

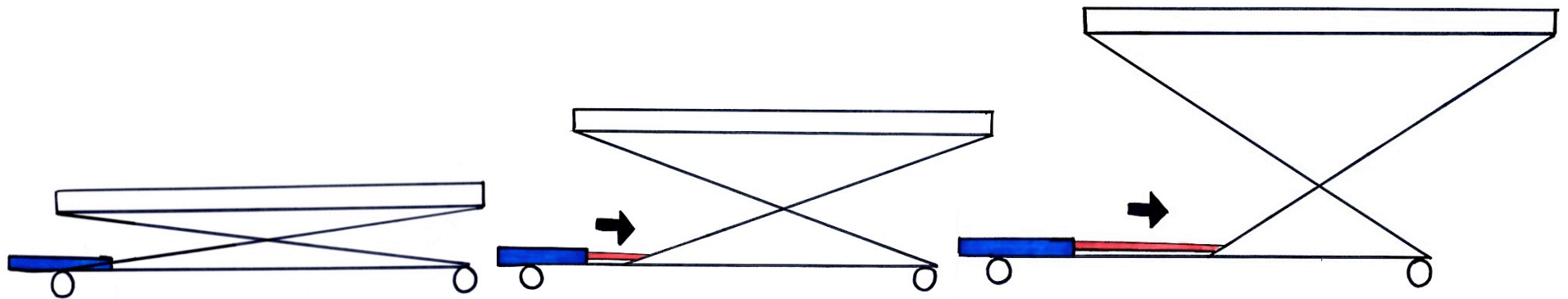
# EasyLift Stretcher

Blue B

Sketch Model • 10.8.09

# Our Concept

- Assisted-lift ambulance stretcher
- Reduce back injuries to EMTs
- 16 million patients transported to hospitals each year in the US



# Benchmarking

## Ferno 35A



Cheap (~\$3,000)

Lightweight

No lift-assist

## Stryker PowerPRO



Expensive (~\$14,000)

Bulky

Lifts 700lbs with ease

# Considerations

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- ❑ Collapsed height constraint
- ❑ Speed and smoothness of lifting
- ❑ Manual over-ride
- ❑ How much load assist is appropriate?
  - 80th percentile male weight= 210 lbs

*Need to balance these parameters*

# Demonstration

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- In current configuration:
  - ▣ 200 lbs of lifting force
  - ▣ 2.5" diameter piston
  - ▣ 11" of piston travel for 30" of vertical lift

# Lessons Learned

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- Several orientations for linkages
  - ▣ Piston can be moved, re-oriented, adjusted, etc.
- Pedal is a comfortable control
- Need robust locking mechanism when raised

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# Questions?

