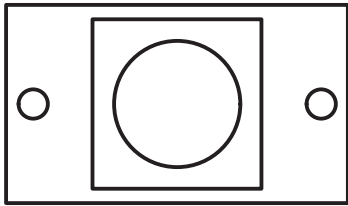
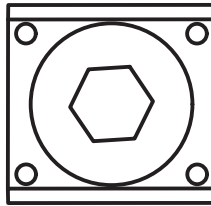


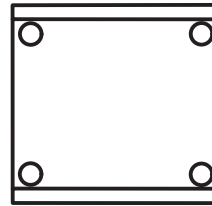
This guide is an intro of the components that make up the modulox system. We hope that after reading this you will further understand the modulox system.



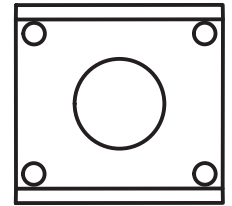
**motor block**



**bearing block**  
(shown with bearing)



**back block**



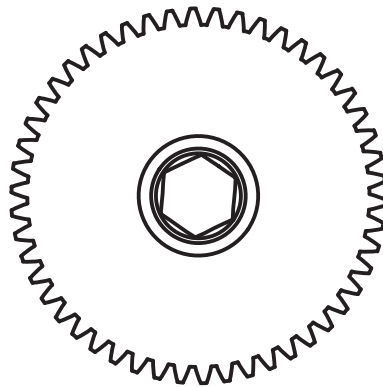
**through block**



**6-32 screw**



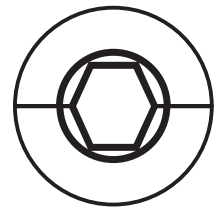
**hex spacer**



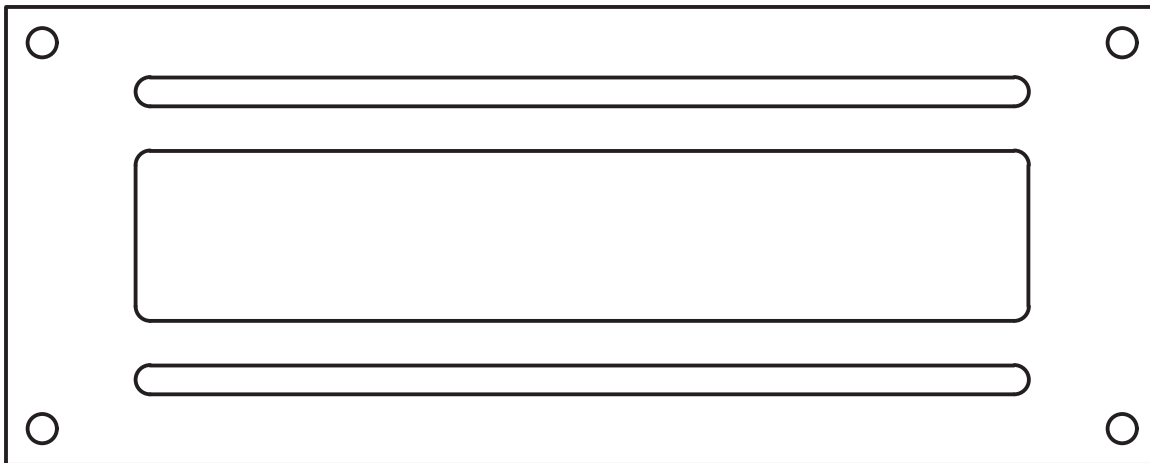
**hex bore gear**



**hex shaft**



**hex collar**

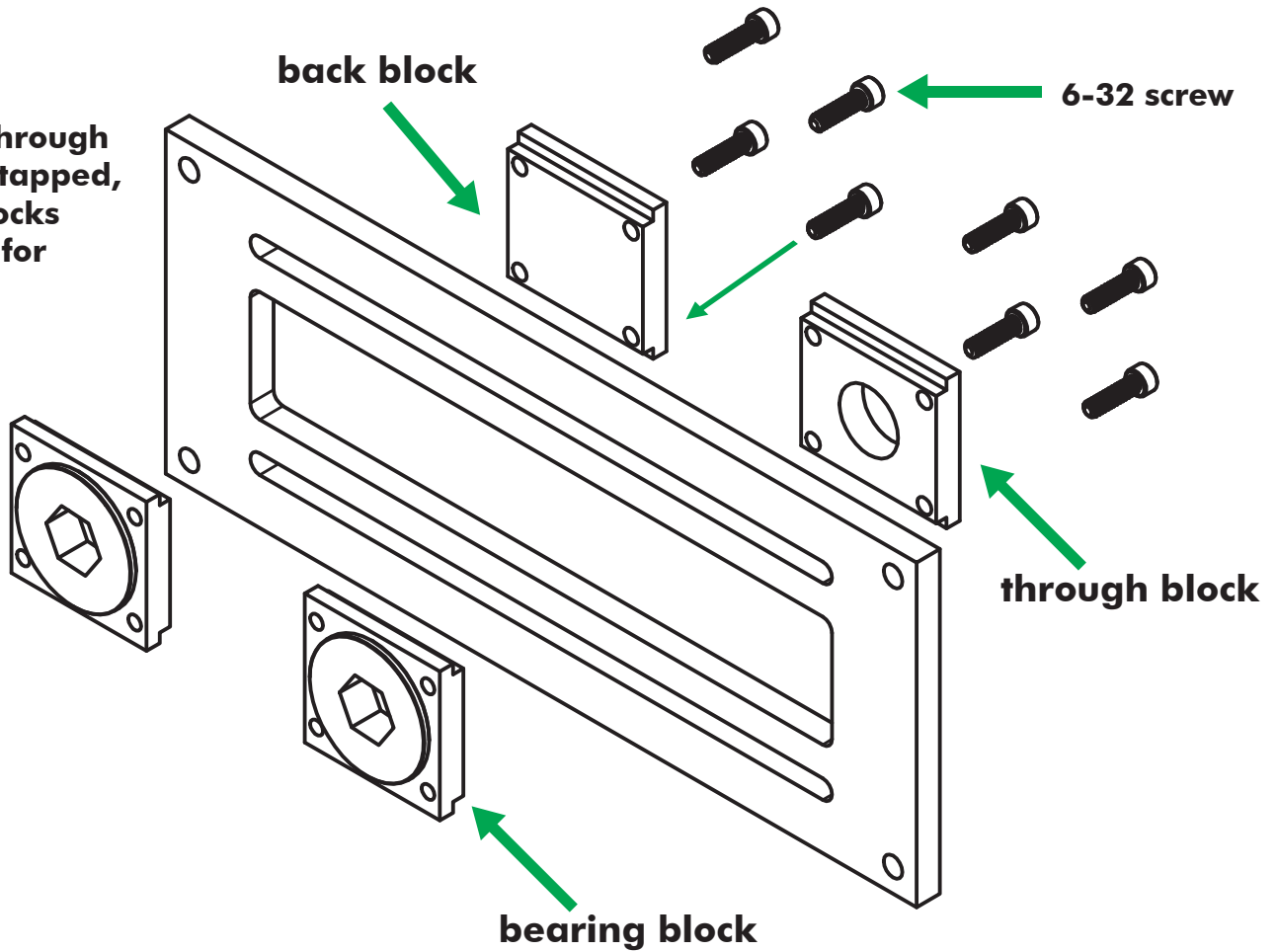


**slot plate**

Here are the basic components that make up the modulox system. There are a variety of machined aluminum blocks, these parts are precision machined to work with the modulox system. All modulox parts use standard hex shaft, therefore all the gears, spacers, and collars work with each other.

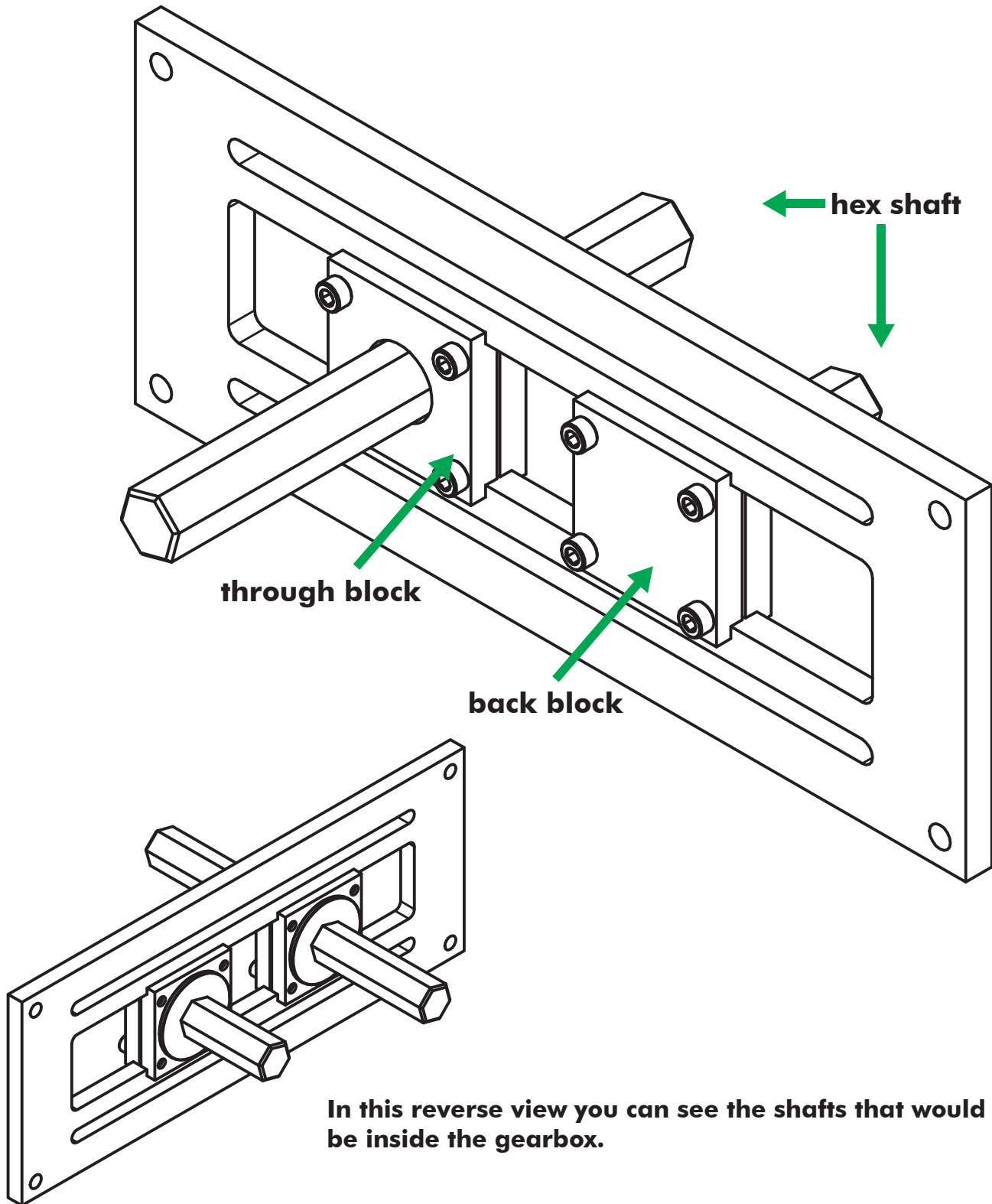
We'll begin by talking about the bearing blocks and the main support, the slot plate. The modulox system is really based around these components.

Back and through blocks are tapped, bearing blocks are drilled for clearance.

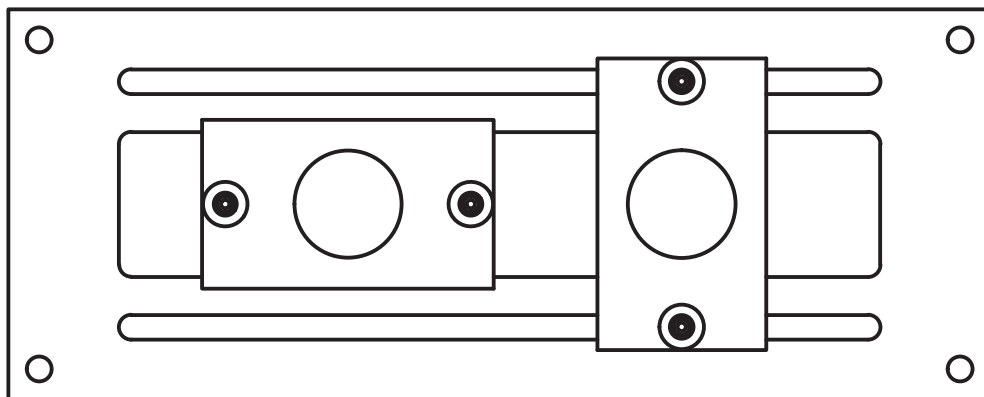
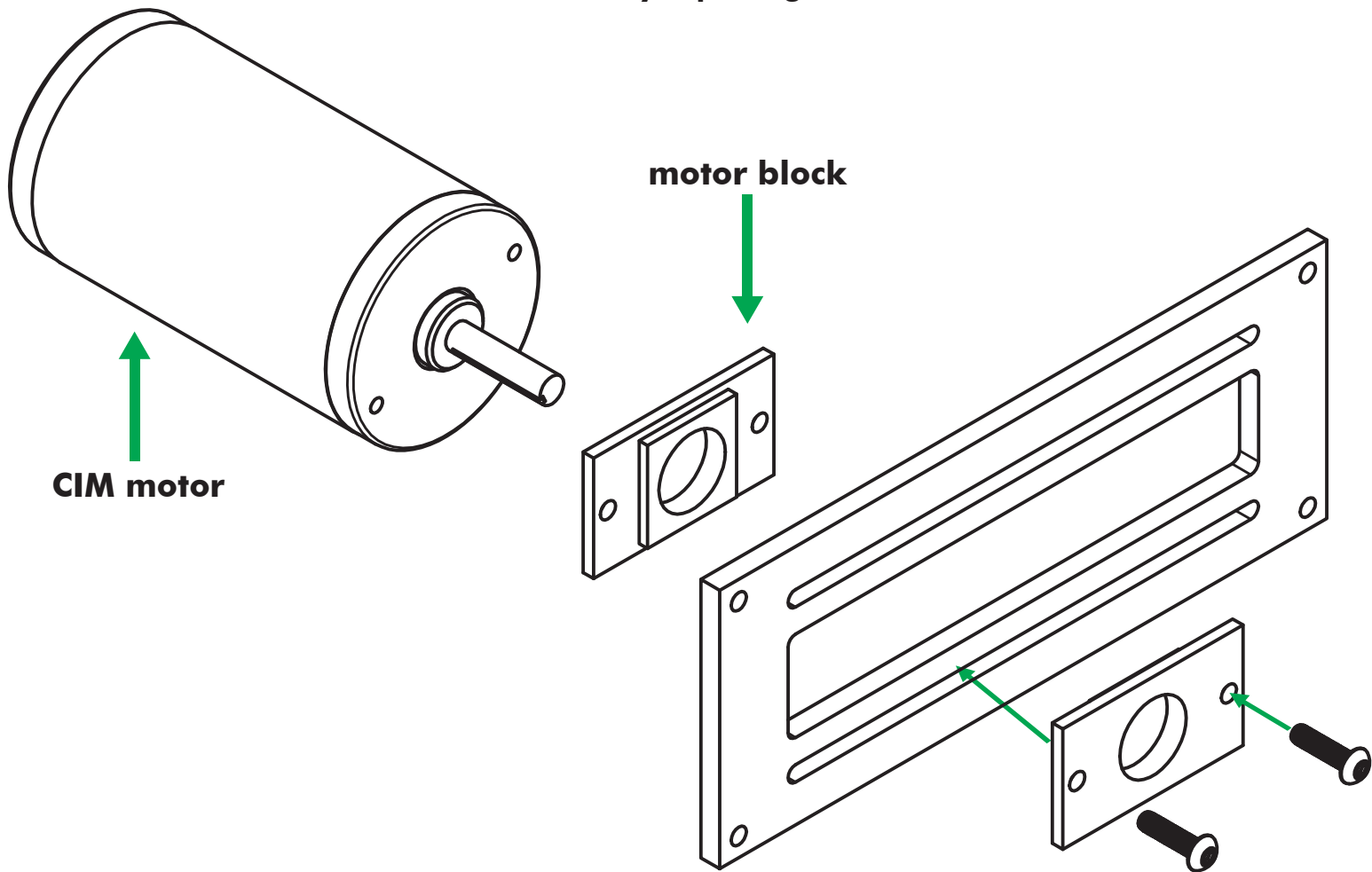


The 6-32 screws provide a huge amount of clamping force on the blocks by squeezing them, virtually locking the blocks into any position on the slot plate.

The through block allows a hex shaft to pass through the slot plate allowing for an external output shaft. Closed blocks keep the shaft captive within the gearbox.

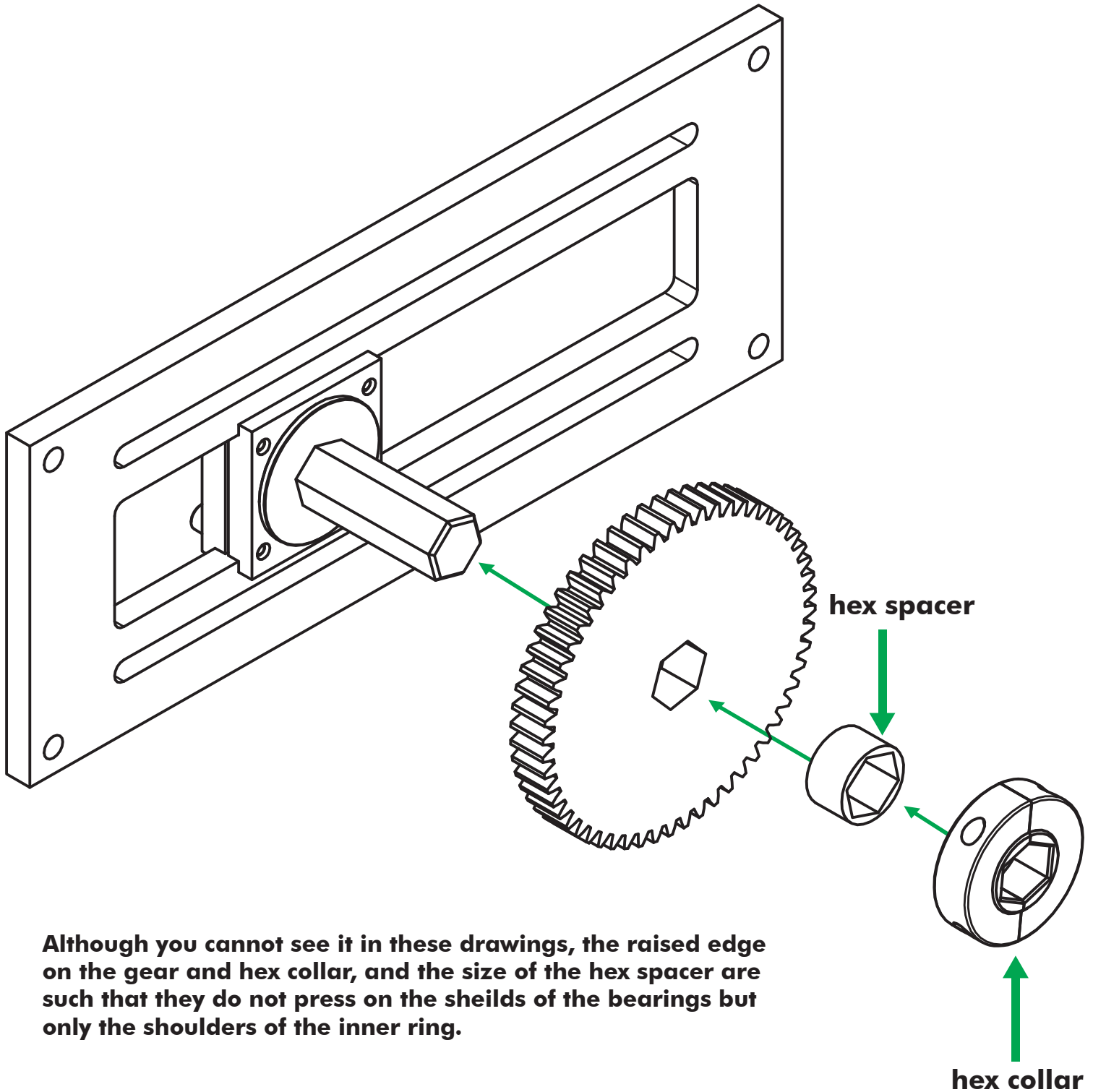


To mount a CIM motor to a modulox gearbox requires use of a pair of motor blocks. This block clamps using the same principal of the bearing blocks while additionally capturing the motor.



The motor block can be placed in two different orientations. The reason for the different orientations is this allows for a wider range of gears to correctly mesh with the motor output shaft.

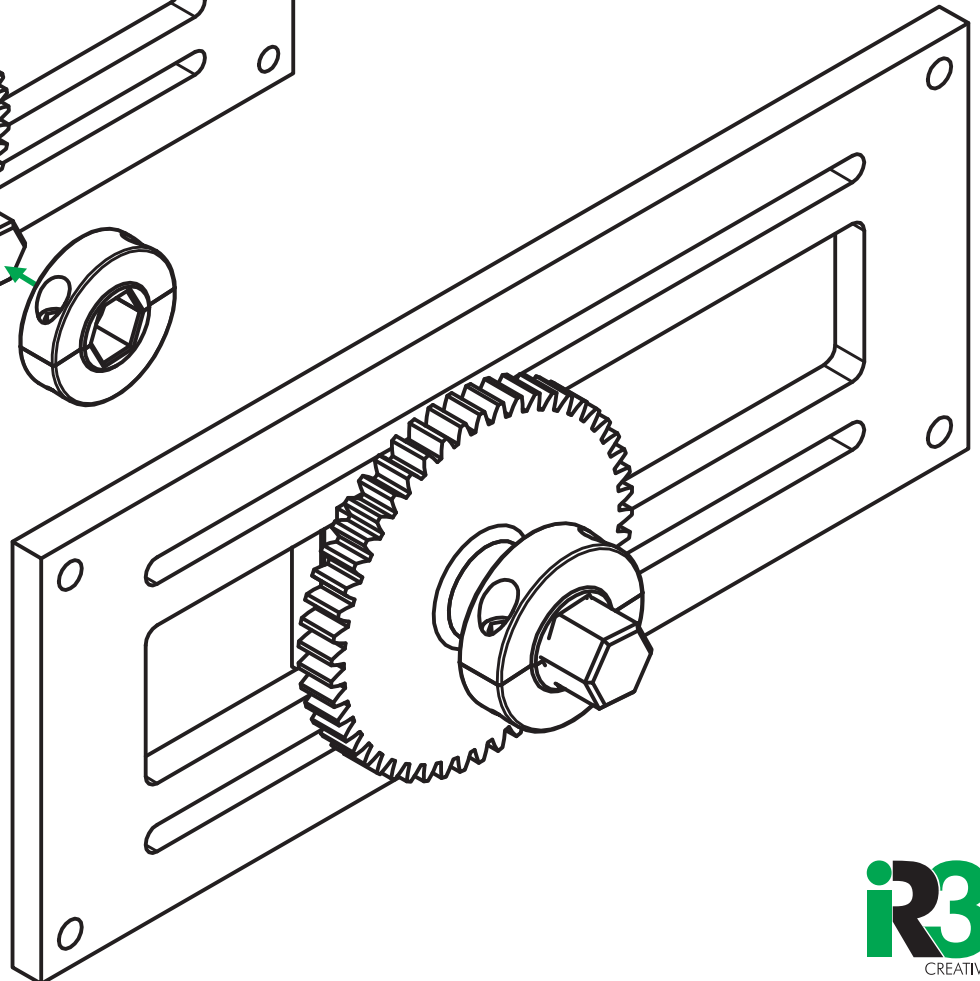
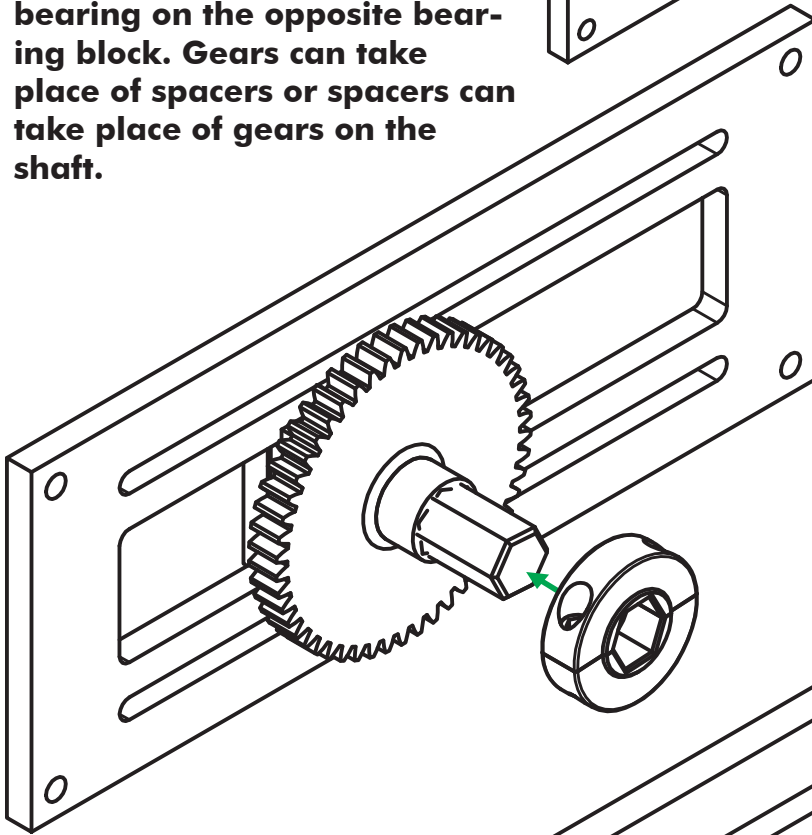
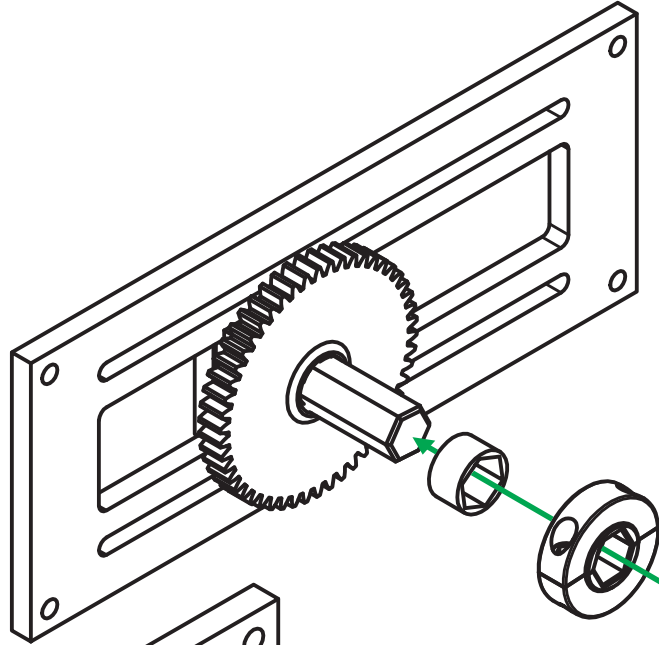
With the modulox system users can quickly assemble gear clusters. Because the modulox uses a standard width of gears and spacers modifications are simple.



Although you cannot see it in these drawings, the raised edge on the gear and hex collar, and the size of the hex spacer are such that they do not press on the shields of the bearings but only the shoulders of the inner ring.

To install a gearset users must first put a hex shaft into the bearing block. Then slide a gear on the shaft until it presses against the shoulder of the bearing.

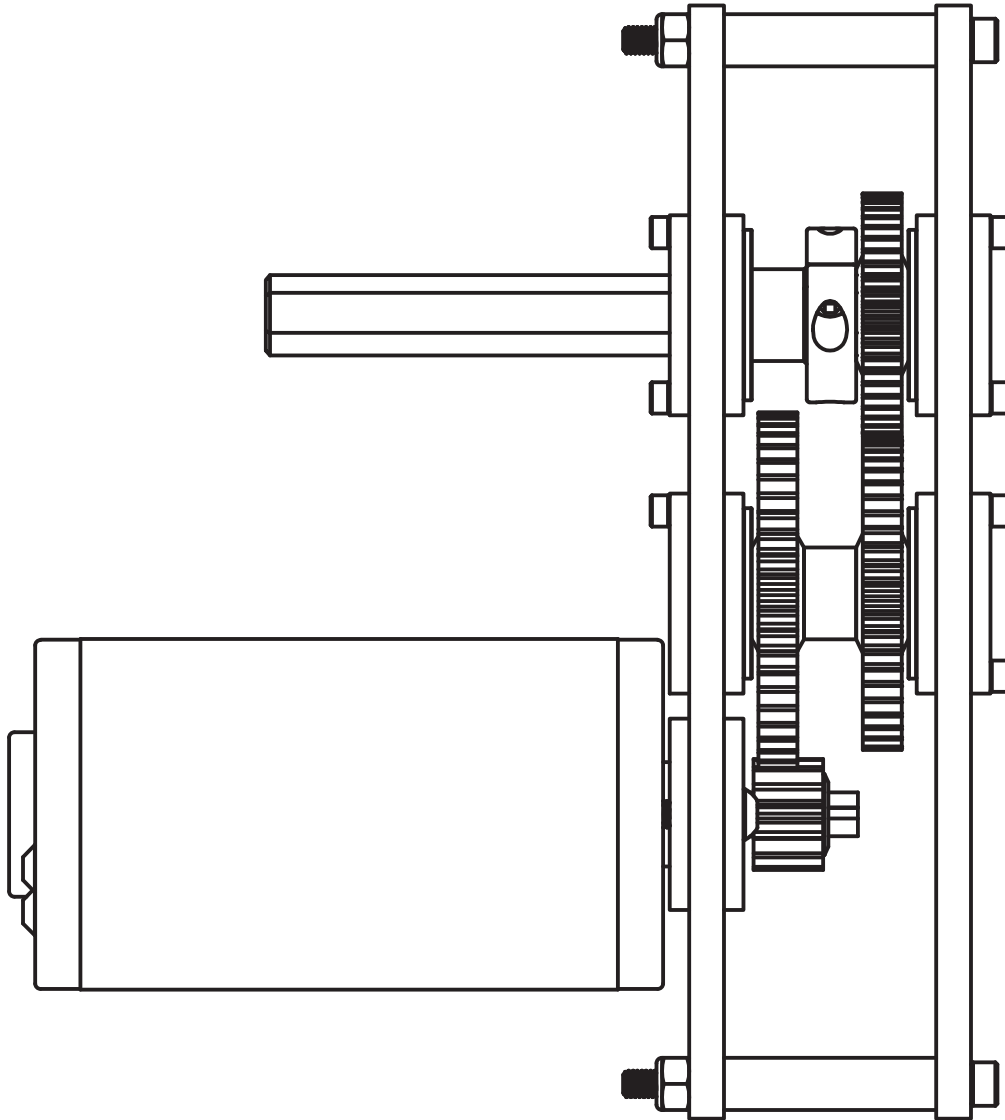
Then slide a spacer down the shaft. If using two back blocks then slide enough spacers on the shaft such that the spacer is pressing the shoulder of the bearing on the opposite bearing block. Gears can take place of spacers or spacers can take place of gears on the shaft.



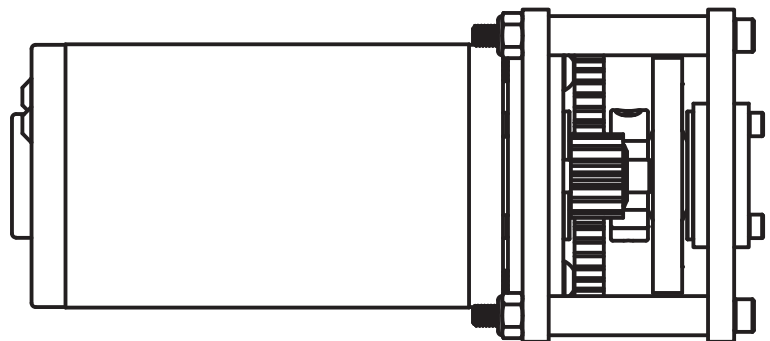
Hex collars are used with through blocks or when an odd width gear is used. The collar holds the gear in place instead of spacers spanning the width of the shaft.



**A fully assembled modulox gearbox can use as many gears as you can fit and the ratios are almost endless!**



**If you want more information on the modulox system or how to purchase a kit please go to [www.modulox.com](http://www.modulox.com)**



**THANK YOU!**

