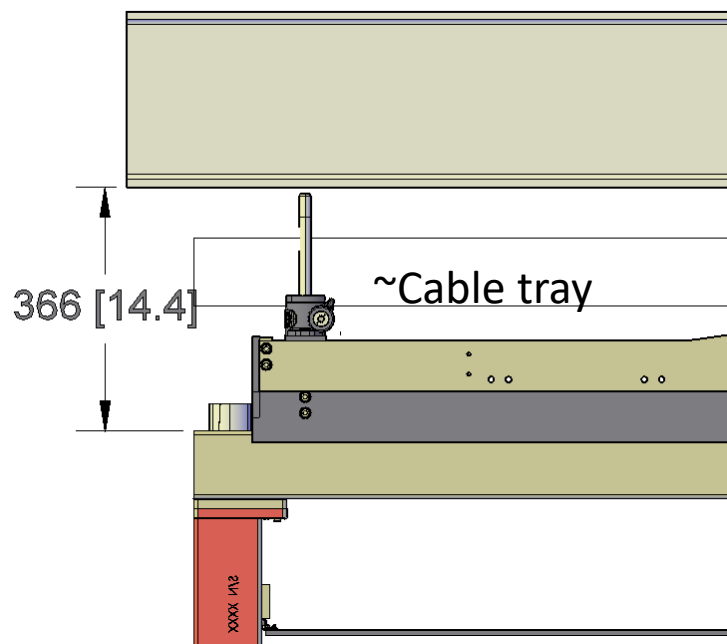


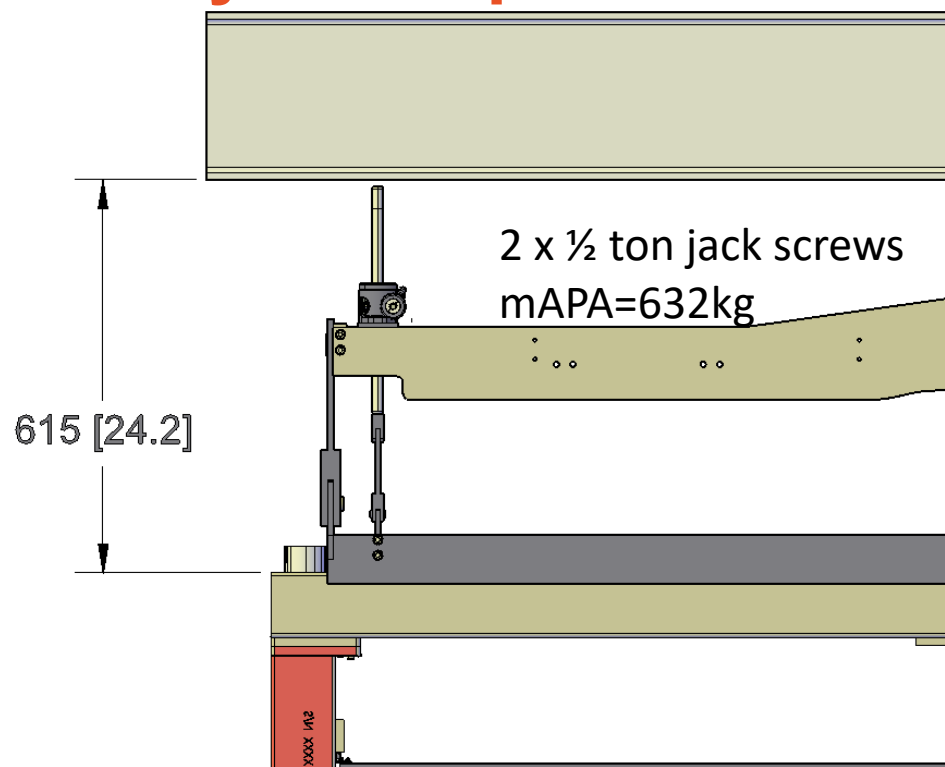
# protoDUNE – II issues

Use of Jack Screws to lower inverted APA in cryostat.

Note: all illustrations are very conceptual



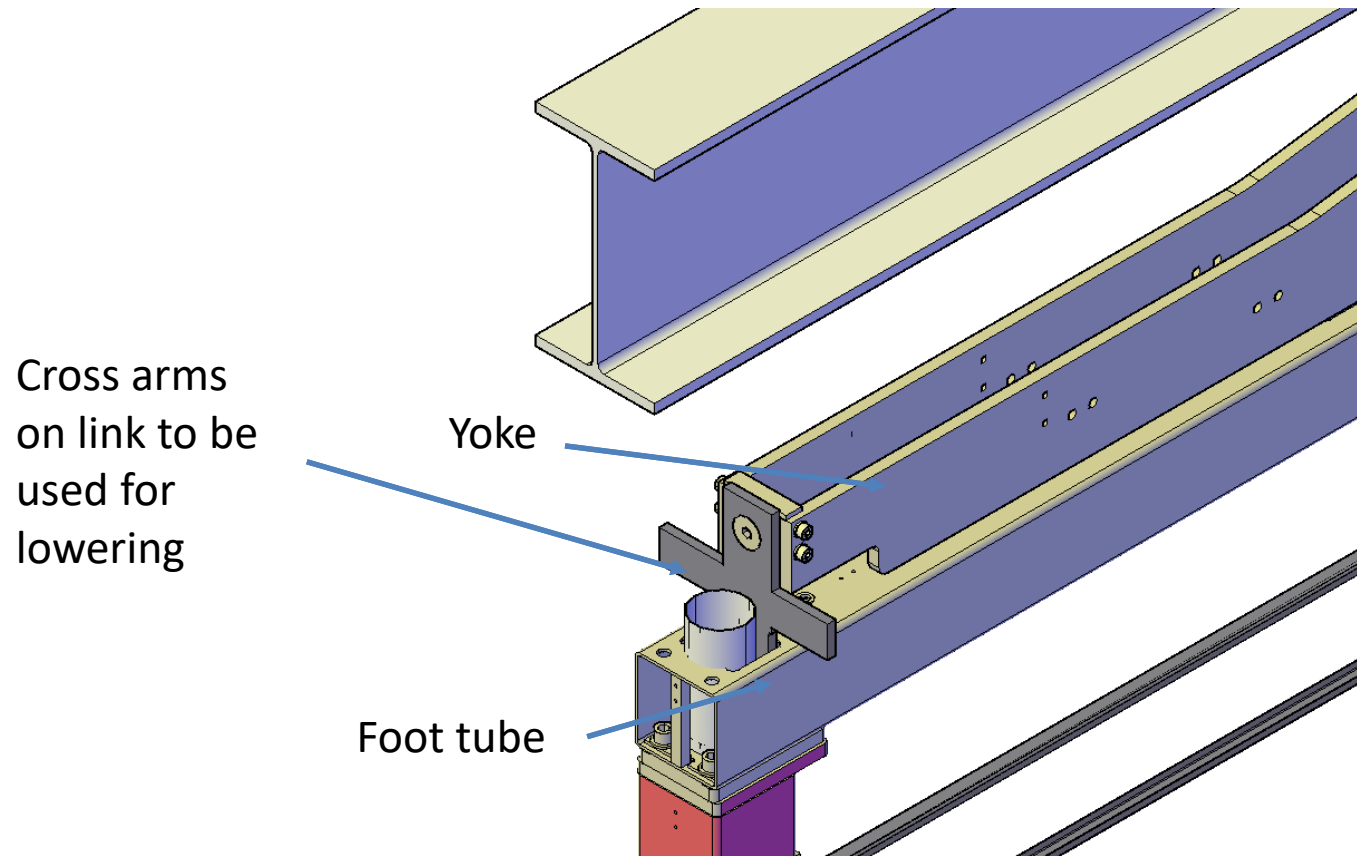
Space needed = 7043.4-  
6769.3=274.1+clearance



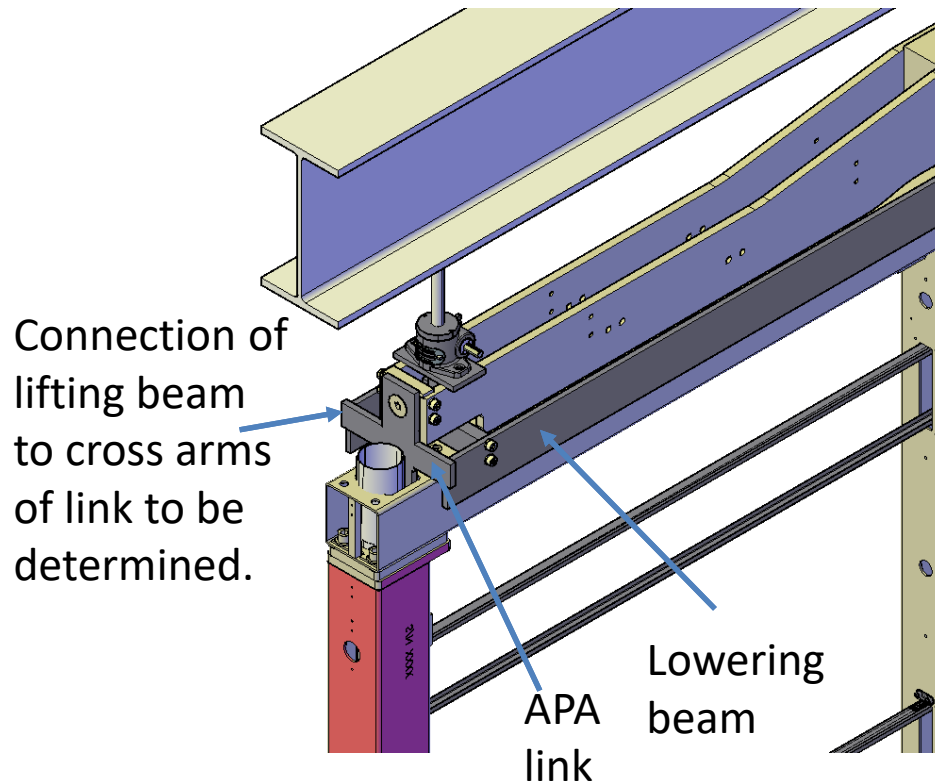
Space gained =  
615-366=249mm

Space still needed =  
25.1+clearance.

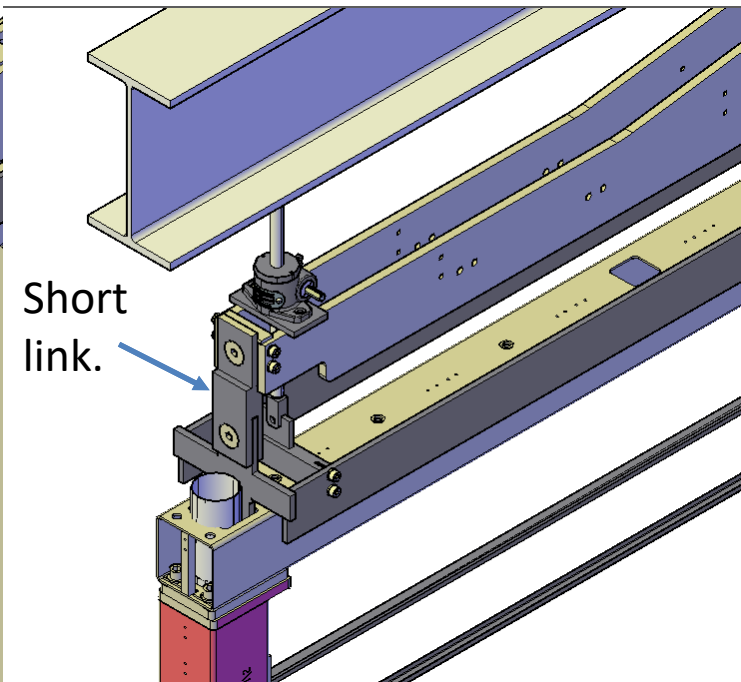
## Step 1 – The yoke is initially mounted close to the foot tube



# Steps 2 and 3 (After APA is delivered)

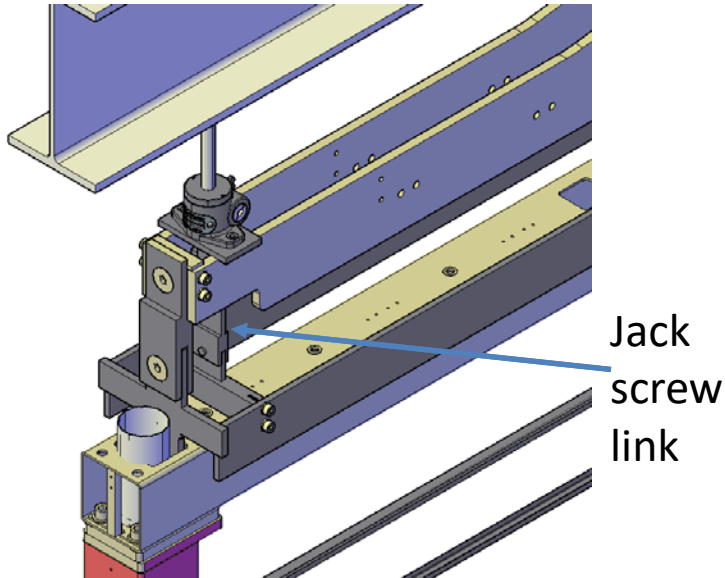


Jack screws and lowering hardware are installed

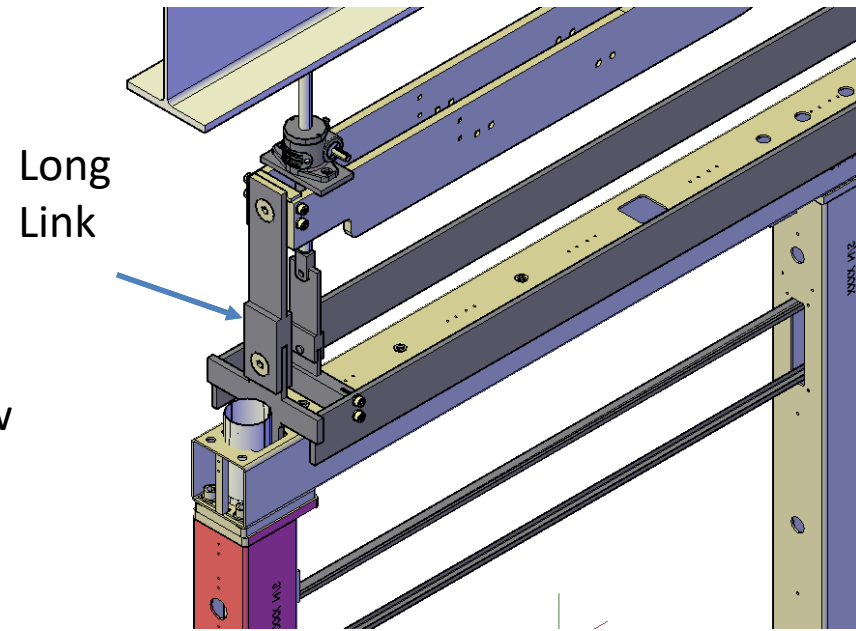


Inverted APA is lowered ~125mm and short link is installed

# Steps 4 and 5



Jack screw is raised and jack screw link is installed



APA is lowered another ~125mm to final height. Long link is installed

# Step – Final configuration

Jack screw and lifting beam is removed

