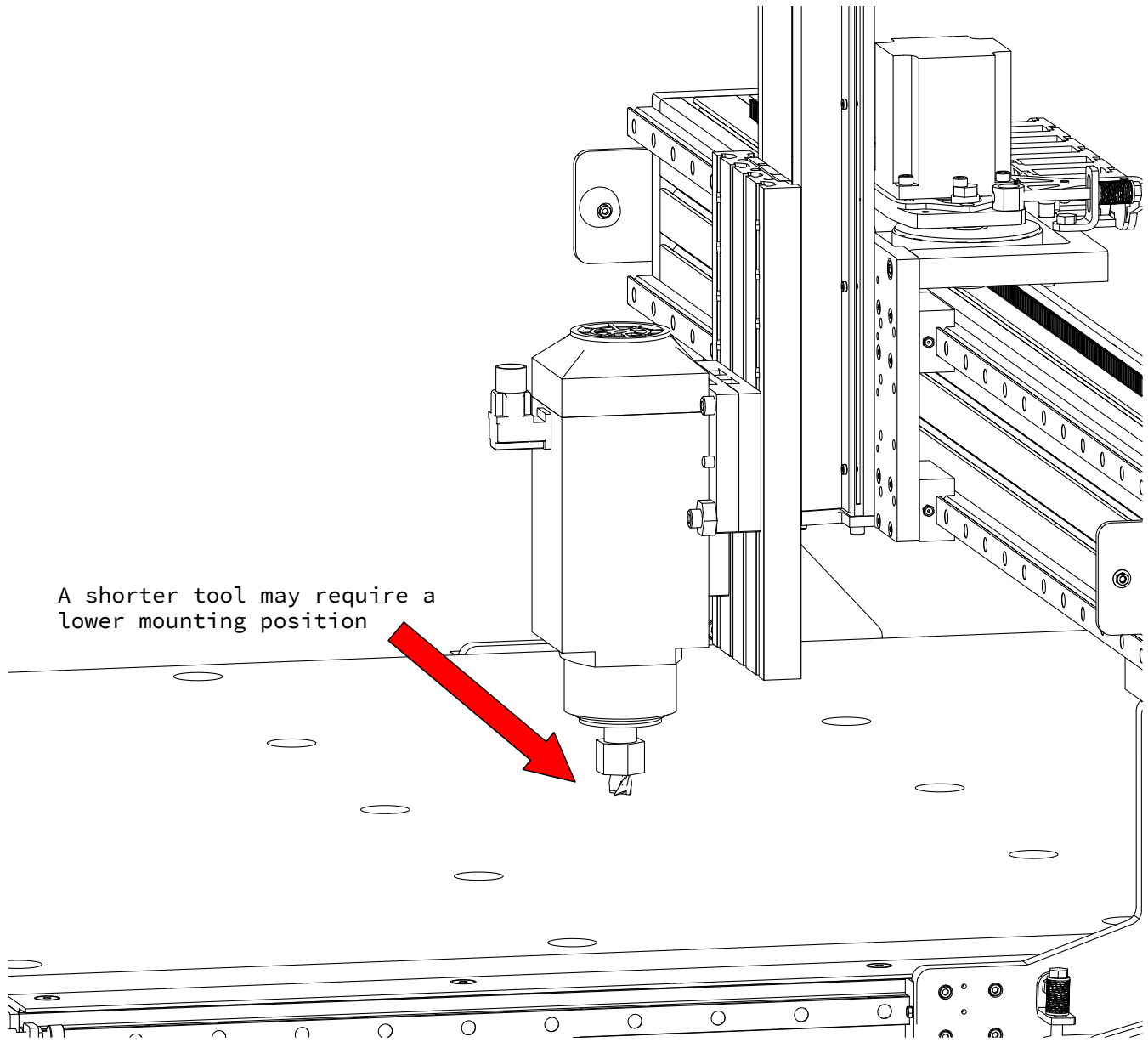


The examples above applies for a PRO CNC machine configured with an 8" Z-Axis and 8" Gantry Height, using a tool with a length of 1.5". If you are using a different machine configuration or tool length, you will need to adjust your router or spindle mount location accordingly.



Use of a vice would require higher mounting to provide adequate clearance

Many situations will require a different mounting location than the one specified in these instructions. For example if a vise is used to hold work pieces, a higher mounting position may be required.

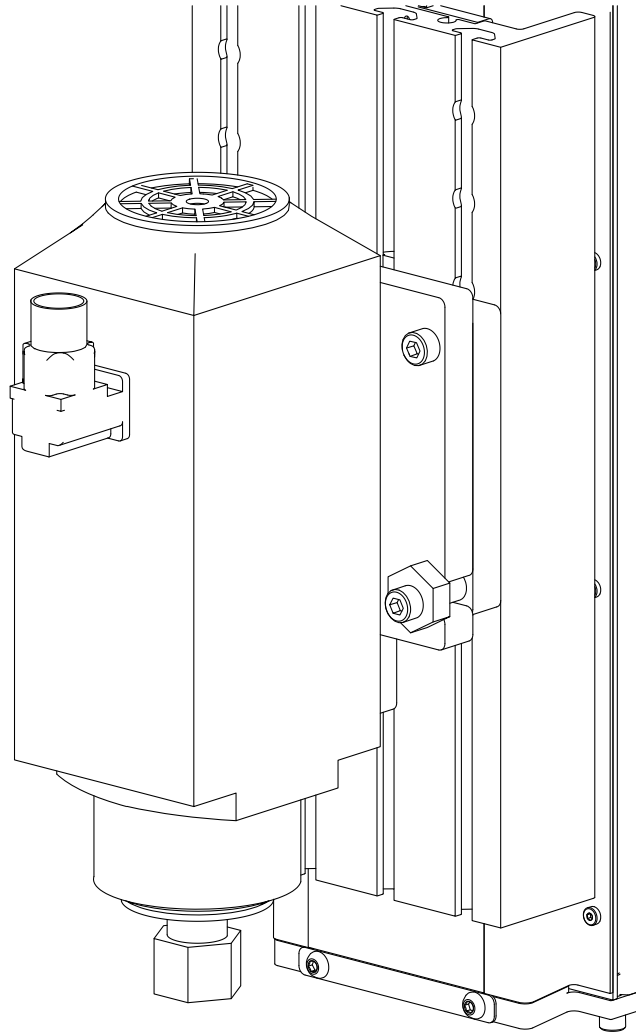


A shorter tool may require a lower mounting position

If shorter tools are commonly used, it may be necessary to position the router or spindle in a lower position. Whatever mounting position you choose, it is recommended to mount the base adapter/tramming plate in the highest position possible while still allowing the vertical range required.

2. Base Adapter Installation

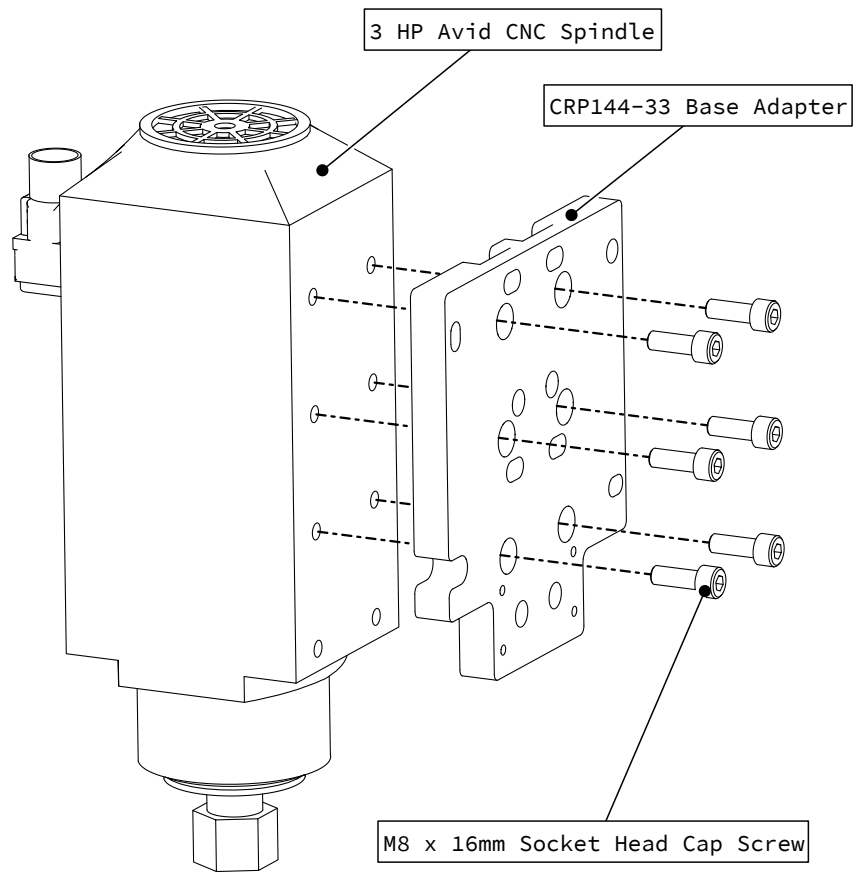
3 HP Avid CNC Spindle



i Info

The hardware bag for the spindle tramping mount contains fasteners for mounting multiple types of spindles. Due to this, you may have unused fasteners after installing your spindle.

2.1.1



- Attach the spindle to the base adapter as indicated.

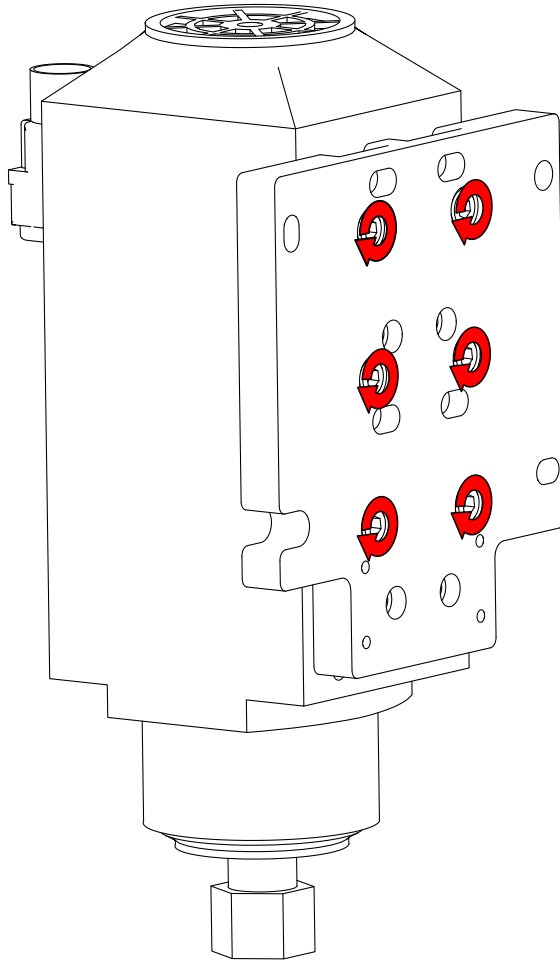
Assembly Note

Use the upper set of mounting holes on the spindle.

Assembly Note

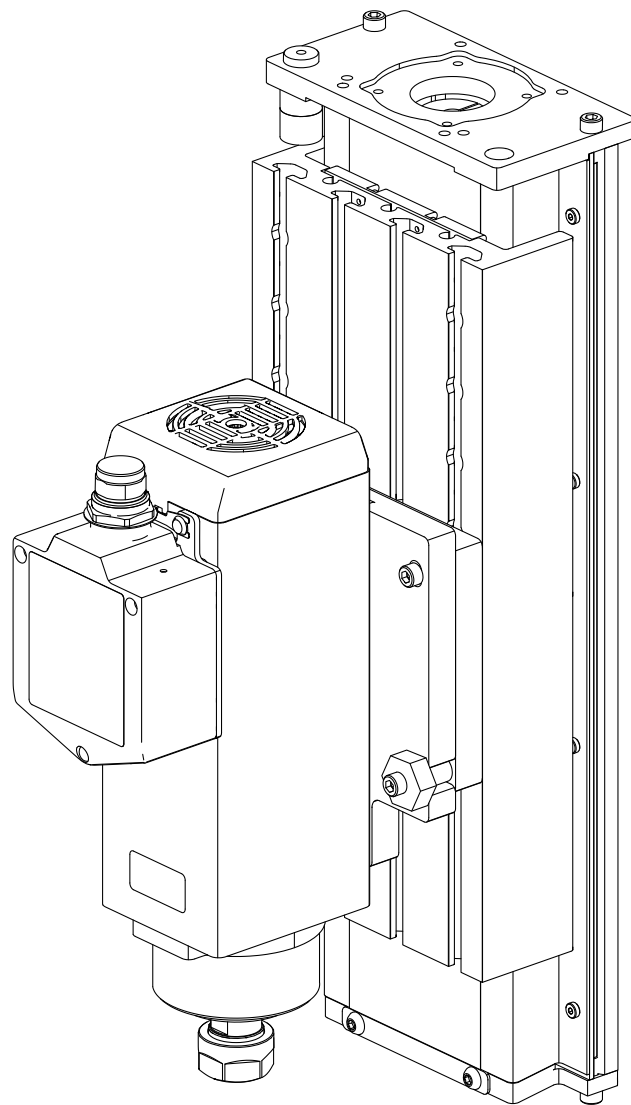
Spindle tramming mounts purchased prior to March 2021 use M8 x 20mm socket head cap screws.

2.1.2



- Fully tighten the fasteners.
- Continue to the Trimming Mount Installation section to install the trimming mount.

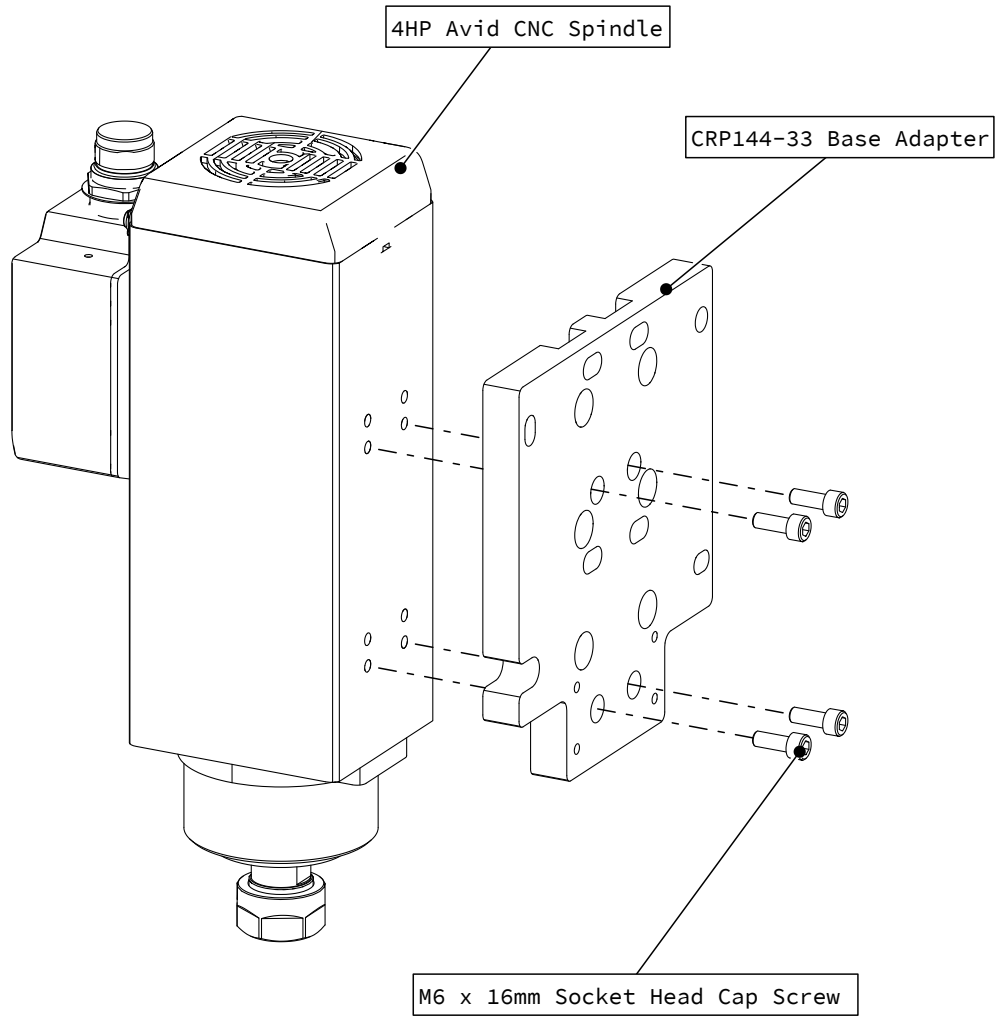
4 HP Avid CNC Spindle



i Info

The hardware bag for the spindle tramping mount contains fasteners for mounting multiple types of spindles. Due to this, you may have unused fasteners after installing your spindle.

2.1.1



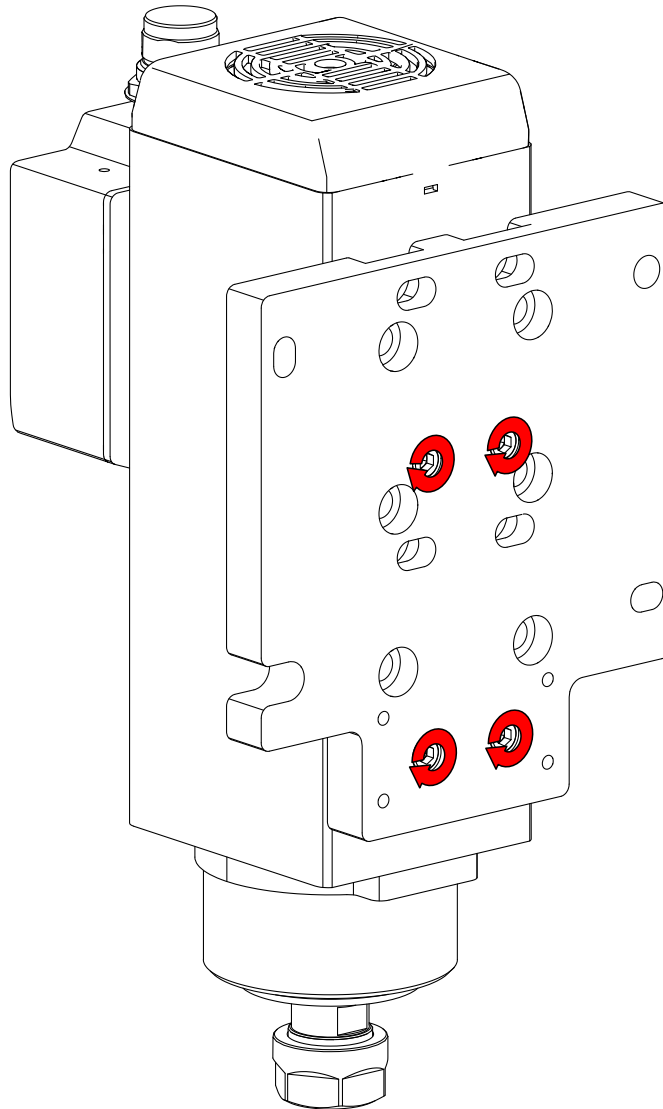
- Attach the spindle to the base adapter as indicated.



Assembly Note

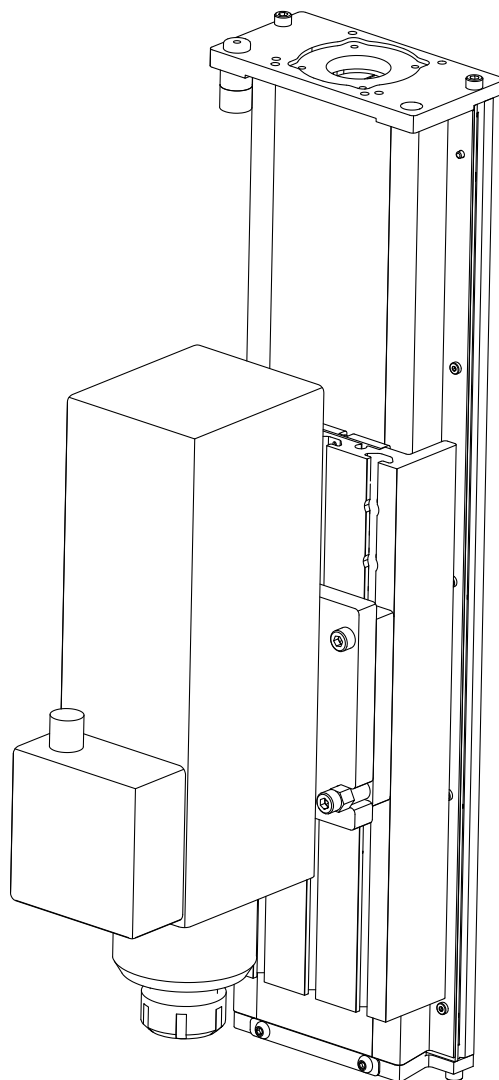
Use the lower set of mounting holes on the spindle.

2.1.2



- Fully tighten the fasteners.
- Continue to the Trimming Mount Installation section to install the trimming mount.

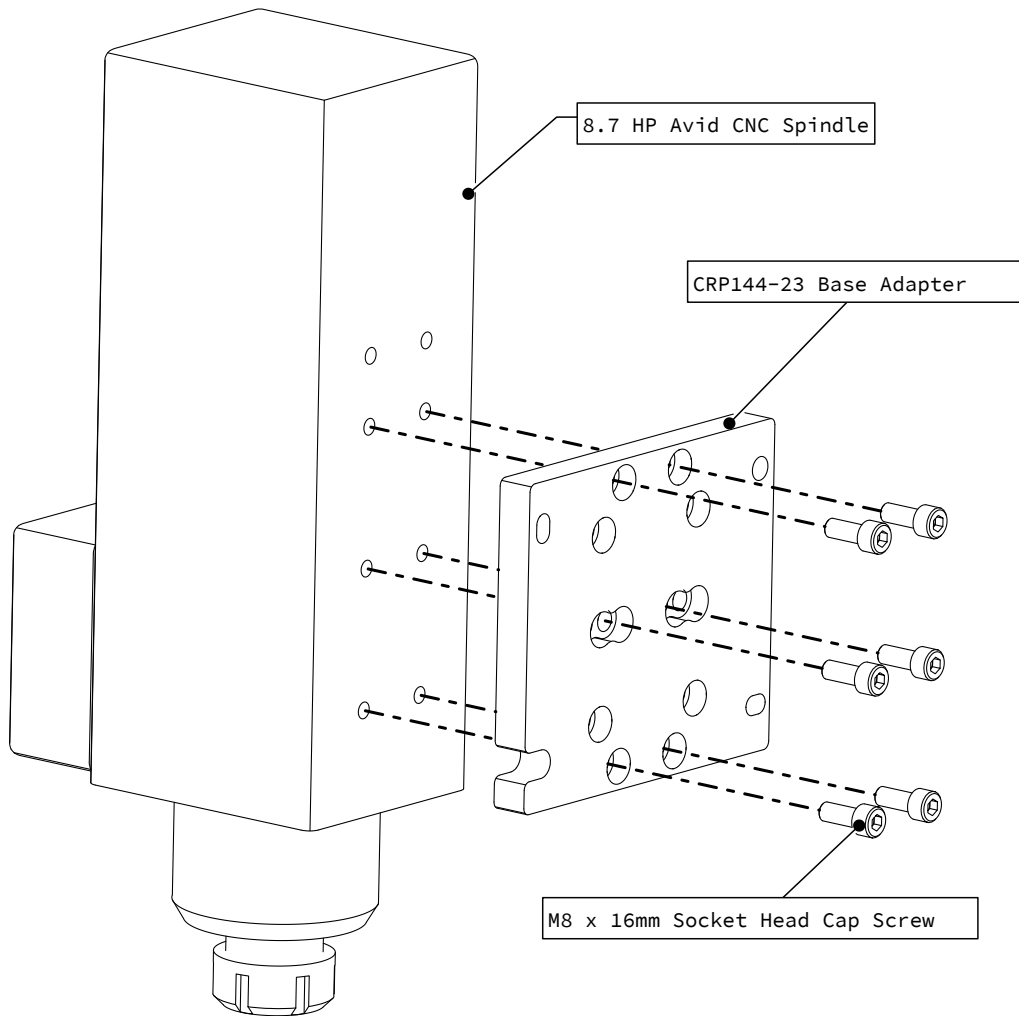
8.7 HP Avid CNC Spindle



i Info

The hardware bag for the spindle tramping mount contains fasteners for mounting multiple types of spindles. Due to this, you may have unused fasteners after installing your spindle.

2.2.1

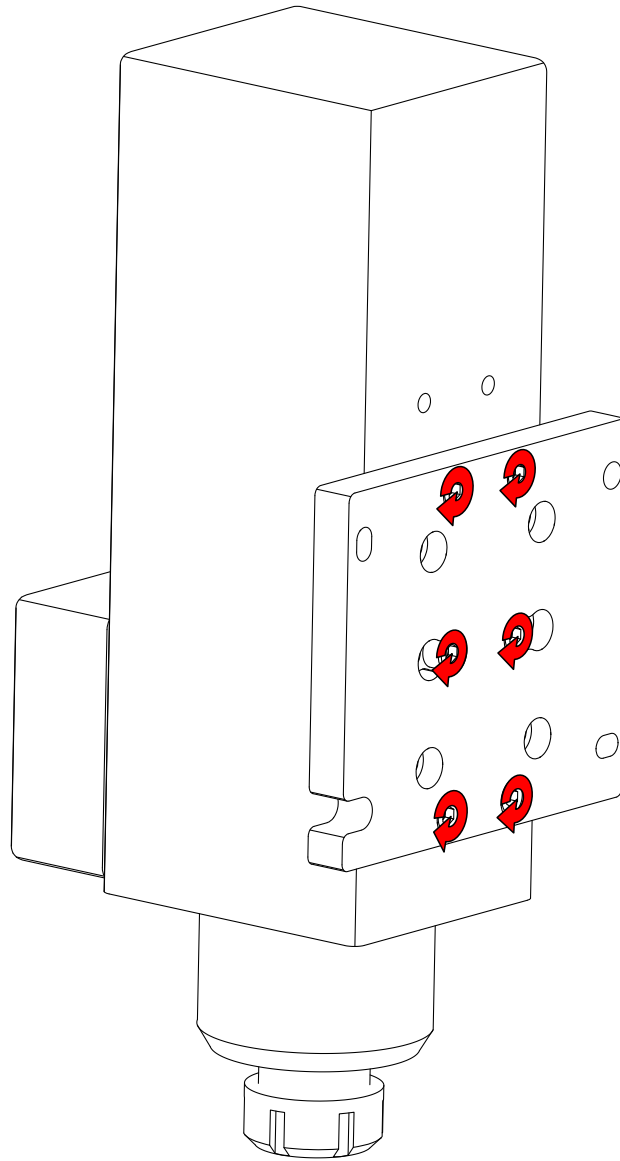


- Attach the spindle to the base adapter as indicated.

Assembly Note

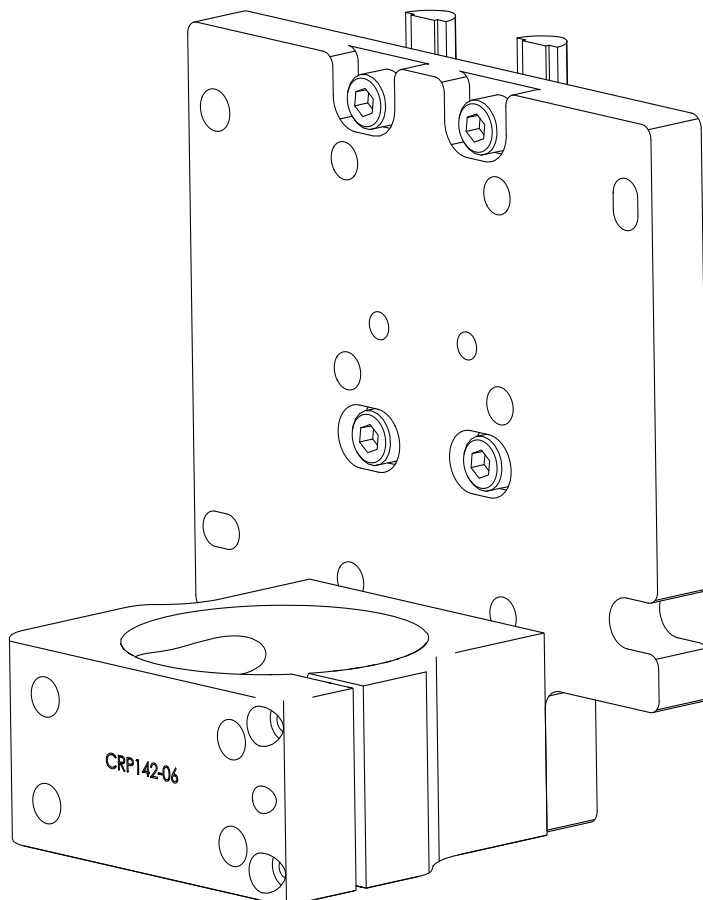
Spindle tramping mounts purchased prior to March 2021 use M8 x 20mm socket head cap screws.

2.2.2

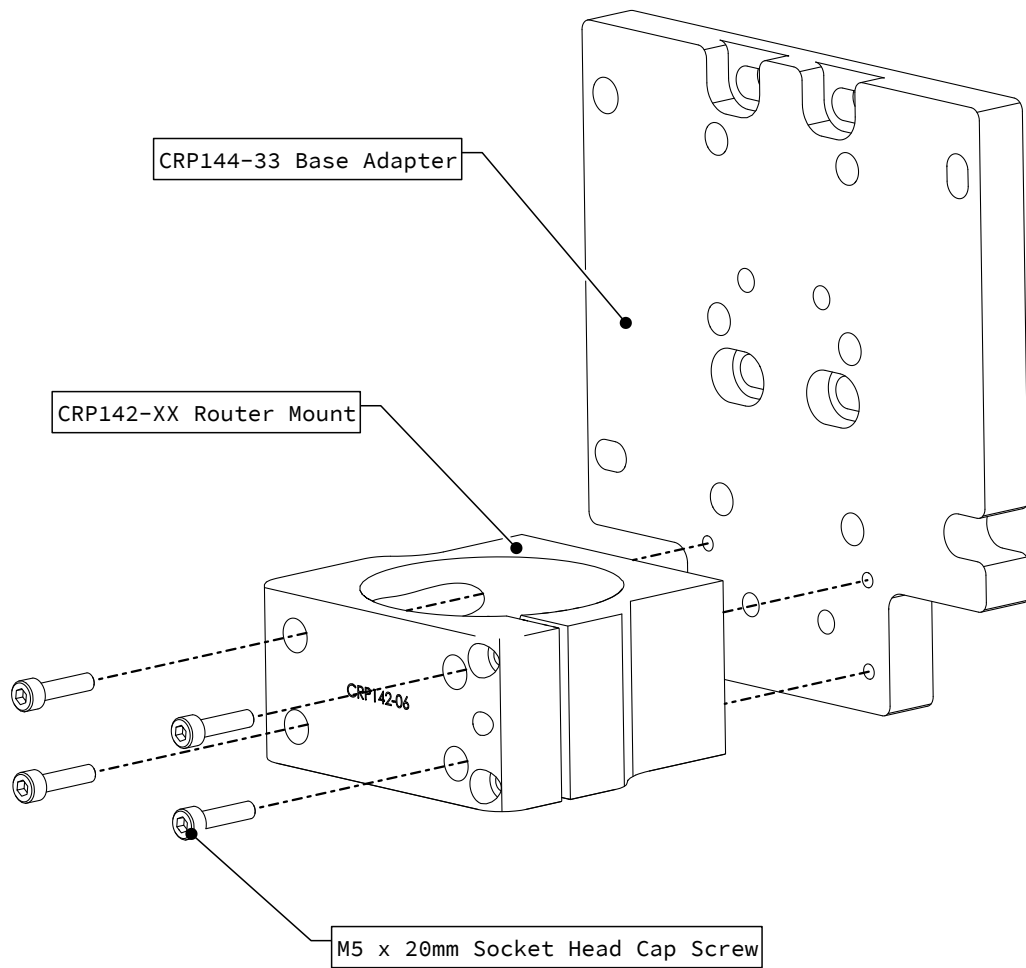


- Fully tighten the fasteners.
- Continue to the Trimming Mount Installation section to install the trimming mount.

Router & Round Spindle



2.3.1

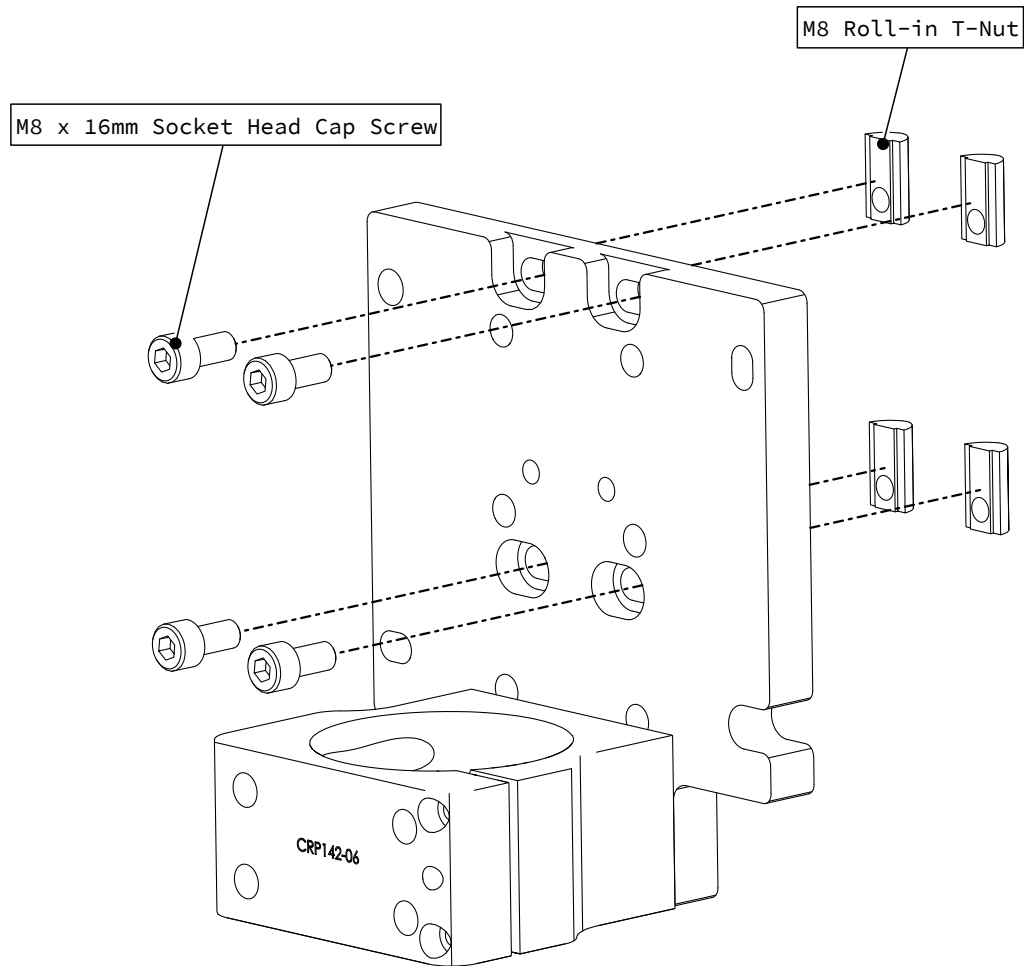


- Attach the router mount to the base adapter as indicated.
- Fully tighten the fasteners.

2.3.2

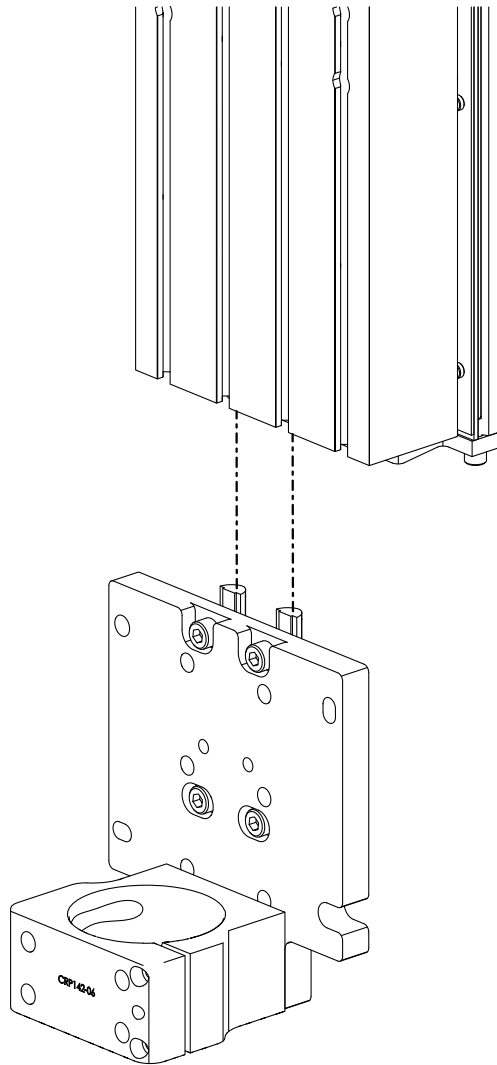
Configuration Option

If you purchased the optional tramping mount, skip this step and proceed to the Tramping Mount Installation section.



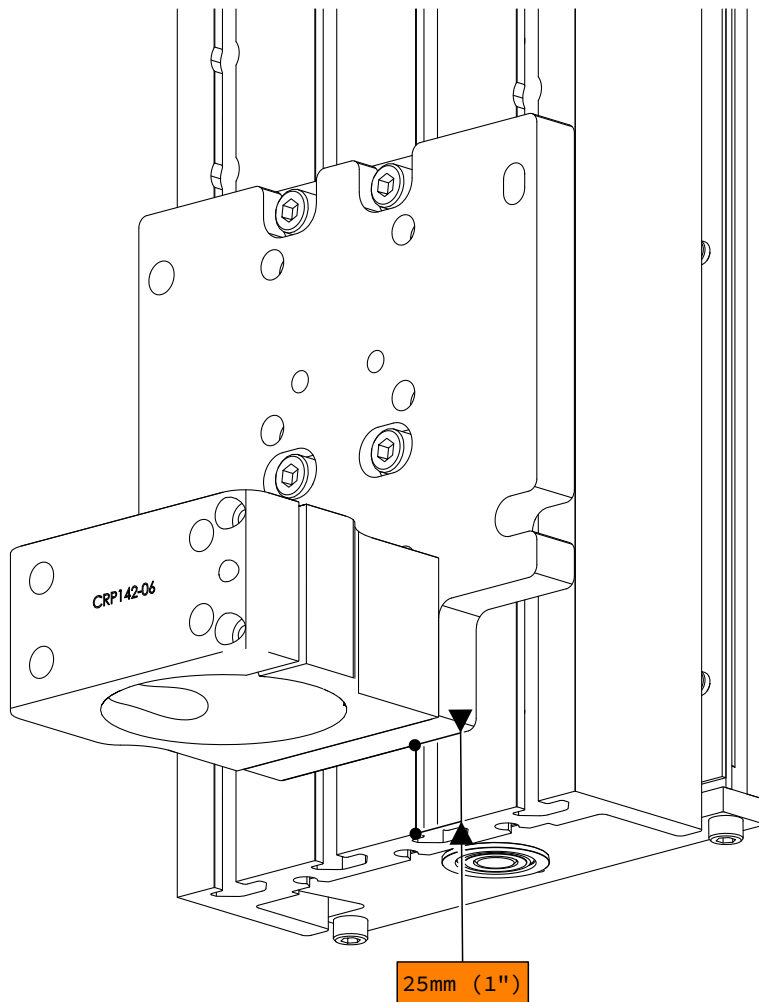
- Partially thread t-nuts onto the socket head cap screws as indicated.

2.3.3



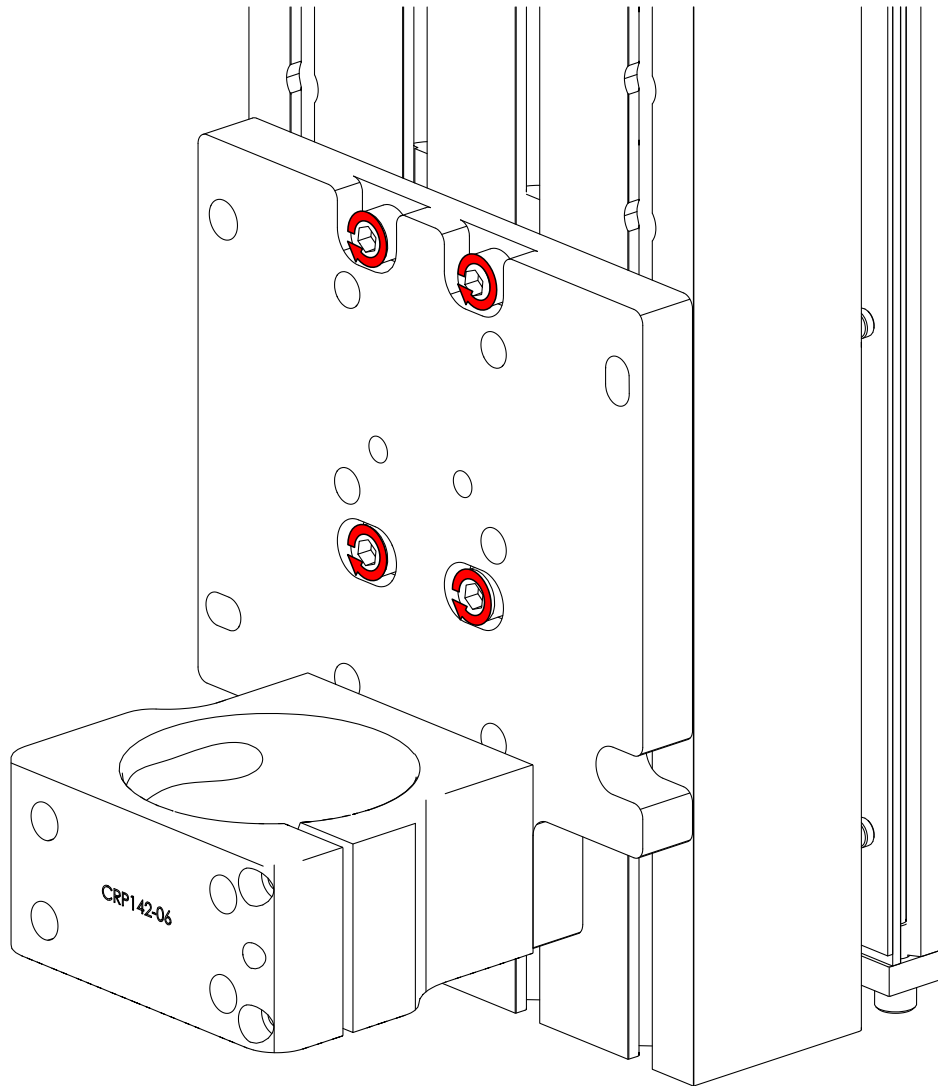
- Slide the router mount assembly into the t-slots of the Z-Axis as indicated.

2.3.4



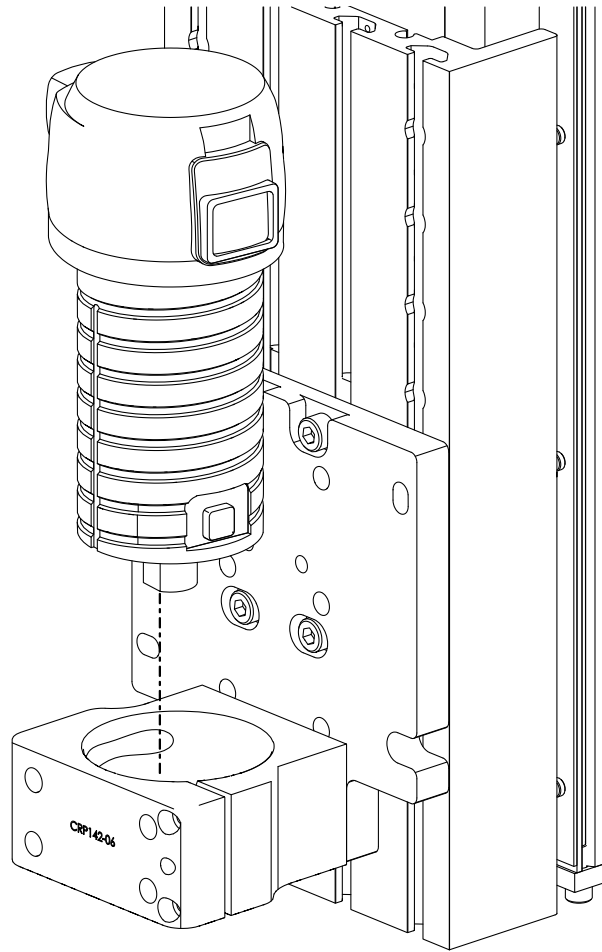
- Position the base adapter 25mm (1") from the bottom of the Z-Axis moving plate as indicated.

2.3.5



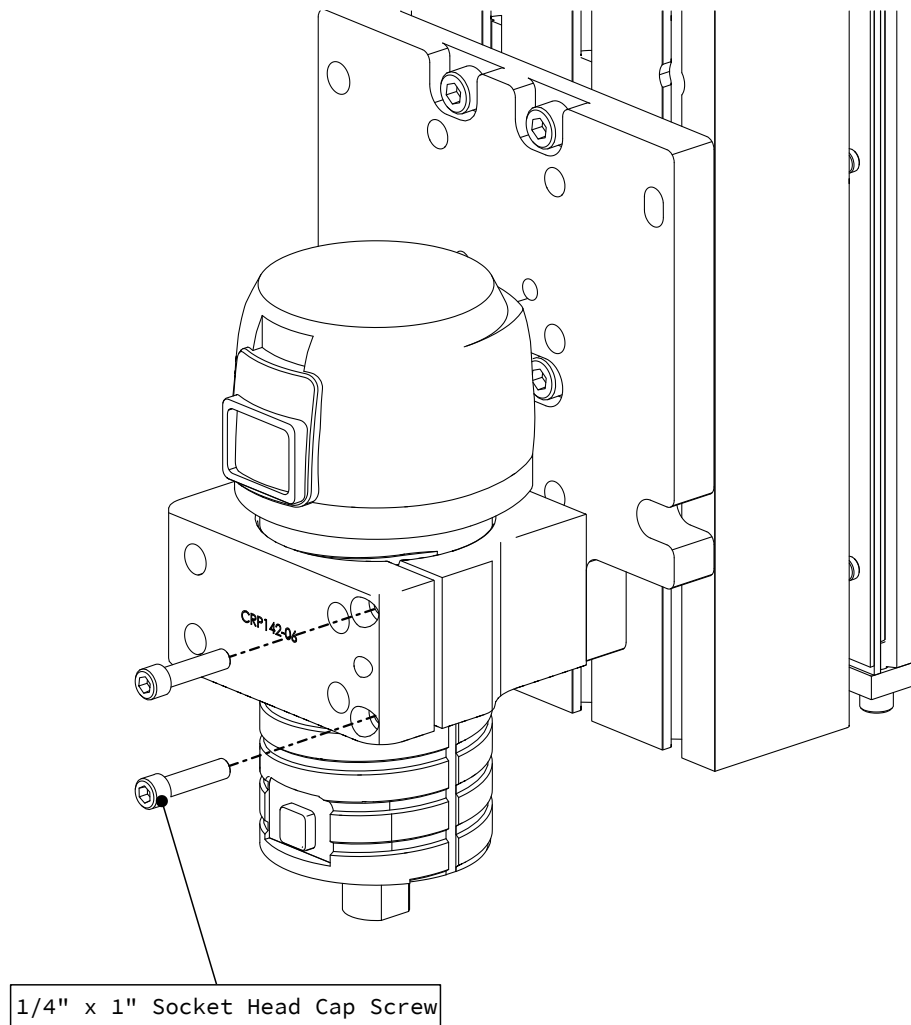
- Tighten the fasteners as indicated.

2.3.6



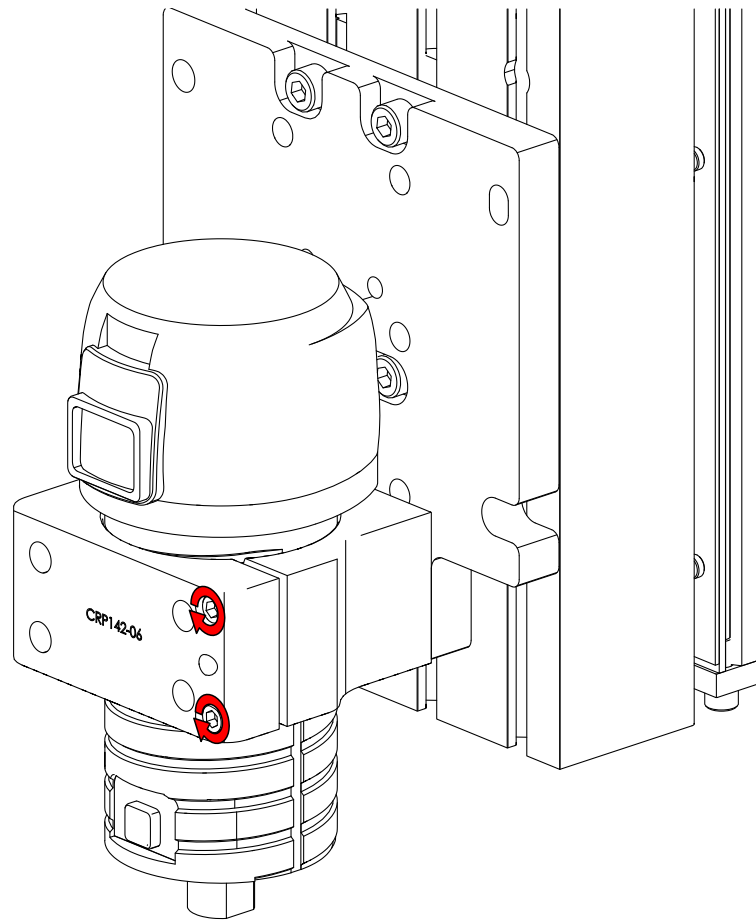
- Slide your router or round spindle into the router mount as indicated.

2.3.7



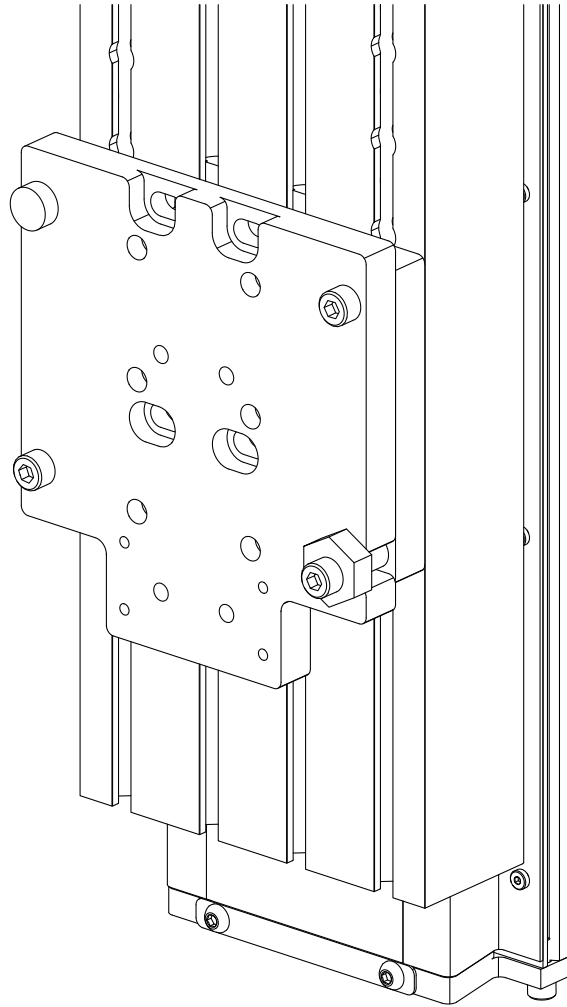
- Install the clamping fasteners as indicated.

2.3.8

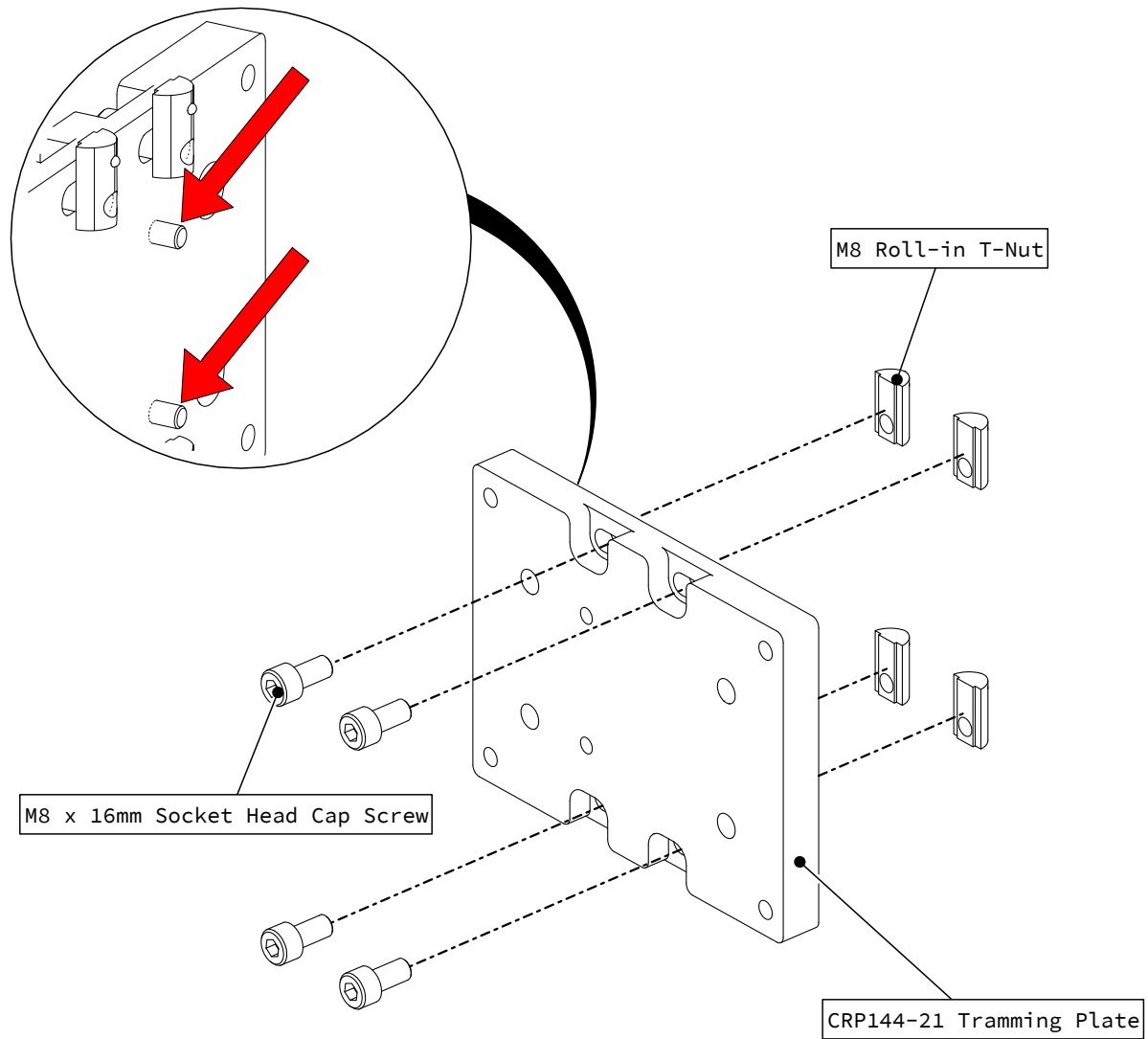


- Tighten the indicated fasteners.

3. Tramming Mount Installation



3.1

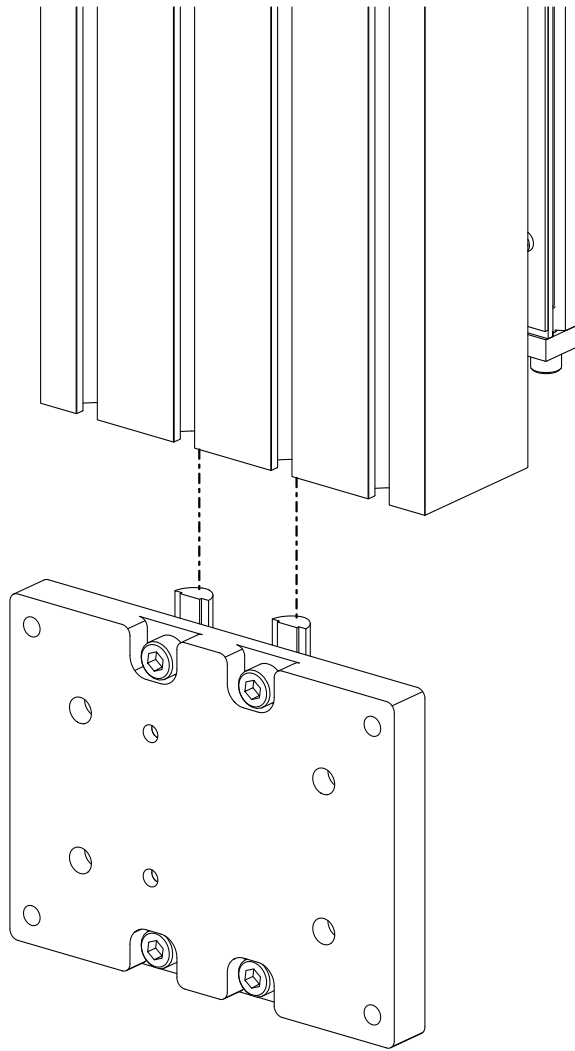


- Partially thread t-nuts onto the socket head cap screws as indicated.

Assembly Note

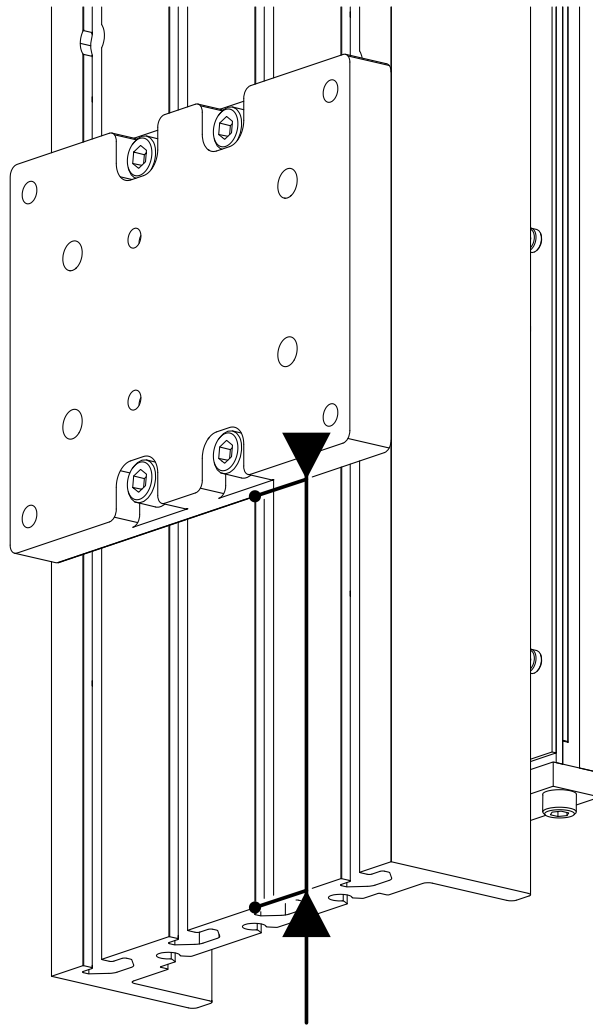
Orient the trimming plate with the dowels on the same side as the T-Nuts.

3.2



- Slide the tramping plate into the t-slots of the Z-Axis as indicated.

3.3

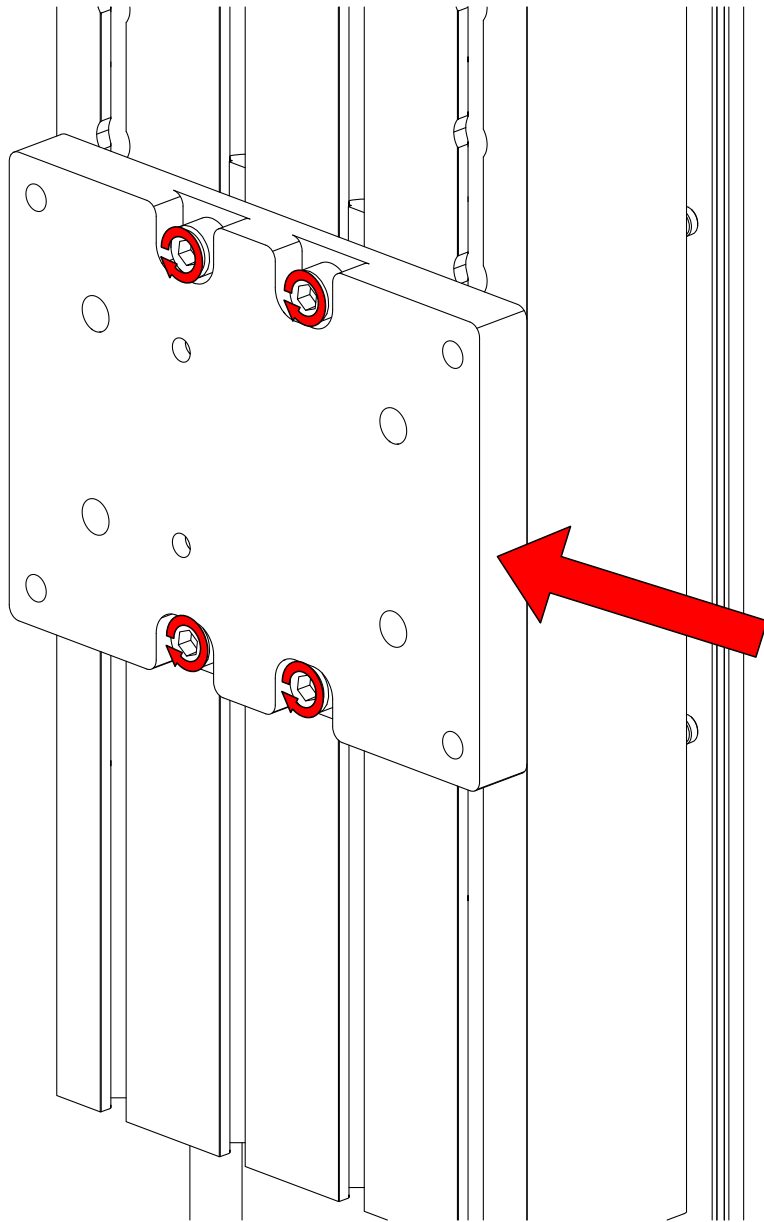


See instructions below for dimension

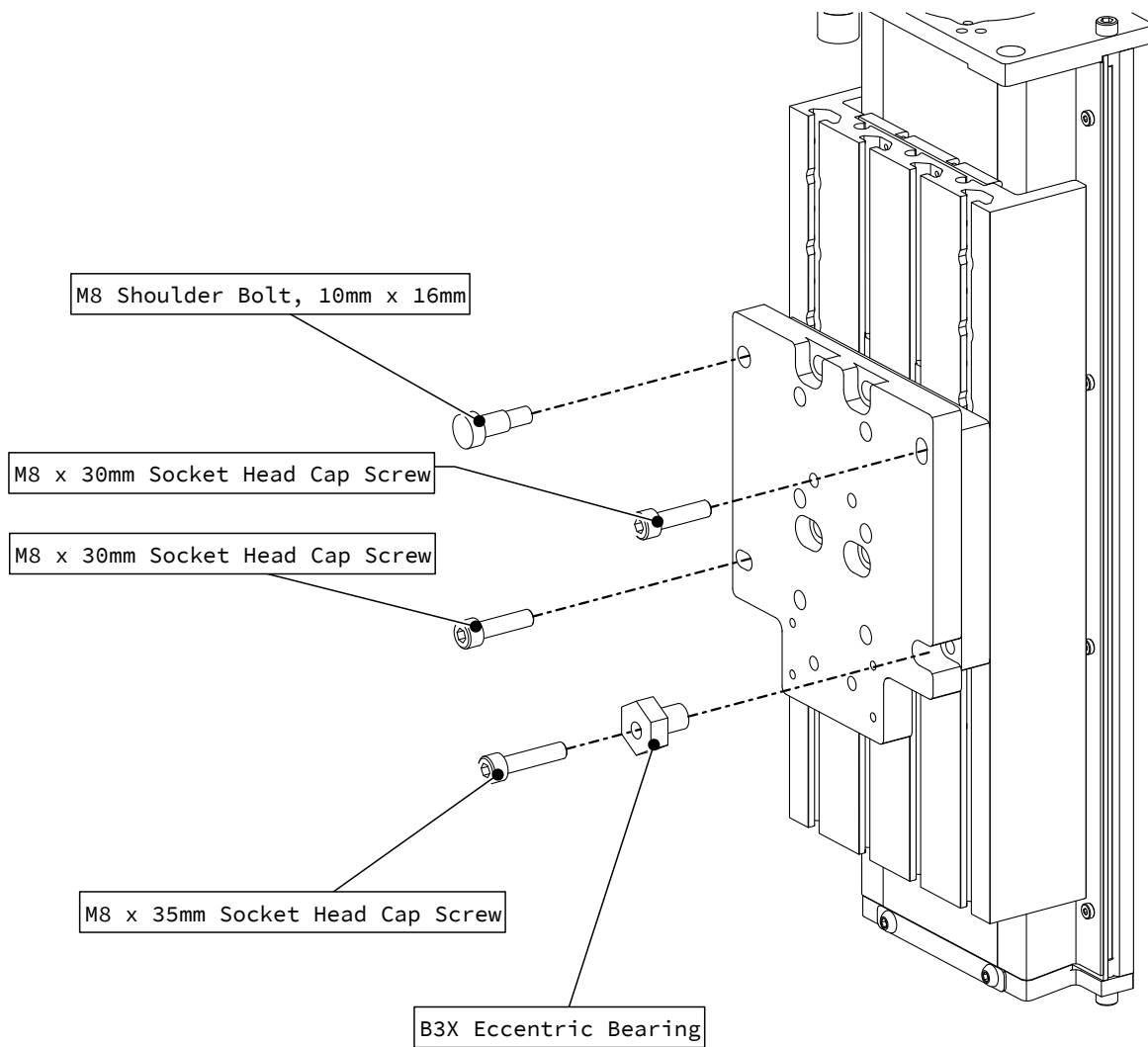
Spindle / Router	Dimension
Avid CNC spindles (all sizes)	96mm (3-3/4")
Router	46mm (1-13/16")

- Position the trammings plate using the dimension for your specific application.

3.4



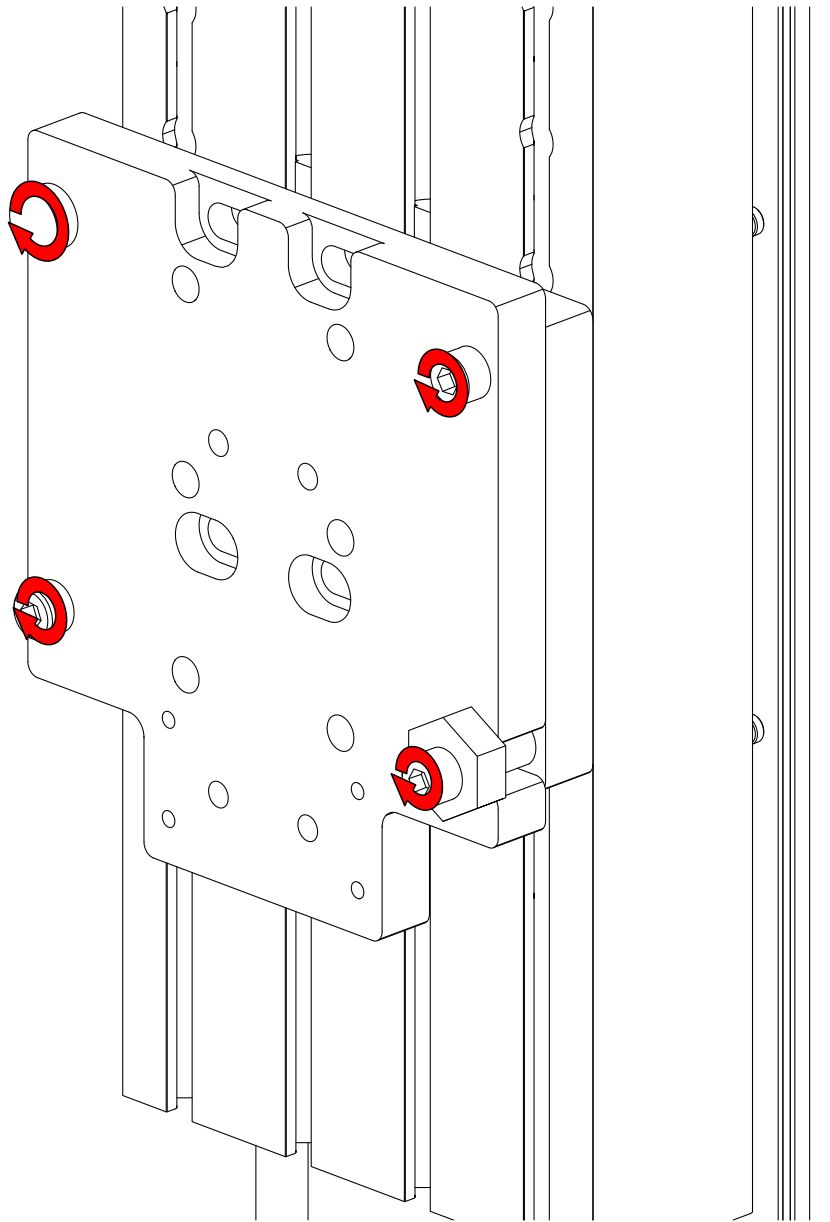
- While pushing on the tramming plate in the indicated direction, fully tighten the tramming plate fasteners.




- Install the base adapter (that is attached to your spindle or router) onto the tramming plate as indicated.

Assembly Note

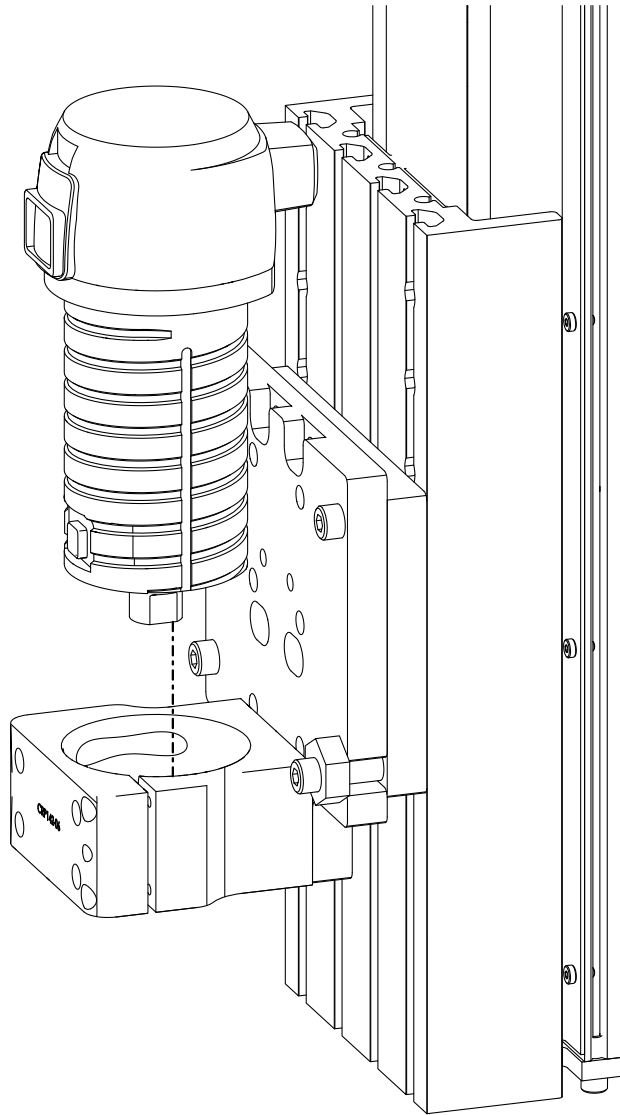
The router or spindle is hidden in the remaining steps for illustrative purposes.




- Tighten the highlighted fasteners.

 Configuration Option

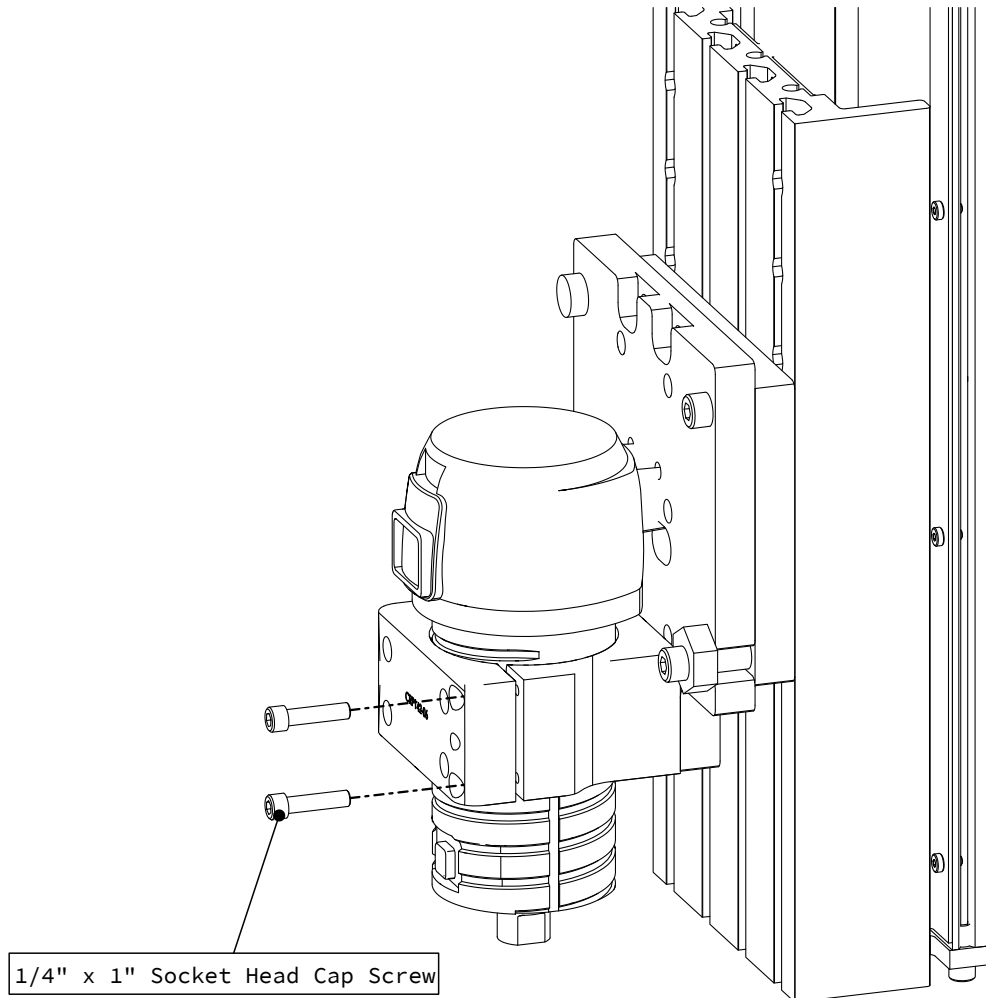
This step is only applicable for router and round spindles.




- Slide your router or round spindle into the router mount as indicated.

 Configuration Option

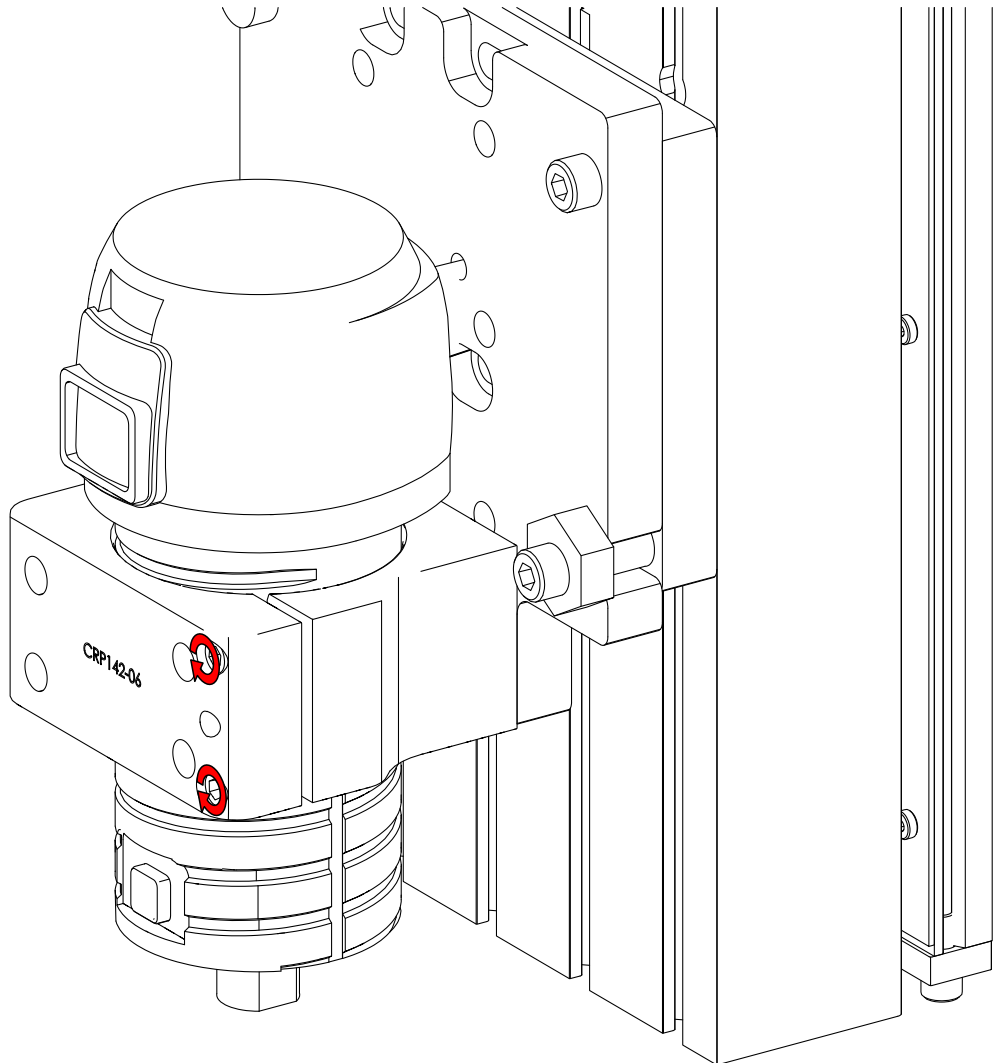
This step is only applicable for router and round spindles.



- Install the clamping fasteners as indicated.

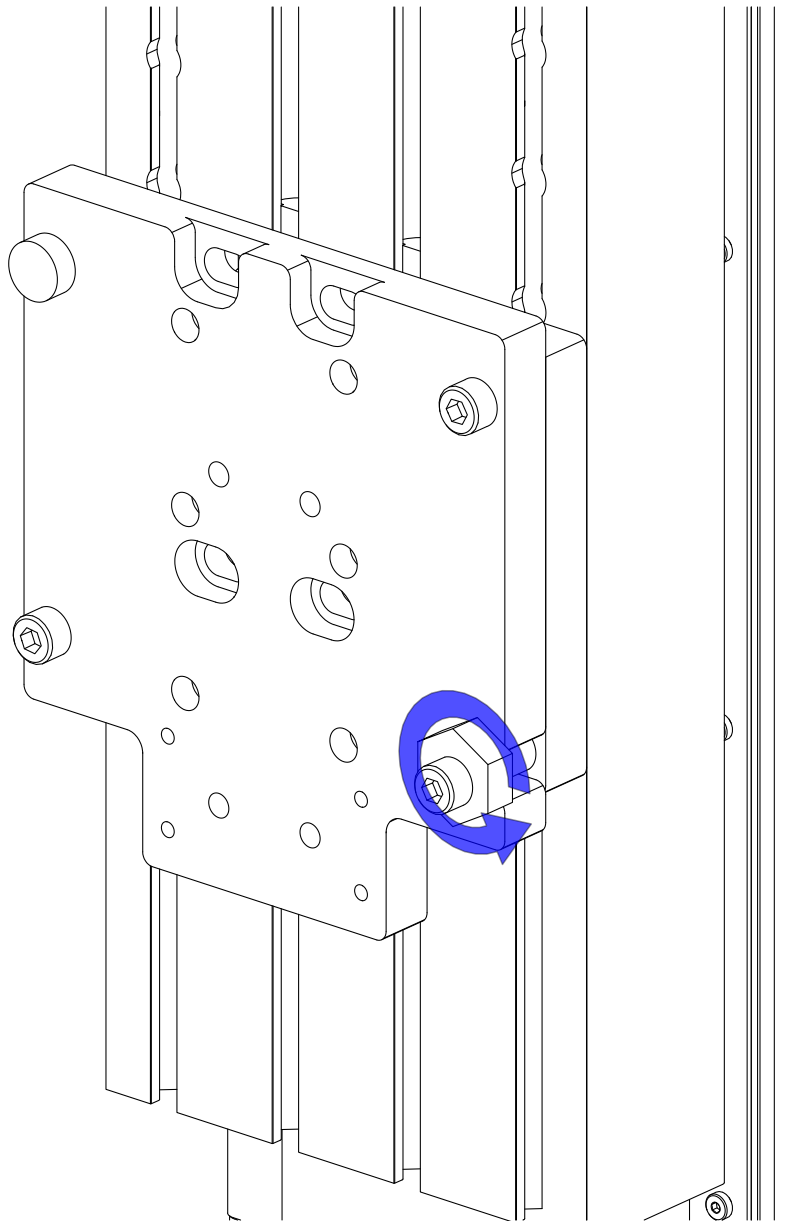
 Configuration Option

This step is only applicable for router and round spindles.



- Tighten the highlighted fasteners.

3.10



- Our Trimming Instructions show how to make test cuts to determine if the tram needs to be adjusted. If so, slightly loosen all four of the mounting fasteners and rotate the eccentric bearing. Re-tighten the fasteners after adjusting the tram.
- Trimming Instructions: <https://www.avidcnc.com/support/instructions/machineSetup/levelingSquaringAndTrimming>