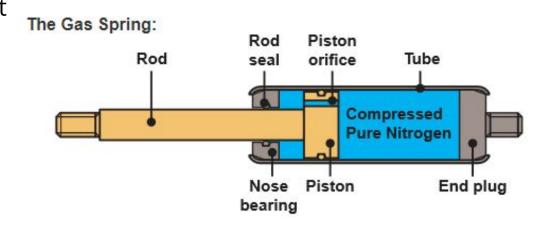
Gas Spring Mechanism

About Gas Spring

- Provide upward force against weight (slow down a transition from standing to sitting)
- Pressure difference is the source of force
- Force strength is adjustable
- We will use lockable gas spring

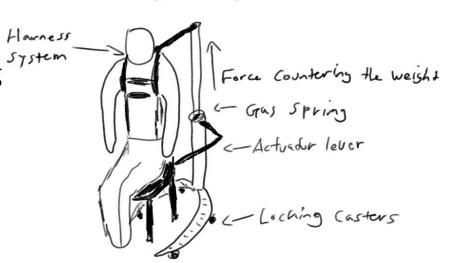


Initial Design

- Using harness system as a connection between Gas spring and user
- Actuator lever can be replaced with a button
- Locking casters for safety during transition
- Harness should be easy to put on and take off



Initial design drawing



Videos & Website

Lockable gas spring with easy unlock button

https://www.youtube.com/watch?v=pKBsV4tkOwM

https://www.youtube.com/watch?v=HojDjwwRZ04 2:21

Gas spring selling website with various stroke length and force

http://www.acecontrols.com/us/products/motion-control/industrial-gas-spring s-push-type/gs-8-to-gs-70.html

 Showing how strong it can be https://www.youtube.com/watch?v=iuZ2uWWrlds