

## 2 DOF with SFU gearboxes:

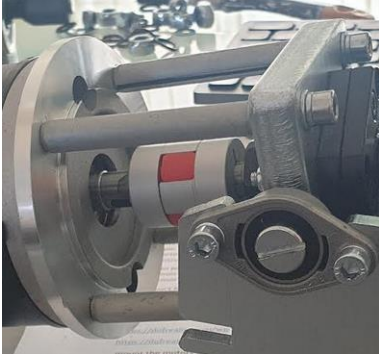
You can review this video before starting an upgrade <https://youtu.be/dRWg9C67sLE>

here are upgrade instructions

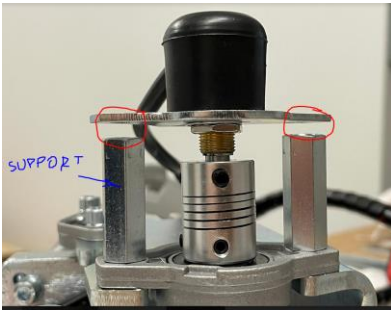
Part 1 <https://youtu.be/twcAVprdlgl>

Part 2 <https://youtu.be/iiq-ZxtglXA>

you might get different supports o attach SFU to the motor compere to the one on the video



If you can't mount the sensor to the SFU , you can use old sensor longer supports from the old gearbox



If when powered, motor will spin and hit/knock the range limits immediately power it off the box and check the sensor connector to the control box and to the sensor, the sensor coupler connecting both gearbox side and sensor side. and don't forget to calibrate each motor as per chapter 5.3 <https://dofreality.com/support/>

For the calibration you might need to unlock motors first (so they are ON in SMC) as per chapter 5.2. You need only to zero "Max Limits" and "Clip Input" in SMC to unlock them.

**Important:** if after upgrade the motor arm will be on the different side compare to one before upgrade. you need to flip the polarity of that motor power wires in the power connector. You can open the connector and swap black and red wires there. See illustration: <https://dofreality.com/wp-content/uploads/2022/04/SFUinverse.jpg>

After calibration please test each motor motion as per chapter 5.4 of main pdf

Update the control box firmware with tools app . it is inside <https://dofreality.com/tools.zip> . No changes in SRS settings needed

If your rear motor hitting just upgraded front ones follow this post:

<https://www.facebook.com/groups/1858593921047822/permalink/3233061706934363/>

## If you have SFU for the rear tractions:

instructions how to mount 3rd axis (rear) SFU :

<https://www.youtube.com/playlist?list=PLHL18KMbfR5iOyxIHJBsqw632HVXQrIMR>