6 DOF with SFU gearboxes:

You got latest generation of the platform. Proper instructions are not ready yet.

Please use the following for the parts where not mentioned in the manual https://dofreality.com/instructionsHP6.pdf:

once you open the box take our all gearboxes out and determine if you have Mode A or B?

https://dofreality.com/wp-content/uploads/2022/04/A.png

https://dofreality.com/wp-content/uploads/2022/04/B.png

as per one of the following modes

https://dofreality.com/wp-content/uploads/2022/04/6a.png

https://dofreality.com/wp-content/uploads/2022/04/6b.png

mount the motors to the frame

https://youtube.com/playlist?list=PLHL18KMbfR5gkKr8V50N7Zys5jQLojhpi

depending on the gearboxes you got. you should be able to arrange motors only in one mode.

Connect the motors to the control boxes as per green labeling (L1,L2,L3,R1,R2,R3) on the illustrations above.

Check overall assembly and correct If needed:

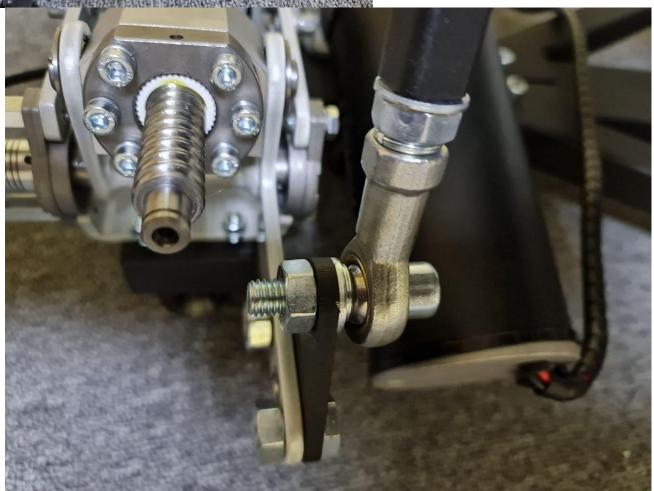
1) if at the max motion range you getting the tightness here, pls inset washers

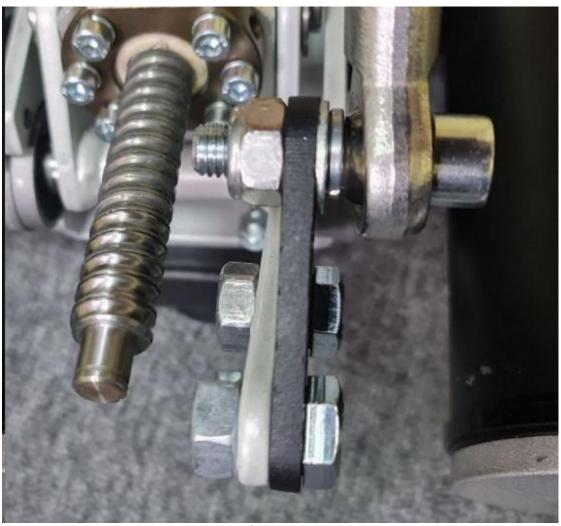


2) check that link triangle is at the proper side of the arm.

And you have proper sequence of the washers connecting the vertical link to that triangle. It should be plate M10 washer - M10 lock washer- ball Link – bolt.







3) if your pilot weight is under 340lbs / 150kg you need to remove all three shocks. they ware needed for the previous-gen platforms and now they only restrain the motions

4)

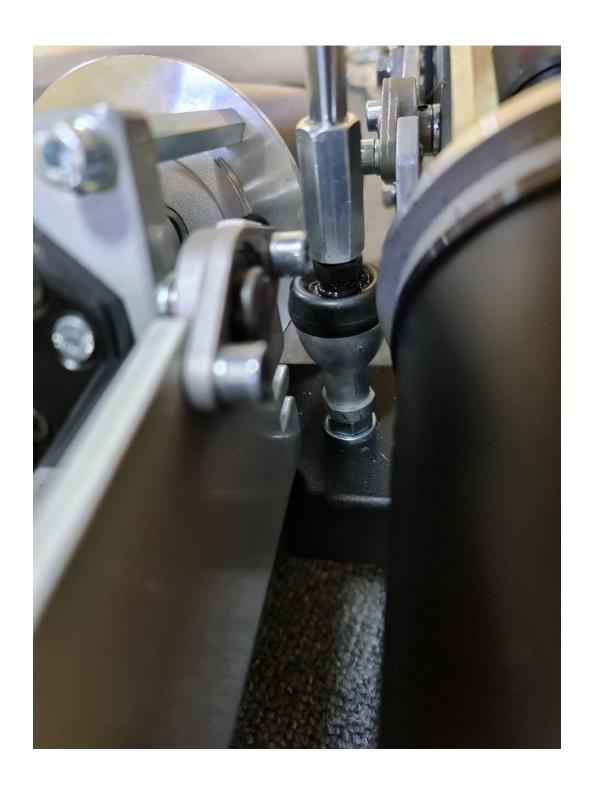


5)



6)







After the assembly completed before powering unit on update the firmware of BOTH boxes with https://dofreality.com/tools.zip

Besides mentioned benefits, there is a noticeable difference in the way the gearboxes act **without a power:**

it is not really a disadvantage, they can slide back. so with the pressure or weight applied to the frame, they can slide freely in to the direction pushed. this is the side effect of them having very efficient energy transmission almost without any friction losses like in traditional gearboxes. with power, they hold the position by doing constant micro-adjustments.