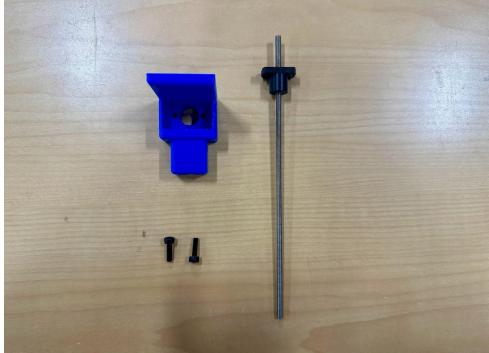
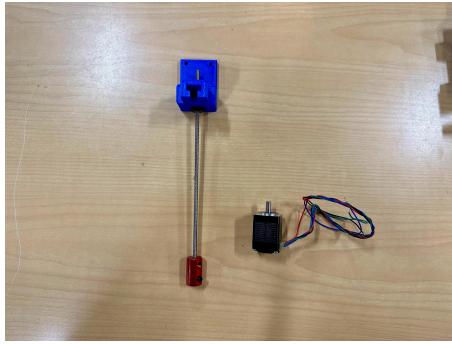
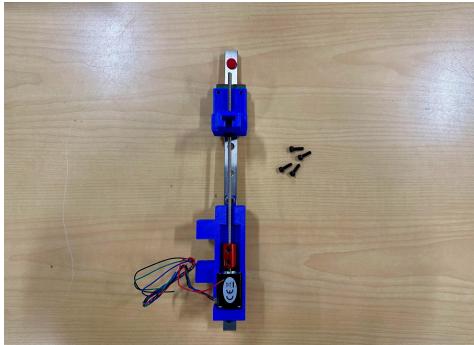
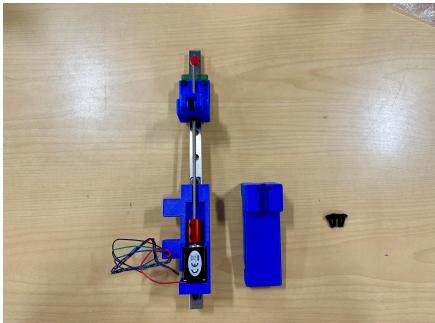


Automated Injector Assembly Procedure:

Parts List: All four 3D printed parts, motor, guide rail, 2 - M3 * 8mm screws, 10 - M3 * 10mm screws, 2 - M3 * 20mm screws, flange nut, lead screw, 1/8in - 4mm coupler with coupling set screws, addition parts if applicable, 2 M4 set screws, 2 - M3 nuts, 2 - M4 washers, 2 - M4 lock washers

	<p>Step 1: Layout all parts out on a clean surface</p>
	<p>Step 2: Locate the linear guide rail and the 3D printed motor housing</p> <p>Step 3: Remove one red rubber stop off linear guide rail (either one can be removed just DO NOT take off both)</p>
	<p>Step 4: Attach motor housing to guide rail (labeled MH in part description above)</p> <p>Step 5: Secure housing by using 2 M3*20mm screws, a washer, and nut for each screw</p> <p><i>Note:</i> Larger washer needed (M4) to secure to guide rail. The M4 washer will go on top of the motor housing connection. On the opposite side, set a lock washer, followed by another M3 washer and finally a M3 nut to secure the motor housing to the linear rail.</p>
	<p>Step 6: Repeat step above to secure other</p>

	<p>Step 7: Screw flange nut onto threaded rod</p> <p>Step 8: Attach flange nut to plunger driver using 2 M3*10mm screws.</p>
	<p>Step 9: Couple the threaded rod (now connected to the plunger driver) to the Nema 8 stepper motor. Make sure to leave ~ 1/32" in between the motor face and coupling to avoid friction during operation.</p> <p>Note: the couplings we received were not machined to exactly 1/8". You may have to drill into the small end of the coupling using, a 1/8" drill bit</p>
	<p>Step 10: insert coupled motor and threaded rod into the motor housing. To secure it to the linear guide rail, use 4 M3*10mm screws.</p> <p>Note: for the threaded rod and stepper motor to fit into the assembly, the flange nut will have to be threaded at least 1/2" onto the threaded rod.</p>
	<p>Step 11: Attach the cover part on top of the motor housing using 4 M3*10mm screws. To attach the device to the stereotaxic arm, use 2 M4*8mm screws as set screws.</p>



Step 12:

Attach the retention mechanism to cover using **2 - M3 * 8mm** screws. One screw will remain in place and used as a pivot point for the retention mechanism.

***Congratulations! Your have assembled
your very own automated injector!!***