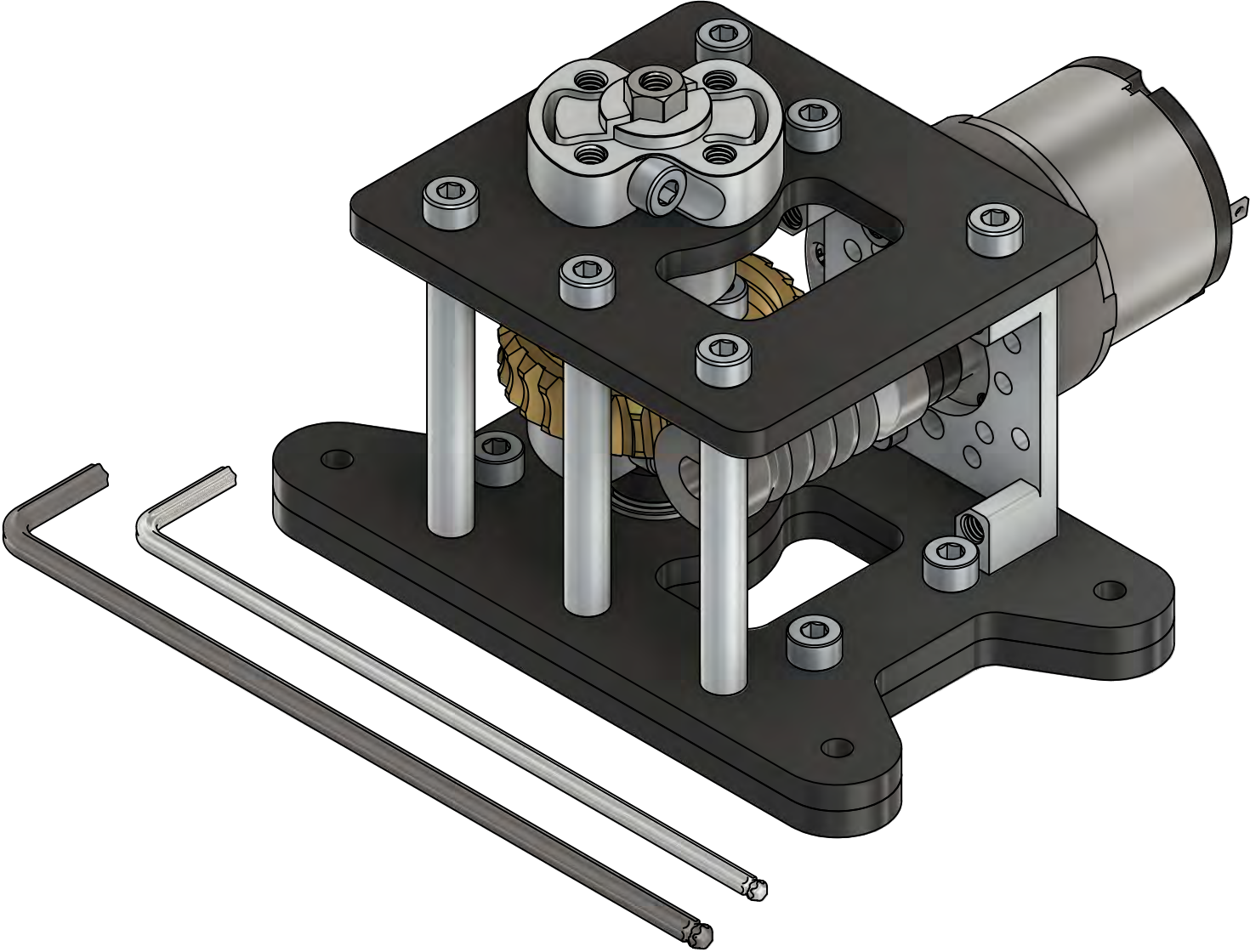


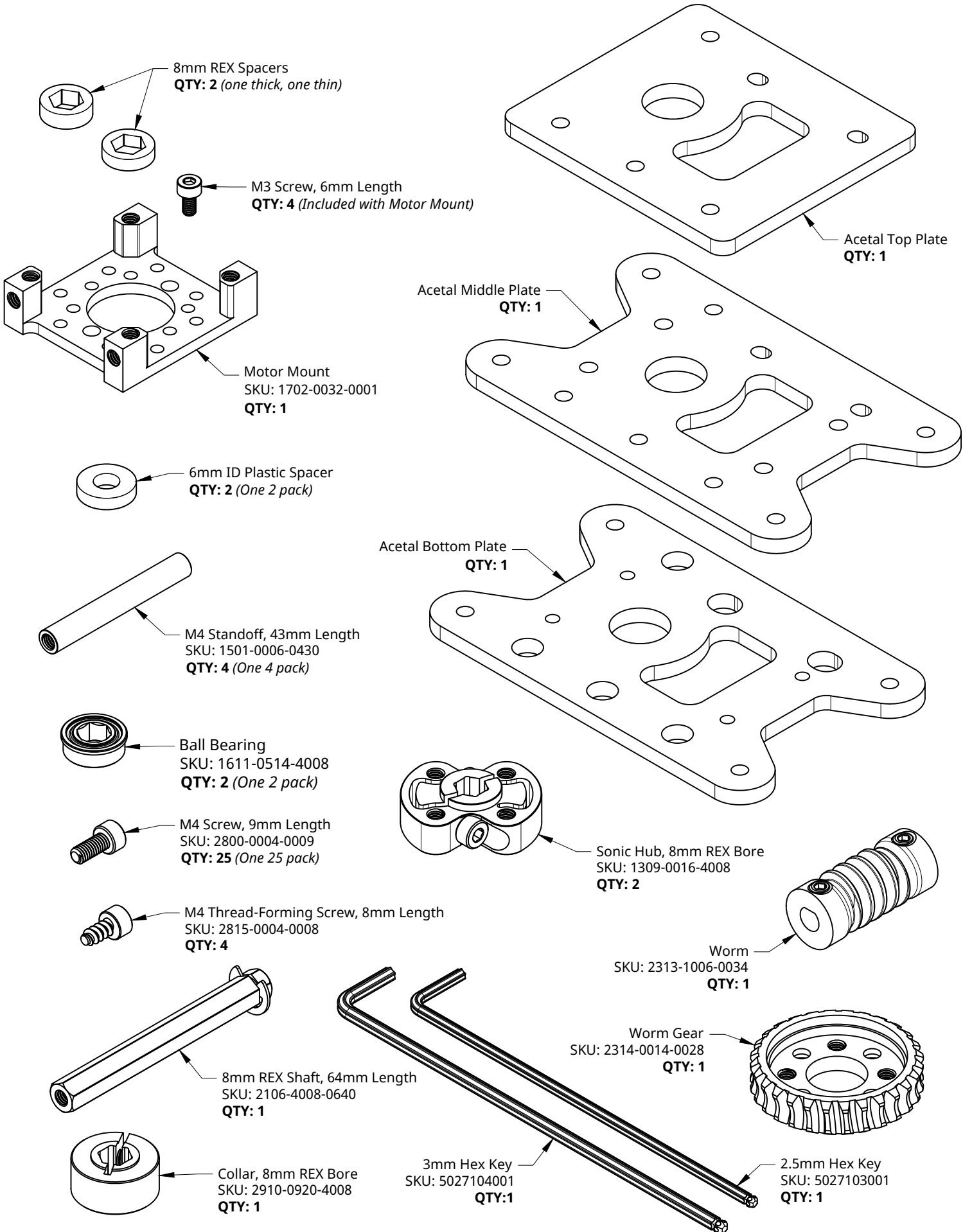
Assembly Instructions for Standard Duty Worm Drive Gearbox (28:1 Ratio)

SKU: 3208-1006-0028



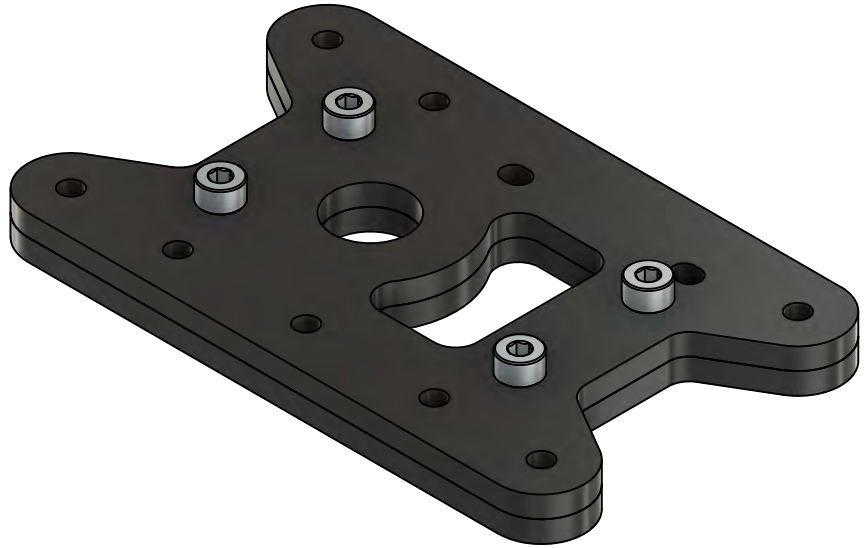
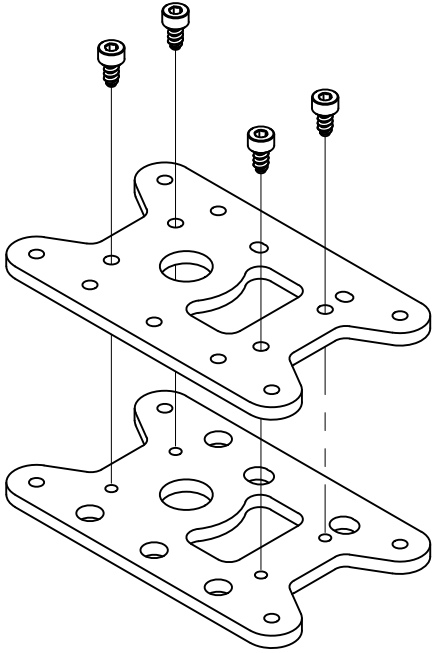
(Gear Motor Not Included)

Kit Contents



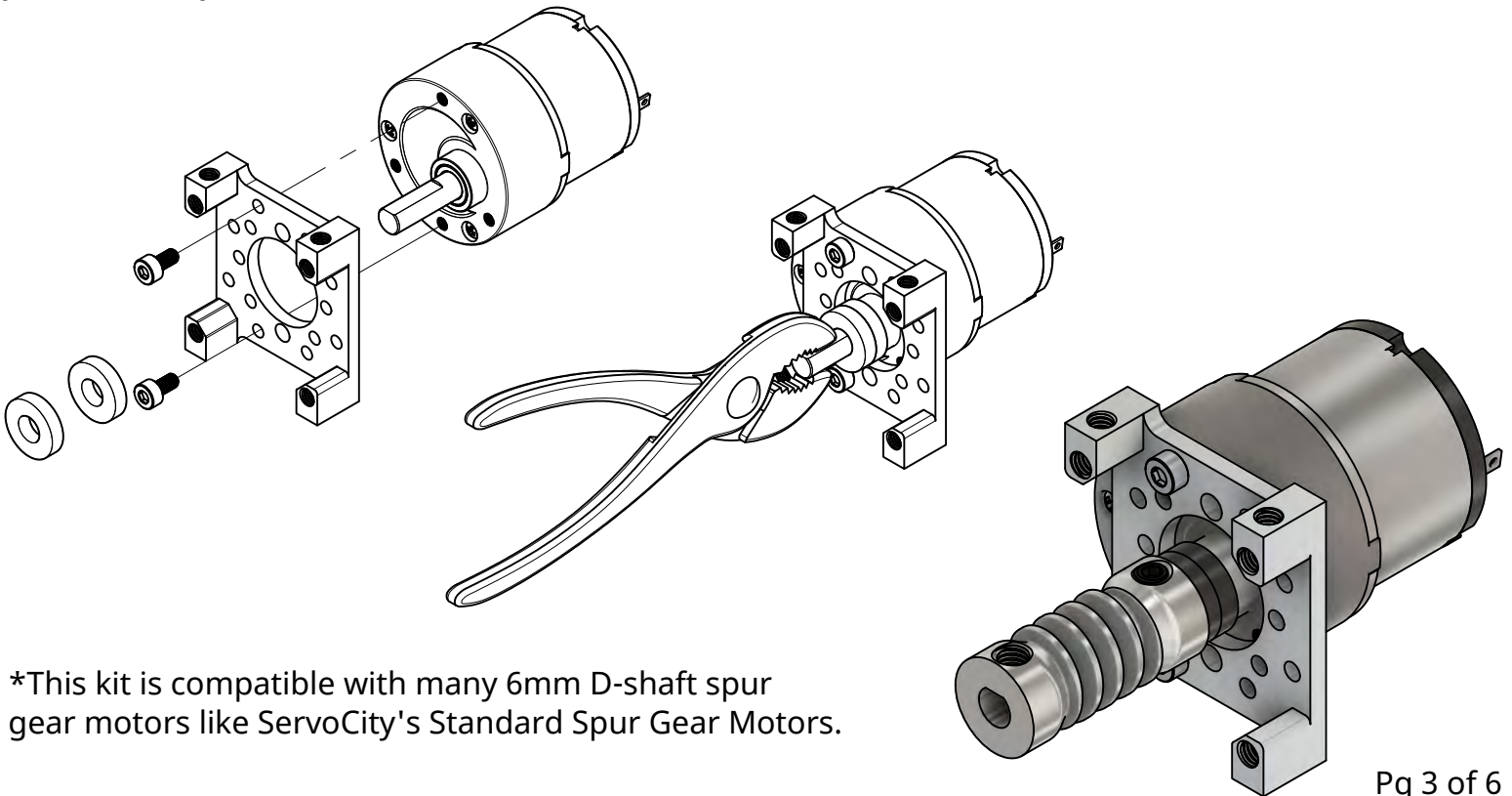
STEP 1

Use the 3mm hex key to drive the 4 thread-forming screws to attach the Middle Plate to the Bottom Plate as shown.



STEP 2

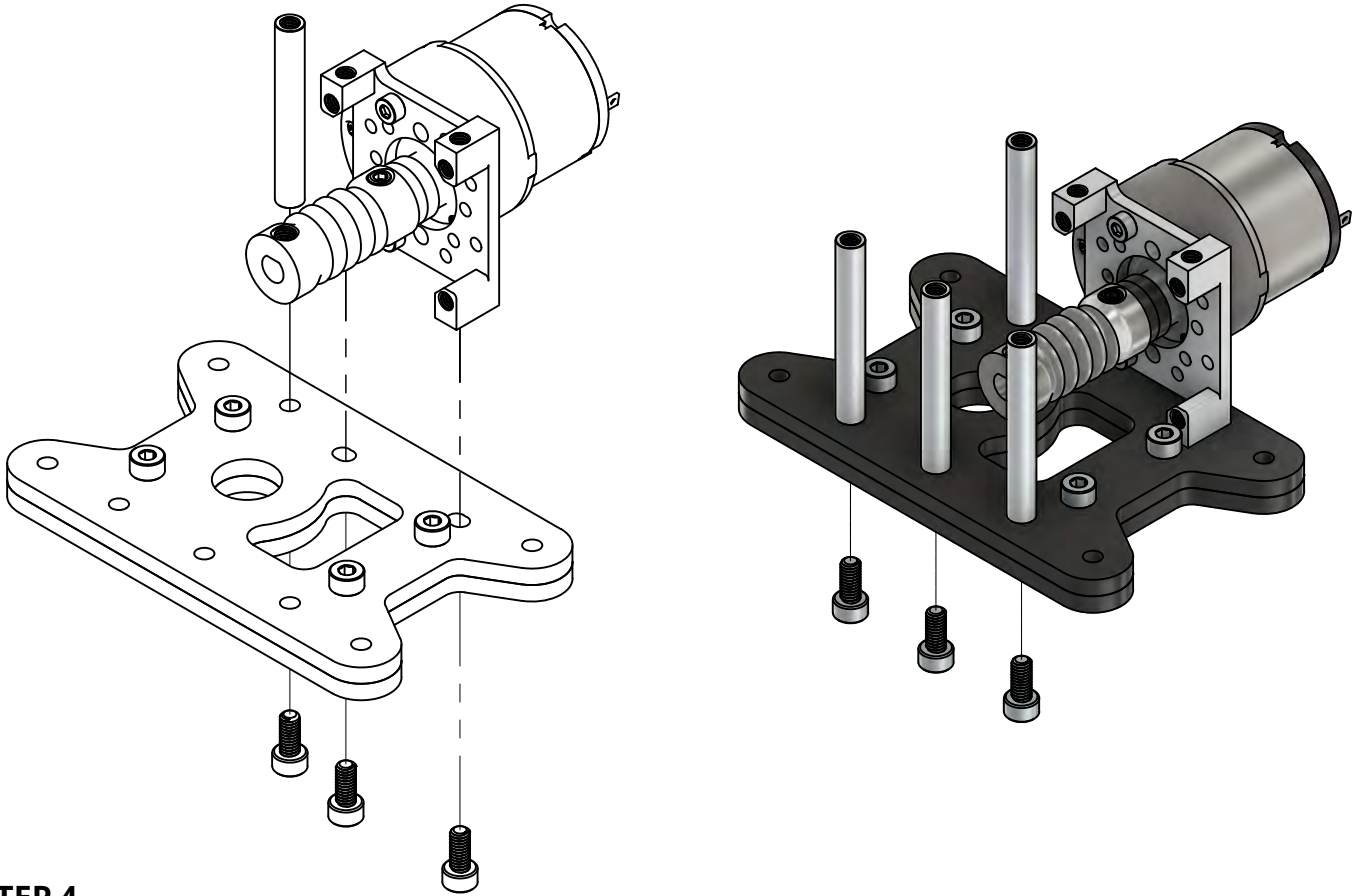
Use the M3 screws included with the motor mount to mount your motor (motor not included). Here, a Standard Spur Gear Motor is shown*. Next, slide the two 6mm ID plastic spacers onto the shaft. Pull the shaft out with a pair of pliers (not included) while pushing the spacers towards the motor. This will remove axial play in the motor's output shaft. Next, add the worm to the motor's output shaft. Tighten the worm's set-screw that is closest to the motor. We recommend removing the other set-screw because it has nothing to tighten down on - this will prevent it from coming loose in your assembly.



*This kit is compatible with many 6mm D-shaft spur gear motors like ServoCity's Standard Spur Gear Motors.

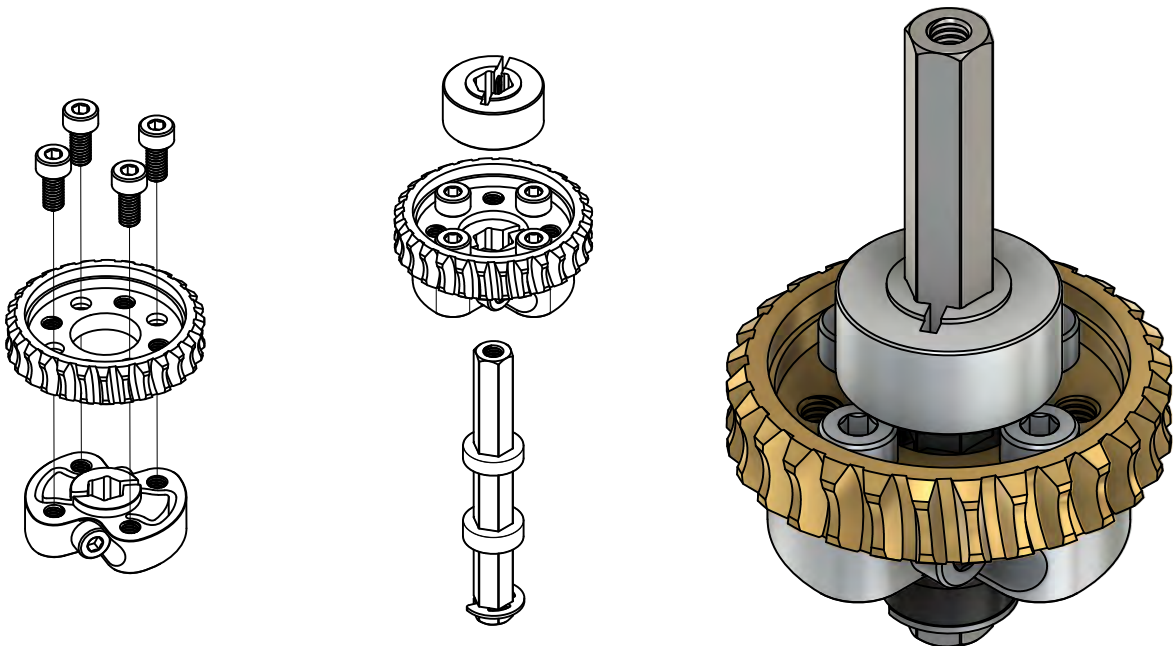
STEP 3

Use six of the 9mm length M4 screws to attach the 4 standoffs and the motor mount to the bottom plate assembly as shown. The 2 screws which attach the motor mount go through slots which allow the motor mount to slide back-and-forth before tightening the screws down. This allows the gear mesh to be adjusted. Leave those two screws a little loose for now.

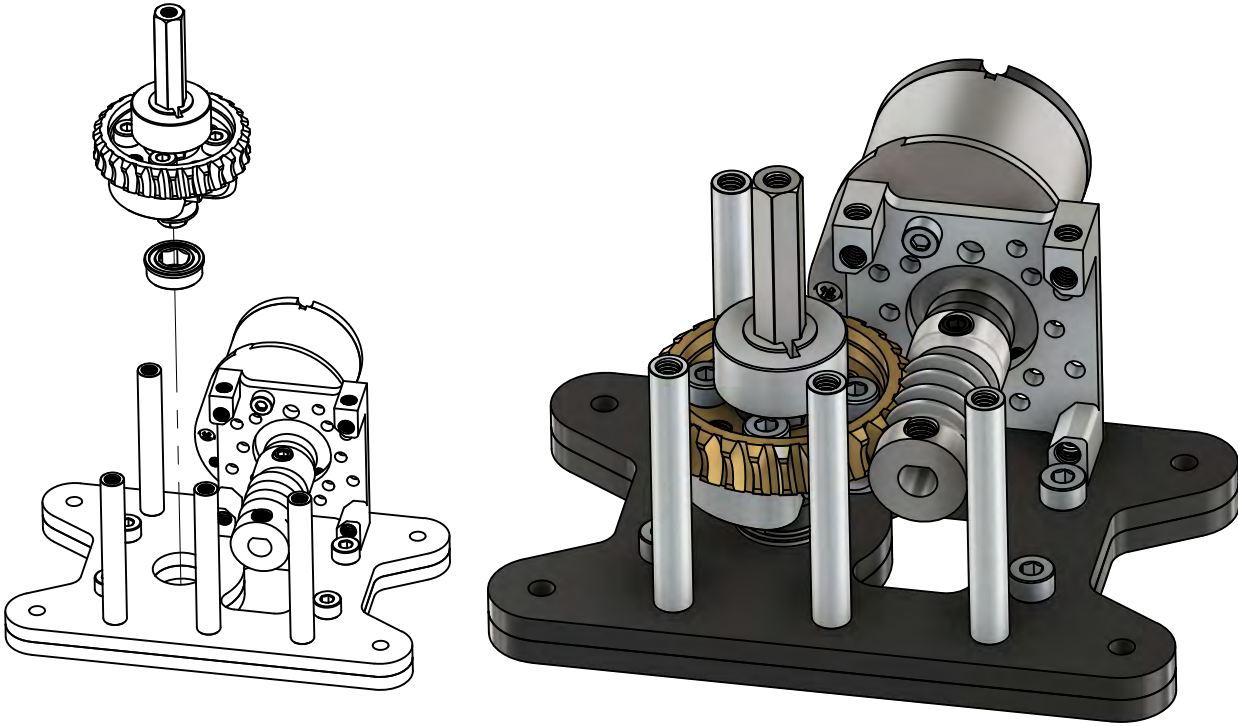


STEP 4

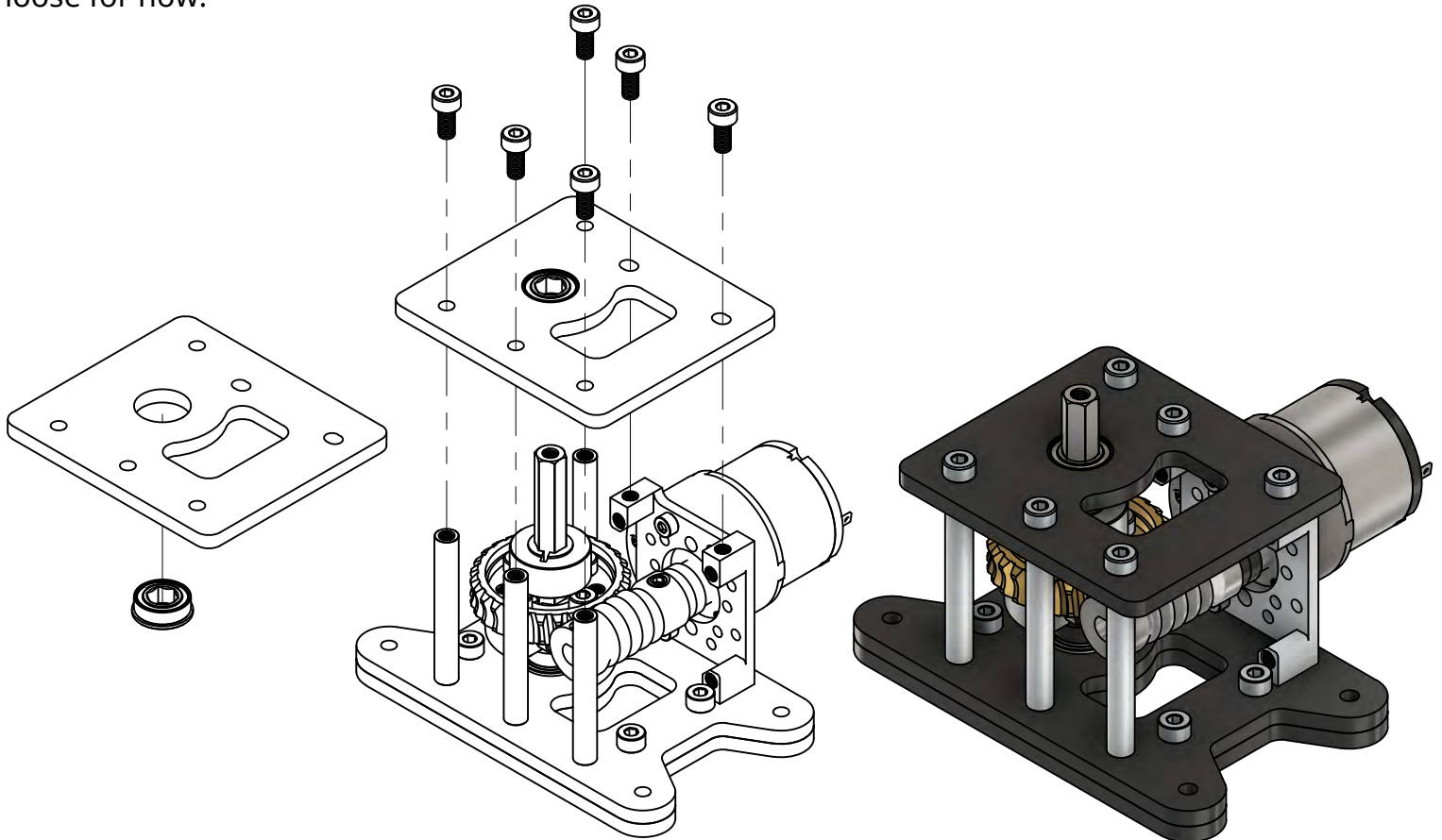
Use four 9mm length M4 screws to fasten the worm gear to a Sonic Hub. Slide both 8mm REX bore plastic spacers onto the 8mm REX shaft. Then slide the hub/gear assembly onto the 8mm REX Shaft as shown. Push it all the way down on the shaft and tighten the Sonic Hub's pinch bolts. Slide the collar onto the shaft as well, leaving its pinch bolt loose for now. Both the hub and the collar have one side with a protrusion - note their orientation (protrusion up).



STEP 5
Insert an 8mm REX bore bearing (flange side up) into the 14mm hole in the bottom plate assembly. Stand the STEP 4 assembly into that bearing.

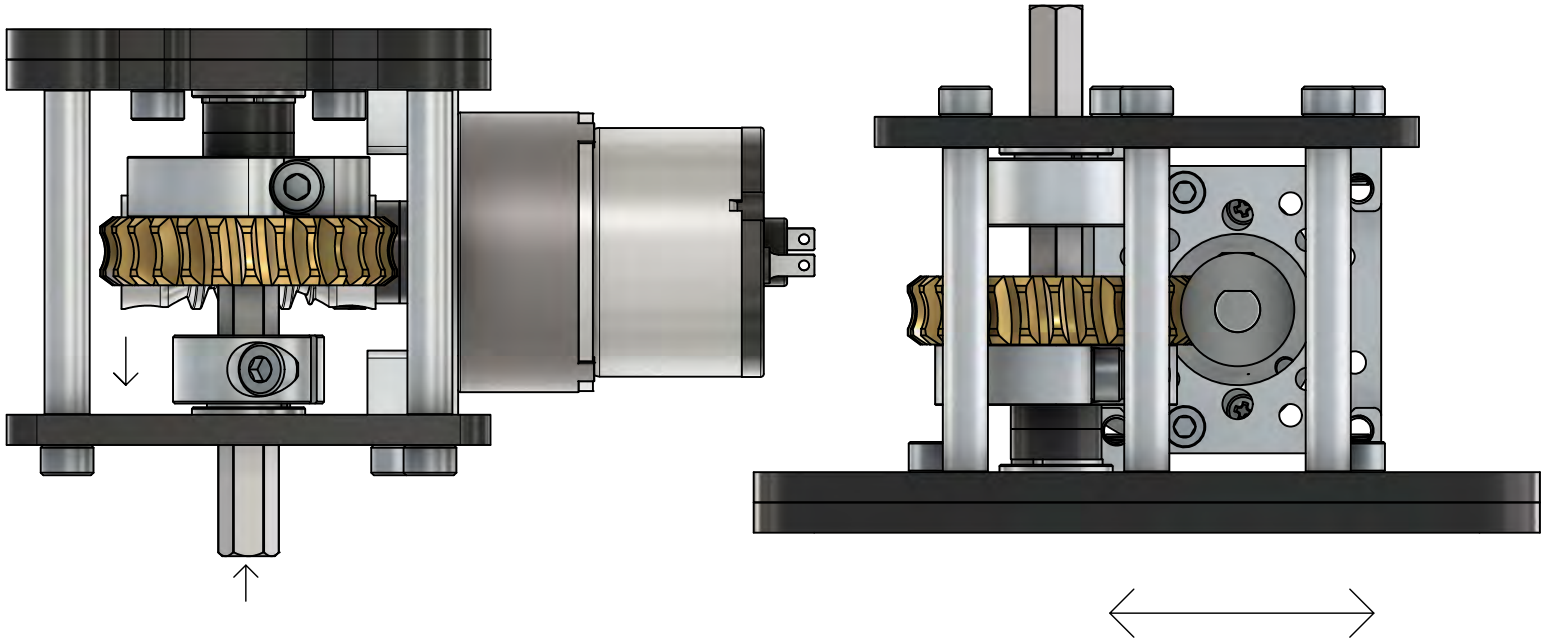


STEP 6
Press the second 8mm REX bore bearing into the bottom of the top plate (with the flange side down). Use six more M4 Screws to attach the top plate. Leave the two screws which go into the motor mount loose for now.



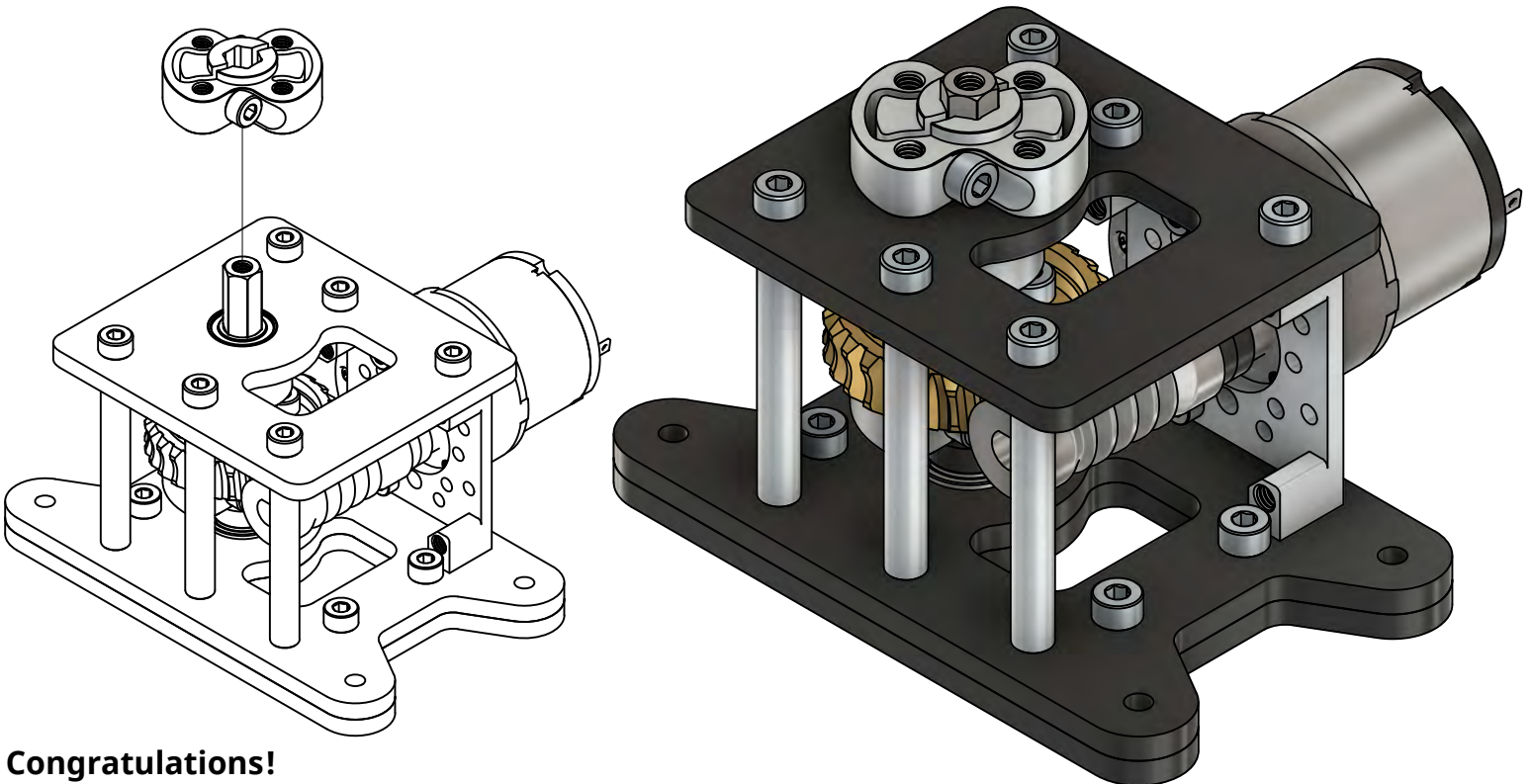
STEP 7

Turn the assembly upside down. Slide the collar down against the bearing while ensuring the shaft is pushed all the way up, then tighten the collar's pinch bolt. Flip the assembly back over. The 4 screws that fasten the motor mount should still be loose enough to slide the motor assembly toward or away from the brass worm gear. Slide it now to adjust the spacing as desired and then tighten those four screws.



STEP 8

Finally, add the second Sonic Hub to the top of the 8mm REX shaft. Leave an air gap between the Sonic Hub on the top plate so that it does not rub against the plastic.



Congratulations!

Your worm drive gear box is now ready to use! See goBILDA.com for a wide range of components which can bolt to the 16mm square pattern on the Sonic Hub.