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

- 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

- In current configuration:
  - 200 lbs of lifting force
  - 2.5” diameter piston
  - 11” of piston travel for 30” of vertical lift
Lessons Learned

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